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Helpful or Harmful? The Role of Ingroup Members
as the Source of Evaluation in Stereotype Threat Contexts

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy
in Psychology

by

Clarissa Cortland

2017

ABSTRACT OF THE DISSERTATION

Helpful or Harmful? The Role of Ingroup Members
as the Source of Evaluation in Stereotype Threat Contexts

by

Clarissa Cortland

Doctor of Philosophy in Psychology

University of California, Los Angeles, 2017

Professor Jenessa Rachel Shapiro, Chair

Negative stereotypes are harmful not only because they can instigate prejudice and discrimination from others; they also have the power to arouse damaging fears and concerns in the minds of negatively stereotyped individuals – a phenomenon known as *stereotype threat*. Being worried about confirming and reinforcing negative stereotypes that could potentially apply to oneself is distracting and has far-reaching negative consequences on an individual's cognitions, attitudes, and behaviors. Given the potential for stereotypes to have such a significant negative impact, what approaches might offer protection from the harmful effects of stereotype threat? A significant amount of stereotype threat intervention research has pointed to highlighting the presence of ingroup members – or members of an important social group that one belongs to – who have the potential to both encourage and inspire improvements in

performance when faced with negative stereotypes. However, very little work has investigated the conditions under which ingroup members might serve as a source of threat in contexts when negative stereotypes are salient. It is plausible that ingroup members should, under some circumstances, evoke threat when they are in a position to judge one's actions, resulting in negative outcomes typically associated with stereotype threat effects. Three experiments investigate the role of ingroup members as a source of evaluation in stereotype threat contexts, pinning down specifically when ingroup members are more likely to serve a helpful, protective role versus a more harmful role on individuals experiencing stereotype threat. In Experiments 1 and 2, ingroup member evaluators – whether portrayed as successful role models (Experiment 1) or merely present ingroup peers (Experiment 2) – serve as a source of support and can protect performance when one's personal abilities are the target of evaluation, but serve as a source of threat and result in destructive performance decrements when the group's reputation is at stake (group-as-target stereotype threat contexts). Using an online vignette study design, Experiment 3 demonstrates that the threat elicited by ingroup member sources of evaluation in group-as-target stereotype threat contexts is qualitatively different from the threat elicited by outgroup member sources of evaluation, and is characterized by concerns about disappointing the ingroup member evaluator.

The dissertation of Clarissa Cortland is approved.

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Jenessa Rachel Shapiro, Committee Chair

University of California, Los Angeles

2017

To

Peter & Fedelle

For showing me what hard work and diligence can accomplish

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Overview of Stereotype Threat

A Black high school student taking the GRE, or a female college student taking a challenging math test, may experience more than the usual exam jitters that most people experience in these kinds of evaluative situations; they may additionally experience *stereotype threat*. *Stereotype threat* refers to the worries and concerns an individual may feel in contexts where one's actions could potentially confirm negative stereotypes associated with a particular group or identity that one holds (Steele and Aronson, 1995). In their now seminal paper that was the first to demonstrate the effects of stereotype threat, Steele and Aronson (1995) show across four studies that Black students underperformed compared to White students on a challenging verbal test when either the test was described as diagnostic of intellectual ability or race was made salient via a questionnaire asking participants to indicate their race prior to taking the verbal test (Steele & Aronson, 1995). However, eliminating the stereotype threat – either by framing the challenging test as non-diagnostic of ability or by not having students indicate their race prior to taking the test – eliminated the gap in performance between Black and White students. These researchers define stereotype threat as a self-evaluative threat experienced when one is faced with negative stereotypes about one's group and is motivated to not reinforce the stereotypes. Decades of research following this first set of studies has demonstrated that this fear of being viewed through the lens of a negative stereotype can lead to significant decrements in both performance and interest in domains relevant to the stereotypes (Davies, Spencer, Quinn, & Gerhardstein, 2002; Schmader & Johns, 2003; Schmader, Johns, & Forbes, 2008; Spencer, Steele, & Quinn, 1999).

Recent research on stereotype threat has distinguished – both theoretically and empirically – between multiple different types of stereotype threat. The Multi-Threat Framework

(Shapiro, 2011; Shapiro & Neuberg, 2007) identifies six qualitatively different stereotype threats depending on the *target* of the stereotype threat – who one’s actions will reflect upon: the self or one’s group – and the *source* of the stereotype threat – who can judge one’s actions: the self, outgroup others, or ingroup others. While the *target* distinction has been demonstrated empirically (Shapiro, Williams, & Hambarchyan, 2013), the *source* distinction of the Multi-Threat Framework has not yet been investigated empirically in the literature, largely because the assumption is that stereotype threat comes from outgroup members.

Indeed, research on stereotype threat has, to date, largely focused on threat coming from other individuals who do not share the negatively stereotyped group membership – outgroup others. This is likely the case because although stereotypes are ubiquitous, people tend to be favorably biased toward their own social groups (Crocker & Major, 1989; Tajfel & Billig, 1974). Therefore, negative stereotypes are more likely to be endorsed by members of groups that are *not* directly targeted by the stereotypes (Rowley, Kurtz-Costes, Mistry, & Feagans, 2007). As a result, the majority of research looking at the consequences of stereotype threat has focused on outcomes in the presence of those most likely to hold negative stereotypes about a target – i.e., members of a non-stigmatized outgroup. However, by focusing primarily on outgroup members, the research on stereotype threat is missing another important source of evaluation and judgment with the potential to significantly impact people experiencing stereotype threat: ingroup members.

Ingroup Members In Stereotype Threat Contexts: The Multi-Threat Framework

Understanding the role and impact of ingroup members necessitates a more nuanced understanding of the different kinds of stereotype threat contexts that can exist – one that is provided by the Multi-Threat Framework (Shapiro, 2011; Shapiro & Neuberg, 2007). The *source*

dimension of the Multi-Threat Framework informs us that evaluation and threat can come from both outgroup members and ingroup members (as well as the self, though self-as-source stereotype threat is not the focus of the present work). However, the majority of research on ingroup members in stereotype-relevant contexts has investigated the impact of ingroup members *when being evaluated by outgroup others* (outgroup others as source). This body of work has demonstrated that being exposed to or primed with both successful, stereotype-disconfirming ingroup members as well as merely present, neither successful nor unsuccessful ingroup members can protect women and racial minorities from a myriad of negative outcomes associated with stereotype threat sourced from outgroup others (Dasgupta, Scirle, & Hunsinger, 2015; Inzlicht & Ben-Zeev, 2000, 2003; Latu, Mast, Lammers, & Bombari, 2013; Marx, Ko, & Friedman, 2009; Marx, Stapel, & Muller, 2005; McIntyre, Paulson, & Lord, 2003; Purdie-Vaughns, Sumner, & Cohen, 2011; Rivera & Benitez, 2016; Sekaquaptewa & Thompson, 2002, 2003; Stout, Dasgupta, Hunsinger, & McManus, 2011; Wout, Shih, Jackson, & Sellers, 2009).

A much smaller body of work has investigated the impact of ingroup members as the source of judgment in stereotype threat contexts (ingroup others as source). Marx and Roman (2002) conducted the first experimental studies investigating the effect of successful ingroup evaluators – ingroup role models – in stereotype threat contexts. They found that women who were highly skilled in math were buffered against the otherwise deleterious effects of salient negative stereotypes associated with women and math ability when a competent female experimenter administered a challenging math test and was expected to provide feedback on participants' math performance. When a competent male experimenter administered the math test, women performed worse – consistent with typical stereotype threat outcomes – than when a female role model administered the math test (Marx & Roman, 2002). A similar effect was found

with respect to race in a study showing that Black participants performed as well as White participants when a competent Black experimenter (ingroup role model) administered a test measuring verbal skills, but Black participants underperformed compared to White participants when the experimenter was White (Marx & Goff, 2005). Furthermore, the Black experimenter reduced Black participants' feelings of stereotype threat and endorsement of negative stereotypes about Blacks' academic abilities compared with the White experimenter. These studies suggest, then, that when ingroup members are a source of potential evaluation and judgment in stereotype threat contexts, they can serve a positive, protective role.

However, are ingroup members a source of support in *all* stereotype threat contexts, or is it possible for ingroup members to be a source of threat in some stereotype threat contexts? There is some work suggesting that ingroup members do not always offer protection from stereotype threat (Asgari, Dasgupta, & Stout, 2012; Blanton, Crocker, & Miller, 2000; Cohen & Garcia, 2005; Davies, Spencer, & Steele, 2005; Hoyt & Simon, 2011; Marx & Ko, 2012); however, no known work has investigated ingroup members as a source of threat in stereotype-relevant contexts when ingroup members act as potential evaluators. Despite the lack of evidence for ingroup members as a source of threat, the *target* dimension of the Multi-Threat Framework offers some insight into the potential detrimental effect of ingroup members. Specifically, the Multi-Threat Framework predicts that ingroup members as the source of evaluation or judgment can have different effects depending on the target of the threat – whether one's performance is representing the self or the group. The self is the target of threat in any stereotype threat context in which one's performance is being used to judge or evaluate one's personal abilities, and one's own reputation is in danger of being characterized as stereotypic. In self-as-target/ingroup-as-source stereotype threat contexts, the central concern is the fear of being personally characterized

as stereotypic by other ingroup members. On the other hand, the group is the target of threat in any stereotype threat context in which one's performance is being used to judge or evaluate the abilities of one's group, and the group's reputation is on the line. In group-as-target/ingroup-as-source stereotype threat contexts, the central concern is the fear of reinforcing negative stereotypes about one's group in the minds of other ingroup members.

Given this distinction between whether stereotype threat is targeting one's own reputation versus one's group's reputation, how do we know, then, when ingroup members are likely to be a source of support versus a source of threat under conditions of stereotype threat? In the present research, I propose that ingroup members are a source of support and protection in the context of self-as-target stereotype threat, but they are a source of threat in the context of group-as-target stereotype threat.

Ingroup Members as a Source of Support in Self-as-Target Stereotype Threat Contexts

Under self-as-target threat, individuals are concerned about how they personally might be seen through the lens of a negative stereotype, and they are worried that their actions will confirm that the negative stereotypes are true about themselves. In these contexts, one's personal reputation is on the line. What happens when an ingroup member is the source of evaluation in this context? For self-as-target stereotype threat to be experienced, it is critical to believe that the source of the threat – the ingroup member – endorses the negative stereotypes that can be applied to oneself. Thus, ingroup members should protect people from experiencing self-as-target stereotype threat because ingroup members are not likely to believe the negative stereotypes about the ingroup are true or that they apply to other ingroup members (Crocker & Major, 1989; Rowley et al., 2007; Tajfel & Billig, 1974). In fact, research suggests that an ingroup member source of evaluation will protect against stereotype threat unless individuals are explicitly told

that the ingroup member evaluator endorses negative stereotypes about the ingroup (Wout et al., 2009). Therefore, if you believe that ingroup members do not endorse negative stereotypes about the ingroup, then you will be less worried about ingroup members judging you personally through the lens of a negative stereotype and less likely to experience self-as-target stereotype threat coming from an ingroup member.

Although not explicitly tested, these predictions are likely reflected in the few stereotype threat studies looking at the positive effect of ingroup member evaluators (Marx & Goff, 2005; Marx & Roman, 2002). In these studies, participants were told that an academic test was diagnostic of their personal academic abilities, and that their test performance would be used to generate feedback about their personal academic skills and abilities. These instructions set up a self-as-target stereotype threat context in which one's performance was a reflection of one's personal abilities. This may explain why an ingroup member evaluator had such a positive effect, and served to protect participants from stereotype threat. In sum, if concerns about upholding one's personal reputation are particularly salient, then ingroup members should serve as a source of support and protection in these self-as-target stereotype threat contexts because they do not endorse the negative stereotypes. Therefore, any distressing concerns otherwise linked to an evaluator who thinks that the stereotypes can be true are alleviated by the presence of non-stereotype-endorsing ingroup member evaluators.

Ingroup Members as a Source of Threat in Group-as-Target Stereotype Threat Contexts

Under group-as-target threat, individuals are concerned about how their devalued social group might be seen through the lens of a relevant negative stereotype, and they are worried that their actions will confirm that the negative stereotypes are true about the group. In these contexts, a stereotypic performance implicates the group's reputation, which then reflects poorly

on all group members. Therefore, ingroup members should be a source of threat because being worried about representing the group to a fellow ingroup member – and doing so unsuccessfully – could lead to distracting concerns about letting down or disappointing the ingroup member. In other words, if your group's reputation is on the line and an ingroup member sees you behave stereotypically in a negatively stereotyped domain, you harm the group's reputation and, by extension, harm the ingroup member's reputation. Importantly, as discussed in the previous section, ingroup members likely do not endorse negative group stereotypes; however, this does not stop their reputation from potentially being contaminated by your poor performance. Therefore, when an ingroup member is the source of evaluation and judgment, the stakes are exceedingly high to represent the group well and to not bring embarrassment and disappointment on the ingroup member. This fear of disappointing an ingroup member evaluator by poorly representing the group characterizes the stereotype threat that is distinguished by the group as the target of threat and ingroup others as the source of judgment.

One reason why ingroup members might arouse these threatening concerns in stereotype threat contexts in which the group's reputation is at stake is that we tend to evaluate those from our ingroup more harshly than outgroup members because we are invested in upholding our group's reputation (Marques, Abrams, & Serôdio, 2001; Marques, Yzerbyt, & Leyens, 1988; Tajfel & Turner, 1979). Consequently, it's likely the case that we assume other ingroup members are going to be particularly sensitive to our behaviors. These destructive concerns in a stereotype-relevant context could result in decrements in cognitive abilities and performance so that instead of offering protection from stereotype threat (as predicted in self-as-target stereotype threat contexts), ingroup members would actually produce stereotype threat. Therefore, if concerns about upholding the group's reputation are particularly salient, then you are more likely

to be worried about disappointing ingroup member evaluators, and as a result ingroup members should elicit threat in these group-as-target stereotype threat contexts.

Overview of Current Research

Taken together, the preceding analysis suggests that the target-of-threat distinction (group versus self) from the Multi-Threat Framework should be particularly important in contexts where ingroup members serve as the primary source of evaluation and judgment because heightened concerns about representing the group (group-as-target threat) versus representing one's personal abilities (self-as-target threat) to an ingroup member is predicted to lead to divergent outcomes. This investigation provides a theoretically significant contribution to the literature because while the Multi-Threat Framework already suggests that ingroup members as a source of evaluation can elicit stereotype threat (Shapiro & Neuberg, 2007), no known empirical studies have examined ingroup-as-source stereotype threat. The current work seeks to fill in this gap in the literature by providing an initial investigation of the causes, content, and consequences of ingroup-as-source stereotype threat. Practically, the present research has major implications for intervention work targeting stereotype threat. Specifically, the literature on the positive effects of ingroup members recommends both increasing ingroup representation as well as exposure to ingroup role models as effective interventions for stereotype threat. However, if ingroup members have a positive effect in some contexts and a negative effect in others, this suggests that some of these interventions may not be a one-size-fits-all solution to stereotype threat (see Shapiro, Williams, & Hambarchyan, 2013), and that in some contexts they may even foster the very outcomes they are designed to prevent.

Three studies were conducted to better understand the effects of ingroup members in stereotype threat contexts, both as a source of support and a source of threat. Specifically, I

predict that ingroup members will have a protective effect as long as you believe your performance is representing to an ingroup member evaluator your personal abilities and not your group (i.e., self-as-target stereotype threat). However, when your performance represents your group's abilities (i.e., group-as-target stereotype threat), an ingroup member should serve as a source of threat because you are worried about how your performance will implicate the group's reputation in the mind of the ingroup member. In Experiments 1 and 2, I provide evidence supporting how ingroup member evaluators – whether portrayed as successful role models (Experiment 1) or merely present as ingroup peers (Experiment 2) – can be a source of support and can protect performance in self-as-target stereotype threat contexts but serve as a source of threat and result in destructive performance decrements in group-as-target stereotype threat contexts. Furthermore, Experiment 2 demonstrates that the established effect of an ingroup peer on performance is eliminated when the ingroup member is no longer perceived as the source of evaluation. Experiment 3 aims to pin down the specific content of the threat elicited by ingroup member sources of evaluation in group-as-target stereotype threat contexts compared to threat generated by outgroup sources of evaluation. Specifically, I predict that compared to ingroup members, outgroup members produce stereotype threat concerns stemming from the belief that outgroup members are more likely to endorse stereotypes than ingroup members. However, an ingroup member should be a source of threat in the context of group-as-target stereotype threat because concerns about upholding the group's reputation are likely to generate disruptive fears and worries about disappointing the ingroup member.

Experiment 1

The purpose of Experiment 1 was to demonstrate that ingroup sources of evaluation can protect against stereotype threat in some contexts, but elicit threat in other contexts depending on

whether one's personal abilities or the abilities of one's group are the salient target of stereotype threat. Past research has demonstrated that exposure to ingroup role models – ingroup members portrayed as counter-stereotypical in their success in a stereotyped domain – protects people from the harmful outcomes typically associated with stereotype threat (Latu et al., 2013; Marx & Goff, 2005; Marx & Roman, 2002; Rivera & Benitez, 2016; Stout et al., 2011). I predict that this effect is indeed the case in contexts in which judgment is coming from an outgroup member, or judgment is coming from a successful ingroup member and one's personal abilities and reputation are at stake (self-as-target stereotype threat contexts). However, when the group's reputation is at stake and a successful ingroup member serves as the primary source of judgment, ingroup members should fail to offer protection and instead elicit threat.

In Experiment 1, Latino-American college undergraduate students who were reminded of negative racial stereotypes linked with intelligence were administered a challenging diagnostic academic test by either a highly competent Latino/a experimenter (i.e., successful ingroup member) or a highly competent White experimenter (i.e., successful outgroup member). I predicted that when students' test performance was expected to be a reflection of the academic abilities of Latino/a students (group-as-target stereotype threat), a Latino/a experimenter would act as a source of threat and would produce performance decrements similar to typical stereotype threat outcomes (i.e., in the presence of a White experimenter). However, freed from the burden to represent Latino students as a whole, when students' test performance was expected instead to be a reflection of their personal abilities (self-as-target stereotype threat), a Latino/a experimenter would act as a source of support and protection from the harmful effects of stereotype threat otherwise felt in the presence of a White experimenter, resulting in enhanced test performance.

Method

Participants and design. Participants were 367 Latino-American (only monoracial; multiracial individuals were not eligible) undergraduate students at the University of California, Los Angeles (UCLA). Data were collected between October 2013 and April 2017. Participants voluntarily agreed to take part in an hour-long study for either \$20 directly deposited into their student billing accounts or one course credit. Paid participants were identified using a registrar's list, while students receiving course credit were identified through the introductory psychology course participant pool. Following past stereotype threat research (Aronson et al., 1999; Schmader & Johns, 2003; Spencer, Steele, & Quinn, 1999), only participants who identified strongly with the stereotyped domain – academics in general – and felt that academics were important to their sense of self were selected to participate. To facilitate this, participants indicated in a brief, five-minute pre-screening survey their academic identification by answering two items: “Being successful in school is an important part of who I am” and “In general, being successful in school is an important part of my self-image” (1=*strongly disagree* to 7=*strongly agree*). Responses to these two items were averaged to create an academic identification score. Participants were recruited to participate in this study if their academic engagement score was above the scale midpoint (“4”). Data from 86 participants who failed to correctly identify the race of the experimenter at the conclusion of the study in a manipulation check question were excluded¹. The final sample consisted of 281 participants (200 female, 81 male) randomly assigned to one of four experimental conditions in a 2 (experimenter race: White, Latino/a) x 2 (target of stereotype threat: self, group), between subjects design.

¹ This number is likely so high because the ability to accurately distinguish the experimenter's race may have been compromised with so few cues available outside of phenotypic/physical attributes and the name of the experimenter.

Procedure. Participants were met by an experimenter who was either White or Latino/a. Fifteen experimenters (seven White and eight Latino/a) were employed throughout the four years this study was conducted. (There were no consistent experimenter effects, so data were averaged across all White experimenters and across all Latino/a experimenters). The experimenter always showed up wearing a white lab coat to signify expertise and authority. Experimenters led each participant to a small room with a computer and had the participant sit down in front of the computer. At this point, the experimenters introduced themselves as either “Mary Richardson” (White experimenters, all female) or “Maria/Miguel Rodriguez” (Latino/a experimenters). They then explained that they were the lead researcher for the study, which was part of an independent research project that they were working on with their faculty advisor. To increase the likelihood that participants were paying attention to the experimenter’s name (manipulating experimenter race), the experimenters asked each participant to complete a brief form for tracking purposes. The form asked for the date/time, the participant’s subject number and computer number (given to them verbally by the experimenter), and the experimenter’s name (already filled in by the experimenter).

Next, the experimenter repeated that s/he was the lead researcher for the study, and was interested in studying the intellectual abilities of students through performance on standardized intelligence tests. Furthermore, the experimenter explained that in the study, participants would be asked to take a challenging intelligence test that the experimenter created for the project. Finally, the experimenter informed the participant that s/he would be scoring the test and providing the participant with feedback on his/her performance. These procedures were implemented to portray to the participant that the experimenter was a successful, high-achieving individual, and to cement the experimenter’s role as the source of evaluation.

At this point, the experimenter left the room while participants read more information about the study on the computer in front of them. Participants advanced through a series of computer screens giving them more information and instructions on the test. This is where both the stereotype threat and the target of the stereotype threat were manipulated. In all conditions, participants read the following:

“You are invited to participate in an experiment investigating various psychological factors involved with intelligence. Part of this experiment is a complex standardized test. This exam contains 24 problems that have been shown to be diagnostically accurate in judging a person’s intellectual abilities. Further, this exam has been found to identify a person’s intellectual limitations, so that we may better understand the factors involved in both. For the last several years, we have been investigating differences in intellectual abilities as a function of race.”

Similar to past stereotype threat research (Spencer et al., 1999; Steele & Aronson, 1995), the purpose of these instructions was to induce feelings of stereotype threat in the participants by labeling test performance as diagnostic of academic abilities and also by informing participants of potential group differences in ability based on race.

In just the *self-as-target* threat condition, participants continued to read the following (Bold text indicates places where the target of the threat was manipulated.):

“In today’s session we want to get a measure of **your intellectual ability** by having you take a standardized intelligence test. Just like the GRE or the SAT, this test has been specifically developed and repeatedly tested so that its evaluation of **your Intelligence Quotient (IQ)** is accurate. You may find

some of the questions challenging; however, they are all in the range of ability for most college students. We ask that you take this test seriously and make a genuine effort so that we can collect accurate data. Your performance on this test will be used to help us establish **your personal intellectual ability**. After the test, we will provide you with feedback about **your performance relative to other students** and ask you some questions about test-taking.”

In the *group-as-target* threat condition, participants read the following:

“In today’s session we want to get a measure of **intellectual ability for Latino and White students** by having you take a standardized intelligence test. Just like the GRE or the SAT, this test has been specifically developed and repeatedly tested so that its evaluation of **the Intelligence Quotient (IQ) for your racial group** is accurate. You may find some of the questions challenging; however, they are all in the range of ability for most college students. We ask that you take this test seriously and make a genuine effort so that we can collect accurate data. Your performance on this test will be used to help us establish **intellectual performance norms for Latino and White students**. After the test, we will provide you with feedback about **Latino students’ performance relative to Whites’ performance** and ask you some questions about test-taking.”

These instructions were intended to manipulate the target of the stereotype threat: the participant themselves (self) versus Latino/a students in general (group).

At the end of the computer instructions, participants were instructed to notify the experimenter outside the room. The experimenter sat the participant back down, and placed the test in front of them, with the cover page facing up. The experimenter then explained that they created the test for the study, and asked the participant to read over the cover page and fill out the information requested. In the *self-as-target* condition, in order to further strengthen the salience of the self-as-target manipulation and make the self more salient, participants were asked to write in their first initial, last name, and their date of birth. In the *group-as-target* condition, in order to make their racial group more salient, participants were asked to indicate their race by checking off one of three boxes (White, Latino-American, other) and to write in the current date. Experimenters then explained that participants had 25 minutes to work on the test, and started a stopwatch while the participant was watching. The experimenter then left the room and the participant worked on the test alone in the room.

After 25 minutes, the experimenter came into the room and instructed the participant to put down their pencil. The experimenter collected the test materials, and then set up the computer. The experimenter instructed participants to respond to several survey questionnaires on the computer while they the experimenter scores the participant's test in another room. The experimenter then left the room while participants responded to some demographics questions as well as a manipulation check item asking for the race of the experimenter on the computer. Once participants were done with the computer questionnaires, they read instructions on the computer to notify the experimenter that they were done. At this point, the experimenter informed participants that the study was over, fully debriefed them about the purpose of the study and the rationale for using deception in the stereotype threat instructions, and then dismissed them.

Measure.

Math and verbal test. The test in all four conditions consisted of 24 multiple-choice items (12 math and 12 verbal) drawn from various practice tests for the Graduate Record Examination (Educational Testing Service). The primary measure of performance was number of questions answered correctly overall.

Results

Results from a two-way analysis of variance (ANOVA) revealed no significant main effects of experimenter race or target of stereotype threat, nor a significant Experimenter Race X Target of Stereotype Threat interaction, all $ps > .2$. Planned contrasts were conducted to investigate specific *a priori* hypotheses investigating the effect of experimenter race (White, Latino) and the target of stereotype threat (self, group) on participant test performance. First, as seen in Figure 1, when Latino/a students' test performance was expected to be a reflection of the academic abilities of Latino/a students in general (group-as-target stereotype threat) to a successful ingroup evaluator (Latino/a experimenter), participants scored lower ($M = 10.34$, $SD = 4.01$) on a math and verbal test than participants who expected their test performance to reflect their personal abilities (self-as-target stereotype threat), ($M = 10.94$, $SD = 4.51$), though this effect was not statistically significant ($p > .4$). Furthermore, when expecting an outgroup member to evaluate them, there was no difference in test scores between participants in the self-as-target versus group-as-target conditions. Consistent with predictions, when expecting a successful ingroup member to evaluate them, participants in the group-as-target stereotype threat condition performed just as poorly on an academic test as participants expecting to be evaluated by a successful outgroup member, regardless of the target of stereotype threat ($p > .6$).

A planned contrast analysis examining the effect of a successful ingroup evaluator in the self-as-target stereotype threat condition found that participants scored higher in the ingroup

evaluator/self-as-target condition on a math and verbal test than participants in both of the outgroup evaluator conditions combined (self-as-target + group-as-target), though this planned contrast did not reach conventional levels of significance: $t(277) = 1.377, p = .169$. Furthermore, participants scored higher in the ingroup evaluator/self-as-target condition on a math and verbal test than participants in all other conditions (outgroup evaluator/group-as-target, outgroup evaluator/self-as-target, and ingroup evaluator/group-as-target), though again, this contrast did not reach conventional levels of significance: $t(277) = 1.317, p = .189$.

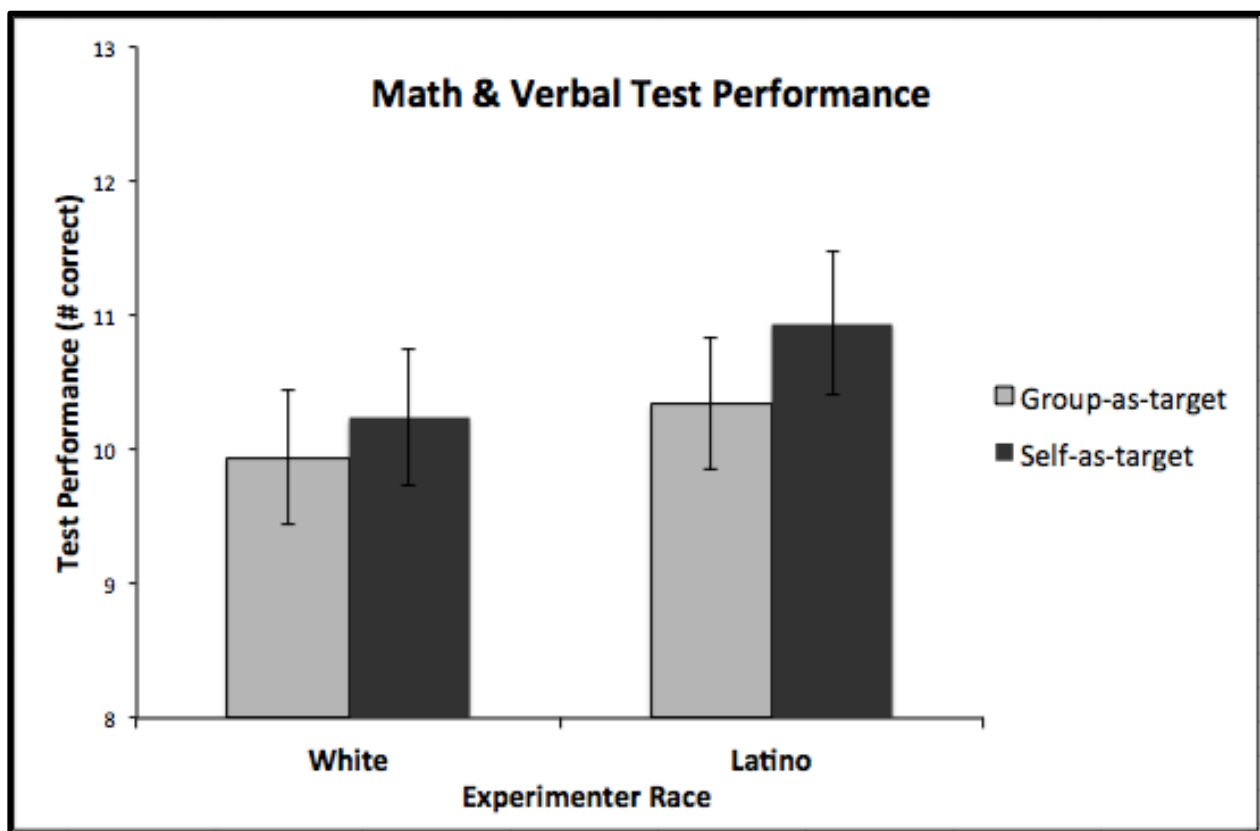


Figure 1.

Discussion

Although results are merely trending and do not reach conventional levels of significance, Experiment 1 provides some suggestive evidence that while successful ingroup members can sometimes protect against stereotype threat, it is also possible that they can elicit

performance outcomes consistent with stereotype threat in specific contexts. Specifically, the target of the stereotype threat seems to make a difference when assessing the effect of successful ingroup member sources of evaluation on individuals affected by stereotype threat. Previous work has shown that ingroup role models who serve as the primary source of evaluation have a positive effect on negatively stereotyped individuals in stereotype threat contexts (Marx & Goff, 2005; Marx & Roman, 2002). These past studies have demonstrated that ingroup members who are portrayed as (1) successful in a negatively stereotyped domain, and (2) experts who will be providing critical feedback on an individual's performance, were able to protect the academic performance of negatively stereotyped individuals. However, Experiment 1 provides evidence suggesting that successful ingroup members will not necessarily have a positive, protective effect in every context. Rather, successful ingroup evaluators do indeed protect against stereotype threat if you believe that your performance is representative of your personal abilities. However, weighed down by the burden to uphold the reputation of the group in the eyes of an ingroup member, successful ingroup evaluators can elicit performance decrements similar to traditional stereotype threat outcomes. The distinction between whether an individual's performance reflects upon one's personal abilities or the abilities of one's group has a considerable impact on how ingroup members affect individuals under conditions of stereotype threat.

Experiment 2

Experiment 1 demonstrated that it may be possible for successful ingroup members to be a source of threat in group-as-target stereotype threat contexts. However, must ingroup members necessarily be successful and counterstereotypical to be a source of threat? Or might ingroup members who are merely present and emit no other information regarding their abilities also sometimes be a source of threat? Past work suggests that increasing the representation of merely

present ingroup members in stereotype threat contexts results in positive, stereotype-threat-buffering outcomes (Inzlicht & Ben-Zeev, 2000, 2003; Sekaquaptewa & Thompson, 2002, 2003). However, none of this work investigated merely present ingroup members from whom evaluation and judgment could come (ingroup-as-source), nor has there been an empirical investigation distinguishing between the self and the group as the target of stereotype threat coming from a merely present ingroup member source. Experiment 2 aimed to address these gaps in the literature surrounding ingroup members in stereotype threat contexts. I predicted a pattern similar to Experiment 1 in that merely present ingroup members who were expected to be the source of evaluation in a stereotype threat context would elicit stereotype-threat-consistent underperformance (compared to a control condition devoid of stereotype threat) when concerns about representing the group were salient (group-as-target stereotype threat). However, consistent with Experiment 1, merely present ingroup member evaluators were predicted to protect individuals from self-as-target stereotype threat. Furthermore, this effect should be attenuated when the ingroup member was no longer expected to be the source of evaluation.

In Experiment 2, Black college undergraduate students who were reminded of negative racial stereotypes linked with intelligence took a challenging diagnostic academic test with a Black confederate who was instructed to act like a typical undergraduate student also participating in the same psychology study at the same time. The confederate was then randomly assigned to grade the participant's test (ingroup evaluator) or not. Importantly, an additional control condition was included in Experiment 2 in order to compare effects to a context with no ingroup member present and no stereotype threat introduced. I predicted that when students' test performance was expected to be a reflection of the academic abilities of Black students in general (group-as-target stereotype threat), a merely present Black evaluator would act as a

source of threat and would underperform compared to a control condition where no stereotype threat was introduced. However, when students' test performance was expected to be a reflection of their personal abilities (self-as-target stereotype threat), a merely present Black evaluator would act as a source of support and protection from the harmful effects of stereotype threat, resulting in enhanced test performance similar to a no-threat control condition. Finally, removing the possibility of the merely present ingroup member being a source of evaluation was hypothesized to attenuate the effects of the ingroup evaluator, such that the target of stereotype threat (self vs. group) would no longer affect test performance.

Method

Participants and design. Participants were 122 African-American (only monoracial; multiracial individuals were not eligible) undergraduate students at UCLA. Data were collected between October 2012 and February 2017. Participants voluntarily agreed to take part in an hour-long study for either \$20 directly deposited into their student billing accounts or one course credit. Paid participants were identified using a registrar's list, while students receiving course credit were identified through the introductory psychology course participant pool. Only participants who identified strongly with the stereotyped domain – academics in general – and felt that academics were important to their sense of self were selected to participate. To facilitate this, participants answered the same two academic identification items from a pre-screening survey as in Experiment 1. Responses to these two items were averaged to create an academic engagement score. Participants were recruited to participate in this study if their academic engagement score was above the scale midpoint ("4"). Furthermore, one participant who indicated that they had participated in a similar stereotype threat study in the past was excluded from the final sample, and one participant was excluded due to experimenter error. The

remaining sample consisted of 120 participants (92 female) randomly assigned to one of five experimental conditions in a 2 (ingroup member: evaluator, non-evaluator) x 2 (target of stereotype threat: self, group) + 1 (no ingroup member, no threat control), between-subjects design.

Procedure. In all conditions, each participant was met by a White, female experimenter in the waiting area. In the experimental conditions (not the control condition, which will be described at the end of the Procedure section), also waiting in the waiting area was a Black confederate who was instructed not to engage in any kind of interaction or conversation with the participant while sitting in the waiting area. Nine different experimenters and seven different confederates were employed throughout the five years this study was conducted. (There were no consistent experimenter or confederate effects.). The experimenter led both the participant and the confederate to a room with two computers separated by a divider and had the participant and the confederate each sit down in front of a computer. For participants in the *ingroup non-evaluator* condition, the experimenter then told both the participant and the confederate that more information about the study would be presented via computer instructions.

In the *ingroup evaluator* condition, the experimenter first had both the participant and the confederate reach into a bowl and take out a folded piece of paper. Unknown to the participant but known by the confederate, both pieces of paper in the bowl had the word “NON-GRADER” written on them. The experimenter instructed the participant and confederate to place the folded piece of paper to the side without opening it yet, and to read through some computer instructions for more information on the study and the folded piece of paper. In both conditions, the confederate was always instructed to pay close attention to the participant while reading through the computer instruction screens, and to follow along at about the same pace as the participant.

Participants advanced through a series of computer screens giving them more information and instructions on the test. This is where both stereotype threat and the target of the stereotype threat were manipulated.

In the *self-as-target* threat condition, participants read the following (Bold text indicates places where the target of the threat was manipulated.):

“In today’s session we want to get a measure of **your intellectual ability** by having you take a standardized intelligence test. For the last several years, we have been investigating differences in intellectual ability as a function of race. This research is being conducted by the Center for Intellectual Aptitudes (CFIA) at UCLA. Just like the GRE or the SAT, this test has been specifically developed and repeatedly tested so that its evaluation of **your Intelligence Quotient (IQ)** is accurate. You may find some of the questions challenging; however, they are all in the range of ability for most college students. We ask that you take this test seriously and make a genuine effort so that we can collect accurate data. Your performance on this test will be used to help us establish **your personal intellectual ability**. After the test, you will be provided with feedback about **your performance relative to other students** and asked some questions about test-taking.”

In the *group-as-target* threat condition, participants read the following:

“In today’s session we want to get a measure of **intellectual ability for Black and White students** by having you take a standardized intelligence test. For the last several years, we have been investigating differences in intellectual ability as a function of race. This research is being conducted by

the Center for Intellectual Aptitudes (CFIA) at UCLA. Just like the GRE or the SAT, this test has been specifically developed and repeatedly tested so that its evaluation of **the Intelligence Quotient (IQ) for your racial group** is accurate. You may find some of the questions challenging; however, they are all in the range of ability for most college students. We ask that you take this test seriously and make a genuine effort so that we can collect accurate data. Your performance on this test will be used to help us establish **intellectual performance norms for Black and White students**. After the test, you will be provided with feedback about **Blacks' performance relative to Whites' performance** and asked some questions about test-taking.”

Similar to Experiment 1, these instructions were intended to manipulate the target of the stereotype threat: the participant themselves (self) versus Black students in general (group).

For participants in the *ingroup non-evaluator* condition, the computer instructions stopped there. For participants in the *ingroup evaluator* condition, the computer instructions further indicated the following:

“When you arrived, the research assistant asked you to draw a slip of paper out of a bowl. Please take a moment to unfold the piece of paper. If the piece of paper has the word “GRADER” printed on it, you will be appointed the task of grading both your test and the test of the other participant. If the piece of paper has the word “NON-GRADER” printed on it, you will be handing your test over to the other participant who will grade your test. If

you are a non-grader, you will be appointed the task of answering some questions on the computer.”

Therefore, in the *ingroup evaluator* condition, all participants realized at this point that the other participant (the confederate) would be grading their test.

At the end of the computer instructions, the experimenter placed a test in front of the participant and one in front of the confederate and asked them to read over the cover page and fill out the information requested. Just as in Experiment 1, in the *self-as-target* condition, participants were asked to write in their first initial, last name, and their date of birth. In the *group-as-target* condition, participants were asked to indicate their ethnicity by checking off one of three boxes (White, African-American, other) and to write in the current date. The participant and confederate were then given 20 minutes to work on the test.

After 20 minutes, the experimenter came into the computer area and instructed the participant and confederate to put down their pencils. In the *ingroup non-evaluator* condition, the experimenter collected the test materials from both the participant and the confederate. In this way, the participants had no reason to believe the merely present ingroup member might see how they performed on the test. The experimenter then instructed the participant and confederate to respond to several questions on the computer. In the *ingroup evaluator* condition, the experimenter asked for the person assigned as the “grader” to collect the test from the person assigned as the “non-grader.” At this time, the confederate collected the participant’s test materials. Therefore, in this condition, participants believed that their performance on the test would be known and evaluated by the ingroup member. The experimenter then gave the confederate the answer key and asked the confederate to grade both tests, and answer some additional surveys if they had time. As the confederate started to grade the tests, the

experimenter instructed the actual participant to respond to some questions on the computer. Once the participant finished responding to the computer questions, the experimenter came and collected all the test materials from the confederate. At this point, the experimenter informed the participant and the confederate that the study was over and dismissed the confederate. Participants were then fully debriefed about the purpose of the study and the rationale for using deception with the confederate and the stereotype threat instructions, and were dismissed.

In the *control* condition, participants were alone and no ingroup member confederate was present during the study. In addition, the computer instructions differed from the experimental conditions in the following way:

“In today’s session we would like you to complete a problem solving task.

This task is not diagnostic of any ability – this task is just a simple lab exercise that allows us to study how people work at problem solving. You may find some of the questions challenging because this is how we understand working memory processes. We ask that you take this exercise seriously and make a genuine effort to answer the questions so that we can collect accurate information. Afterwards, you will be given feedback about how you did and asked some questions about the problem solving exercise.”

Therefore, the test was described as a problem-solving task that was not diagnostic of academic ability. The purpose of these instructions was to reduce stereotype threat, since no references to race or academic ability were mentioned, and therefore participants’ performance would not be linked to negative racial stereotypes that could potentially be applied to them (Steele & Aronson, 1995). After working on the problem-solving task for 20 minutes, participants completed the demographics questions on the computer, were debriefed, and then dismissed.

Measure.

Math and verbal test. The test in all five conditions consisted of 24 multiple-choice items (12 math and 12 verbal) drawn from various practice tests for the Graduate Record Examination (Educational Testing Service). The primary measure of performance was number of questions answered correctly overall.

Results

Planned contrasts were conducted to investigate specific *a priori* hypotheses between conditions. As seen in Figure 2 and consistent with hypotheses, when Black participants' test performance was expected to be a reflection of the academic abilities of Black students in general (group-as-target stereotype threat) to a merely present Black evaluator, participants scored significantly lower ($M = 5.48$, $SD = 2.58$) on a math and verbal test than participants in a control condition where no stereotype threat was introduced and no ingroup member was present ($M = 8.00$, $SD = 3.95$), $t(115) = 2.128$, $p = .036$, $d = 0.76$. However, when Black participants' test performance was expected to be a reflection of their personal abilities (self-as-target stereotype threat) to a merely present Black evaluator, participants scored significantly higher ($M = 8.19$, $SD = 3.76$) on a math and verbal test than participants in the group-as-target/Black evaluator stereotype threat condition, $t(115) = 2.438$, $p = .016$, $d = 0.82$. Importantly, there was no difference in test scores between participants in the self-as-target/Black evaluator condition and participants in the no-stereotype-threat control condition ($p > .8$). Finally, when the merely present Black confederate was no longer expected to be the source of evaluation (non-evaluator conditions), participants' test scores no longer differed as a function of the target of stereotype threat ($p > .7$).

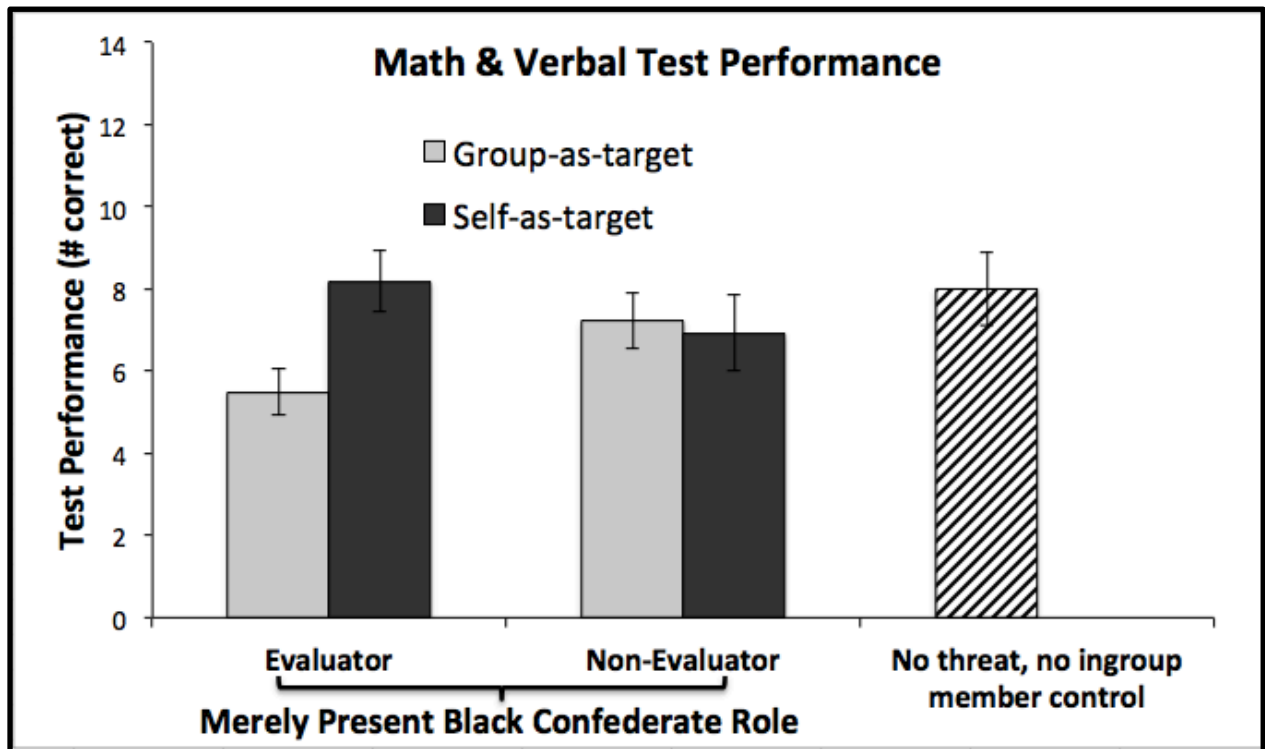


Figure 2.

Discussion

Replicating Experiment 1, Experiment 2 demonstrates that the target of the stereotype threat makes a difference when measuring the effect of merely present ingroup member sources of evaluation on individuals affected by stereotype threat. Previous work has shown that merely present ingroup members have a positive effect on negatively stereotyped individuals in stereotype threat contexts (Inzlicht & Ben-Zeev, 2000, 2003; Sekaquaptewa & Thompson, 2002, 2003). These past studies have demonstrated that merely having ingroup members around and preventing people from falling into solo or token status can protect individuals from stereotype threat. However, Experiment 2 provides evidence suggesting that the mere presence of ingroup members might not have a positive, protective effect in every context. Rather, Experiment 2 found that a merely present Black evaluator elicited performance decrements similar to traditional stereotype threat outcomes when Black participants expected their test performance to

represent the group's abilities (as compared to their personal abilities). Furthermore, removing the possibility of the merely present Black confederate as a source of evaluation attenuated the effect of the Black evaluator, such that the target of stereotype threat (self vs. group) no longer affected test performance. In sum, Experiment 2 replicated and extended the effects from Experiment 1 to demonstrate that an ingroup member does not necessarily need to be successful and can be a source of threat even when they are merely present under conditions of group-as-target stereotype threat. Furthermore, Experiment 2 clarifies that the negative outcomes associated with ingroup members in group-as-target stereotype threat contexts emerge only when the ingroup member is expected to serve as the source of evaluation.

Experiment 3

Experiments 1 and 2 have shown that whether portrayed as successful or merely present, an ingroup member will offer protection from stereotype threat as long as you believe your performance is representing – to that ingroup member – your personal abilities and not your group. On the other hand, when your performance represents your group, ingroup members serve as a source of stereotype threat. However, neither of the previous studies investigate the qualitative distinction in the content of the stereotype threat being experienced from ingroup member sources in group-as-target contexts versus outgroup member sources. Past work suggests that outgroup member sources in stereotype threat contexts elicit threat-related concerns due to the belief that an outgroup source of evaluation is more likely to believe the negative stereotypes to be true (Rowley et al., 2007), and subsequently judge a target of stereotype threat based on the negative stereotypes associated with the target's identity (Logel et al., 2009). However, an ingroup member source is not likely to elicit similar concerns because ingroup members are less likely to endorse negative group stereotypes (Crocker & Major, 1989; Wout et

al., 2009). What, then, are the concerns that characterize the stereotype threat-consistent, adverse effect of ingroup member sources in group-as-target contexts demonstrated in Experiments 1 and 2? To date, no known empirical evidence exists to explain why ingroup members might elicit stereotype threat in some contexts. The current hypothesis is that in stereotype threat situations where (1) your performance represents the abilities of a negatively stereotyped group that you belong to, and (2) your performance is being judged by an ingroup member, the stakes are especially high to avoid damaging the group's reputation and, by extension, the ingroup member's reputation as well. Therefore, this group-as-target, ingroup-as-source stereotype threat context should elicit disruptive, performance-diminishing concerns characterized by fears of disappointing the ingroup member.

The aim of Experiment 3 was to experimentally create a psychological context similar to the evaluative testing situation in Experiments 1 and 2 using an imagined vignette, and then measure the threat-related concerns that emerge as a result. Unlike Experiments 1 and 2, Experiment 3 focuses on the group-as-target stereotype threat context because this is the critical context in which ingroup member sources of evaluation are hypothesized to elicit threat. Indeed, Experiments 1 and 2 provide converging evidence that ingroup member sources generate stereotype threat-consistent outcomes in group-as-target contexts, but improve performance in self-as-target stereotype threat contexts.

In Experiment 3, I predict that participants who anticipate an outgroup evaluator – compared to an ingroup evaluator – will report typical stereotype threat concerns related to the likelihood that the outgroup evaluator endorses the negative stereotypes associated with their group. Furthermore, I predict that participants who imagine being evaluated by an ingroup member – versus an outgroup member – when their performance has the potential to prove

negative stereotypes true about their group (group-as-target stereotype threat) will report qualitatively different stereotype threat concerns than those elicited by outgroup evaluators: concerns characterized by fears of disappointing the ingroup member. Furthermore, if participants are truly worried about disappointing an ingroup member, they should report a heightened desire to engage in apologetic and conciliatory behaviors in response to the anticipated disappointment (Van Kleef, De Dreu, & Manstead, 2006; Van Kleef & Van Lange, 2008).

Method

Participants and design. Seventy-three Latino-American undergraduate students at the University of California, Los Angeles (UCLA) voluntarily agreed to participate in a twenty-minute-long online study for either \$10 directly deposited into their student billing accounts or one course credit in an enrolled psychology course. One participant was excluded for failing to answer a manipulation check question correctly. The final sample consisted of 72 participants (58 female) randomly assigned to one of two experimental conditions in a between-subjects design: outgroup evaluator versus ingroup evaluator.

Procedure. Participants were informed that they would be reading a scenario, and were asked to imagine how they would think, feel, and behave as if they were in the imagined scenario. Then, participants in the *outgroup evaluator* condition were presented with the following vignette:

Imagine your professor, Professor Michael Richards, is about to hand out midterm exams in your most important and most challenging class. On top of being worried about how you will do on this challenging exam, you are also aware that your performance on this test will represent the academic abilities

of Latino/Hispanic students to your professor. So, your score on the test could be used by Professor Richards to evaluate the quality of the intellectual skills of Latino/Hispanic students in general.

In the *ingroup evaluator* condition, the professor's name was replaced with "Miguel Ramirez," to portray the professor in the vignette as belonging to the same racial/ethnic group as the Latino-American student participants. Otherwise, the vignette was exactly the same in both conditions. It is important to note that across both conditions, the vignette used language consistent with a group-as-target stereotype threat context in which participants' performance is a reflection of the academic abilities of their racial group. Therefore, the purpose of this vignette was to induce feelings of group-as-target stereotype threat among participants.

After reading the vignette, participants were asked to indicate how they would feel in this scenario. Specifically, participants reported their beliefs about the professor's expectations of them (e.g., "I would feel that Professor [Richards/Ramirez] expects me to do well on the exam."), the professor's endorsement of racial stereotypes ("I would think that Professor [Richards/Ramirez] believes that White students have more intellectual ability than Latino/Hispanic students."), and typical outgroup-as-source stereotype threat concerns (e.g., "I would worry about my test performance reinforcing the negative stereotypes about Latino/Hispanic students in Professor [Richards's/Ramirez's] mind."). See Appendix for a complete list of questionnaire items.

Next, all participants read the following update to the vignette: "Now, imagine that you took the midterm exam, and a week later, Professor [Richards/Ramirez] hands back the graded exams. You find out that you did worse than expected on the exam." The goal of these additional instructions was to raise the stakes and measure the concerns that emerge as a consequence of

typical stereotype threat outcomes where participants' struggles often result in underperformance. Participants were then asked to indicate the extent to which they believed their professor would feel emotions related to shame and disappointment ("disappointed," "embarrassed," "ashamed") as a result of participants' poor exam performance. Two other negative emotion words unrelated to disappointment ("anger," "frustrated") were also included in order to distinguish the shame-related negative emotions from other negative emotions. Finally, participants were asked to report the extent to which they would be motivated to enact a variety of apologetic and conciliatory behaviors (e.g., "apologize to Professor [Richards/Ramirez] for your poor exam performance," "go to Professor [Richards's/Ramirez's] office hours for help," "avoid Professor [Richards/Ramirez]," reverse-scored; see Appendix for full item list). After this, participants provided their demographic background, and were debriefed and thanked for their participation.

Results

Independent samples *t*-tests were conducted to investigate the effect of evaluator condition (outgroup vs. ingroup) on all focal outcome measures. For all dependent variables in which the assumption of homogeneity of variance was violated (e.g., Levene's test of homogeneity of variance was found to be significant), results from the Brown-Forsythe test and its corresponding degrees of freedom correction are reported. The Brown-Forsythe test produces a test statistic similar to a standard Analysis of Variance (ANOVA; e.g., *t* or *F*), but it provides robustness against violations of equal variances and normality while retaining statistical power (Brown & Forsythe, 1974).

Latino participants' beliefs about their imagined professor's expectations of them and the professor's endorsement of negative stereotypes about Latino students' academic abilities were

examined as a function of whether or not the professor was portrayed as an ingroup (Latino) or outgroup (White) member. Consistent with the hypothesis that outgroup members are assumed to endorse the negative stereotypes about the target group, Latino participants reported believing a White professor has lower expectations of their abilities and academic performance ($M = 4.49$, $SD = 1.33$) than the expectations of a Latino professor ($M = 5.84$, $SD = 1.11$), $t(70) = 4.691$, $p < .001$, $d = 1.11$. Furthermore, participants were more likely to assume their White professor endorsed the stereotype that White students have more intellectual ability than Latino students ($M = 4.78$, $SD = 1.84$) compared to their Latino professor ($M = 3.46$, $SD = 1.92$), $t(70) = 2.995$, $p = .004$, $d = 0.70$. Moreover, Latino participants who imagined a stereotype threat scenario in which a White professor would be evaluating them reported increased concerns that their performance would reinforce negative racial stereotypes to their professor ($M = 5.54$, $SD = 1.51$) than participants who imagined a scenario with a Latino professor ($M = 4.50$, $SD = 2.26$), Brown-Forsythe $t(58.85) = 2.289$, $p = .026$, $d = 0.70^2$.

In order to investigate the concerns that emerge in stereotype threat contexts where ingroup members are the source of evaluation, Latino participants' beliefs about their imagined professor's feelings of disappointment were examined as a function of whether or not the professor in the vignette was an ingroup (Latino) or outgroup (White) member. Consistent with hypotheses, Latino college student participants who imagined struggling on an academic exam thought a Latino professor was more likely to feel disappointed ($M = 4.83$, $SD = 1.22$), embarrassed ($M = 3.17$, $SD = 1.52$), and ashamed ($M = 3.34$, $SD = 1.77$) by their poor test performance than a White professor (disappointed: $M = 3.95$, $SD = 1.76$; embarrassed: $M = 2.16$, $SD = 1.32$; ashamed: $M = 2.30$, $SD = 1.43$), disappointed: Brown-Forsythe $t(64.36) = 2.478$, $p =$

² Because the assumption of homogeneity of variance was violated (Levene's test: $F = 9.345$, $p = .003$), we report results from the Brown-Forsythe test.

.016, $d = 0.58^3$; embarrassed: $t(70) = 3.005$, $p = .004$, $d = 0.71$; ashamed: $t(70) = 2.768$, $p = .007$, $d = 0.65$. Importantly, manipulating the race of the professor did not have a reliable effect on participants' beliefs about the professor's feelings of anger ($p > .05$) or frustration ($p > .10$), suggesting that the race of the professor had an effect on emotions related to disappointment and shame specifically, and not on negatively-valenced emotions in general.

Finally, participants' motivation to engage in a variety of apologetic and conciliatory behaviors as a response to anticipating disappointment coming from a source of evaluation was examined as a function of condition. Consistent with hypotheses, when the professor in the vignette was presented as Latino, participants expressed more motivation to apologize to the professor for their poor performance ($M = 3.34$, $SD = 2.09$) than when the professor was presented as White ($M = 1.95$, $SD = 1.58$), Brown-Forsythe $t(63.319) = 3.190$, $p = .002$, $d = 0.75^4$. Furthermore, Latino participants were more motivated to request for extra class help from an ingroup professor ($M = 5.17$, $SD = 1.22$) than from an outgroup professor ($M = 4.28$, $SD = 1.66$), Brown-Forsythe $t(66.116) = 2.609$, $p = .011$, $d = 0.61^5$. Finally, Latino participants expressed increased motivation to avoid an outgroup (White) professor ($M = 4.41$, $SD = 1.88$) following a poor test performance than to avoid an ingroup (Latino) professor ($M = 3.23$, $SD = 1.83$), $t(70) = 2.689$, $p = .009$, $d = 0.64$.

³ Because the assumption of homogeneity of variance was violated (Levene's test: $F = 5.598$, $p = .021$), we report results from the Brown-Forsythe test.

⁴ Because the assumption of homogeneity of variance was violated (Levene's test: $F = 6.723$, $p = .012$), we report results from the Brown-Forsythe test.

⁵ Because the assumption of homogeneity of variance was violated (Levene's test: $F = 4.657$, $p = .034$), we report results from the Brown-Forsythe test.

Discussion

Experiment 3 provides evidence supporting a distinction in the characterization of the stereotype threat experienced in the presence of an ingroup versus outgroup source of evaluation in contexts when the group's reputation is at stake. After being instructed to imagine a situation in which one's academic performance was representative of the academic abilities of their racial group in general, Latino undergraduate students expressed increased concerns associated with a professor endorsing negative racial stereotypes when they imagined being evaluated by an outgroup (White) professor compared to an ingroup (Latino) professor. This finding is consistent with past stereotype threat research demonstrating that stereotype threat concerns are largely characterized by fears of being judged negatively by someone who endorses the negative stereotypes (Logel et al., 2009; Steele & Aronson, 1995). Furthermore, Latino students expressed beliefs that an ingroup professor would be more disappointed in a poor academic performance compared to an outgroup professor, and were more motivated to respond accordingly by apologizing for their poor performance and seeking out extra academic help from the Latino professor (versus the White professor). These findings support the notion that while an ingroup evaluator in a group-as-target stereotype threat context can produce underperformance similar to outgroup evaluators in typical stereotype threat contexts, the concerns elicited by an ingroup source are qualitatively different from those elicited by outgroup members. Furthermore, Experiment 3 sheds light on one positive implication of the current findings, suggesting that the specific concerns elicited by ingroup evaluators may be more likely to encourage engagement and help-seeking behaviors as opposed to the avoidance and disengagement often associated with outgroup evaluators.

General Discussion

Three experiments investigated the role of ingroup member sources of evaluation in stereotype threat contexts, pinning down specifically when ingroup members are more likely to serve a protective role versus a more harmful role on individuals experiencing stereotype threat. Using an experimental lab paradigm to simulate stereotype threat contexts, ingroup member evaluators served as a shield from the negative performance outcomes associated with stereotype threat when negatively stereotyped individuals expected their performance to represent their personal abilities. When performance was expected to represent the group's abilities, though, ingroup member evaluators instead elicited negative performance outcomes associated with stereotype threat. This effect was demonstrated among Latino (Experiment 1) and Black (Experiment 2) college students in the academic domain, where negative stereotypes linking racial minorities and poor academic performance exist. Furthermore, this effect held regardless of whether the ingroup member evaluator was presented as a successful role model (Latino honors student in Experiment 1) or a merely present ingroup peer (Black confederate in Experiment 2). In addition, the divergent effect of ingroup member evaluators on performance was eliminated when ingroup members were no longer able to serve as the primary source of evaluation (Experiment 2), suggesting that this effect is specific to ingroup members perceived as the primary source of evaluation and judgment in stereotype threat contexts. Finally, Experiment 3 investigated the specific content of the stereotype threat elicited by an ingroup member evaluator in group-as-target contexts. Specifically, although outgroup members elicit stereotype threat characterized by fears and concerns of being judged by a negative stereotype that is likely endorsed by the outgroup member, ingroup members elicit stereotype threat characterized by fears and concerns of disappointing the ingroup member. Interestingly, these

concerns of disappointing an ingroup member were accompanied by an increase in approach-related and help-seeking behaviors, suggesting one positive implication of the current findings.

The vast majority of research on stereotype threat has focused on outgroup members as the source of threat. This makes sense because stereotype threat has largely been defined as the fear of being seen and judged through the lens of a negative stereotype. This fear is heightened when the source of judgment is more likely to believe the negative stereotypes are true, a tendency attributed more to outgroup members than to ingroup members (Rowley et al., 2007). However, the Multi-Threat Framework (Shapiro, 2011; Shapiro & Neuberg, 2007) distinguishes between six different stereotype threats, each defined slightly differently depending on the source of judgment and the target of the threat. Thus, in addition to outgroup members, the Multi-Threat Framework identifies ingroup members as potential sources of judgment and evaluation. However, no work prior to the present findings has empirically validated this. The present work fills this gap in the literature by providing the first empirical evidence of ingroup member sources of evaluation in stereotype threat contexts.

In addition, the findings in the present research are noteworthy given past research on ingroup members in stereotype threat contexts. Ingroup members have typically been portrayed as a positive force, inspiring a range of positive behavioral outcomes by providing comfort and protection from the anxiety associated with being severely underrepresented (Dasgupta et al., 2015; Inzlicht & Ben-Zeev, 2000, 2003) or by providing a counter-stereotypical role model to look up to (Latu et al., 2013; Rivera & Benitez, 2016). Even ingroup members who serve as the primary source of judgment and evaluation in a stereotype threat context can protect women and racial minorities from the negative performance outcomes associated with stereotype threat (Marx & Roman, 2002; Marx & Goff, 2005). However, the present research identifies one

context in which ingroup members who serve as the source of evaluation *elicit* stereotype threat instead of protecting from it: contexts in which one's performance or behaviors are representative of the group's abilities in a stereotyped domain. Therefore, the findings reported in the current work contribute to the extant literature on the effect of ingroup members in stereotype threat contexts.

Furthermore, providing access to ingroup members, and specifically ingroup member role models, has been lauded in the literature as a particularly effective intervention for stereotype threat, and past empirical work has supported this approach (Dasgupta & Asgari, 2004; Shapiro et al., 2013; Stout et al., 2011). However, the present findings suggest that ingroup member role models who serve as sources of evaluation (e.g., teachers, supervisors, coaches, interviewers) may not actually effectively protect individuals from stereotype threat in every context, like most of the past research suggests (for one notable exception, see Shapiro et al., 2013). Indeed, it is possible that ingroup member interventions may, in some contexts, foster the very outcomes they were designed to counteract. Thus, the present work has significant practical implications for stereotype threat intervention work, and offers a more nuanced perspective on the efficacy of ingroup members as an intervention tool.

Limitations and Future Directions

It is important to recognize some limitations to the present research. First, while Experiment 1 provided some suggestive evidence in line with the current hypotheses, findings from this study did not reach conventional standards of significance. A higher-powered replication of Experiment 1 would significantly increase confidence in the effects reported in the present work. Second, although Experiment 3 aimed to create a psychological context similar to Experiments 1 and 2 in order to measure the mechanism explaining the effect of ingroup member

evaluators in stereotype threat contexts, there was no direct experimental test of mediation showing that the stereotype threat-consistent outcomes generated by ingroup member evaluators in group-as-target contexts were driven by concerns about disappointing the ingroup member. This is because stereotype threat experiments are set up in such a way that finding evidence of mechanism often poses an empirical challenge. The reason why it remains challenging to measure the mechanism in stereotype threat studies where performance/behavior is also captured is that measuring either mechanism or behavior will have leakage effects on one another, which will consequently obscure any stereotype threat effects. Therefore, because the main purpose of the present set of studies was to first demonstrate the effect of ingroup member evaluators in self-as-target versus group-as-target stereotype threat contexts, no direct test of the potential mediators were built into the current experimental designs. However, Experiment 3 finds supportive evidence for the specific content behind the stereotype threat concerns that emerged; specifically, concerns about disappointing an ingroup in a group-relevant context. One way to strengthen these findings would be to replicate these results in a lab procedure similar to the Experiments 1 and 2. Another way to increase confidence in concerns about disappointing an ingroup member as the focal mechanism driving stereotype threat in group-as-target/ingroup-as-source contexts would be to “turn off” these concerns and investigate whether the stereotype threat effect consequently turns off. Strengthening the evidence in support of the psychological mechanism behind stereotype threat that is elicited by ingroup member evaluators is one important avenue for future research

Future work might also explore the downstream consequences of ingroup-as-source, group-as-target stereotype threat. In Experiments 1 and 2, an ingroup evaluator elicited performance decrements typically seen in stereotype threat contexts when racial minority

participants' expected their performance to represent the skills and abilities of racial minorities in general. Furthermore, in Experiment 3, an ingroup evaluator in a group-as-target stereotype threat context led participants to report heightened concerns about disappointing the ingroup member. However, these performance decrements and associated concerns did not necessarily translate into avoidance, disengagement, or disidentification with the negatively stereotyped domain, as has been observed in past stereotype threat research (Davies et al., 2002; Major, Spencer, Schmader, Wolfe, & Crocker, 1998). Rather, in spite of reporting heightened concerns about disappointing an ingroup evaluator, participants in the ingroup-as-source/group-as-target stereotype threat condition in Experiment 3 reported an increased willingness to seek out an ingroup evaluator – both to apologize as well as to seek help in the negatively stereotyped domain. Furthermore, participants were less likely to completely disengage from and avoid an ingroup evaluator compared to an outgroup evaluator. These findings hint at a potential longer-term benefit of an ingroup evaluator in group-as-target stereotype threat contexts, in spite of the short-term performance decrements found in Experiments 1 and 2. Future research could test this by setting up a stereotype threat context in the lab similar to Experiments 1 and 2, measuring performance in a negatively stereotype domain, and then assessing willingness to approach and seek help from an ingroup evaluator as well as interest in persisting on a task relevant to the stereotyped domain.

Finally, one major question that emerges from the present work is which environments tend to be characterized by group-as-target versus self-as-target stereotype threat. Knowing this can help us understand when an ingroup member source of evaluation is more likely to have a helpful effect or a harmful effect on individuals experiencing stereotype threat. In the studies reported here, the target of the stereotype threat was manipulated directly via instructions that

established either the group's reputation or one's personal reputation as the target at stake. However, in the real world, stereotype threat is not manipulated explicitly in this way; it is experienced via the presence of contextual cues linking the stereotype to one's identity (i.e., making the stereotype salient in some way, or making one's negatively stereotyped identity salient in some way).

Given the present findings, if these contextual cues highlighted the fact that one's behaviors were representative of the group in contexts where the group is highly salient – for example, in contexts where severe underrepresentation calls attention to one's minority group identity – we might expect that an ingroup member evaluator might elicit performance decrements. However, if it was possible to shift the focus of the context so that one's behaviors represented one's personal abilities – for example, in testing contexts where one's test performance is diagnostic of their personal abilities – we might expect an ingroup member evaluator to have a positive and protective impact. These environmental nuances are especially important to any stereotype threat intervention efforts looking to increase the presence and availability of ingroup members.

Conclusion

A significant body of research has demonstrated that ingroup members can protect individuals from the pernicious effects of stereotype threat, but very little research has investigated how and when ingroup members can elicit threat. Understanding the complex role that ingroup members have on an individual's psychological processes addresses this gap in the social psychological research on stereotype threat. The current findings provide the first empirical evidence investigating ingroup members as a source of evaluation and stereotype threat, as identified by the Multi-Threat Framework (Shapiro & Neuberg, 2007; Shapiro, 2011).

Furthermore, the present research sheds light on the stereotype threat contexts in which ingroup member evaluators are more likely to be helpful versus harmful. Gaining a more comprehensive understanding of the role of ingroup members in stereotype threat contexts is crucial to the research and development of intervention efforts aimed at reducing the damaging negative outcomes associated with stereotype threat.

Appendix

Questionnaire Items used in Experiment 3

Beliefs about Professor's Expectations

(assessed on a 7-point scale ranging from 1 = *not at all* to 7 = *a great deal*)

1. I would believe that Professor [Richards/Ramirez] hopes that I do well on the exam.
2. I would think that Professor [Richards/Ramirez] believes that I will do poorly on the exam.
(reverse-scored)
3. I would feel that Professor [Richards/Ramirez] expects me to do well on the exam.
4. I would feel that Professor [Richards/Ramirez] expects me to do poorly on the exam. (reverse-scored)

Professor's Endorsement of Stereotypes

(assessed on a 7-point scale ranging from 1 = *not at all* to 7 = *a great deal*)

1. I would think that Professor [Richards/Ramirez] believes that White students have more intellectual ability than Latino/Hispanic students.

Stereotype Threat Concerns

(assessed on a 7-point scale ranging from 1 = *not at all* to 7 = *a great deal*)

1. I would worry about my test performance reinforcing the negative stereotypes about Latino/Hispanic students in Professor [Richards's/Ramirez's] mind.
2. I would be concerned that my performance would prove to Professor [Richards/Ramirez] that the negative stereotypes are true about Latino/Hispanic students.

Beliefs about Professor's Feelings of Shame/Disappointment

(assessed on a 7-point scale ranging from 1 = *not at all* to 7 = *extremely*)

To what extent do you believe Professor [Richards/Ramirez] would feel the following about your test performance:

1. Disappointed
2. Embarrassed
3. Ashamed
4. Anger
5. Frustrated

Anticipated Behaviors

(assessed on a 7-point scale ranging from 1 = *not at all* to 7 = *a great deal*)

To what extent would you be motivated to do the following:

1. Apologize to Professor [Richards/Ramirez] for your poor exam grade.
2. Go to Professor [Richards's/Ramirez's] office hours for help.
3. Email Professor [Richards/Ramirez] for help.
4. Approach Professor [Richards/Ramirez] after class for help.
5. Avoid Professor [Richards/Ramirez].

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