# Dual cues: Women of color anticipate both gender and racial bias in the face of a single identity cue

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Kimberly E. Chaney, Diana T. Sanchez and Jessica D. Remedios<sup>2</sup>

### **Abstract**

Integrating past research on women of color, stigma transfers, and generalized prejudice, the present research examined the extent to which threats and safety cues to one identity dimension (e.g., gender) results in threat or safety to women of color's other stigmatized identity dimension (e.g., race). Across three experimental studies (Total N=638), the present research found support for a dual cue hypothesis, such that Black and Latina women anticipated gender bias from a racial identity threat (Studies 1 and 2) and anticipated racial bias from a gender identity threat (Study 2) resulting in greater overall anticipated bias compared to White women (Study 3). Moreover, Black and Latina women anticipated racial identity safety from a gender identity safety cue (Study 3) supporting a dual safety hypothesis. These studies add to work on double jeopardy by extending a dual threat framework to anticipation of discrimination and highlighting the transferability of threat and safety cues for women of color.

### Keywords

double jeopardy, identity threat, intersectional, stigma

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Past research has consistently demonstrated that experiences of discrimination and prejudice have a large impact on people with stigmatized identities, affecting how they interpret and understand environments and social interactions (Crocker & Major, 1989; Major & O'Brien, 2005). Individuals with stigmatized identities recognize both external factors that can predict experiences of prejudice (e.g., someone who holds negative attitudes towards one's racial group) and internal factors that can predict experiences of prejudice (e.g.,

one's own membership in a stigmatized group; Schmitt & Branscombe, 2002). As women of color are stigmatized for both their racial and gender identities, research taking an intersectional

<sup>1</sup>Rutgers University, Piscataway, USA <sup>2</sup>Tufts University, Medford, USA

#### Corresponding author:

Kimberly E. Chaney, Department of Psychology, Rutgers University, 53 Avenue E, Piscataway, NJ 08854, USA. Email: Kimberly.Chaney@rutgers.edu approach has considered how experiences of stigma may evoke different internal attributions for women of color compared to individuals who are (visibly) stigmatized on only one identity dimension, such as White women (for review, see Remedios & Snyder, 2015). For example, when women of color experience disparate treatment, they could attribute this internally to their racial identity, their gender identity, or both. Yet, we propose that external attributions of prejudice are dependent on individuals' lay beliefs about the nature of prejudices.

Critically, past research has suggested that individuals hold a lay understanding of prejudices as generalized, such that they perceive prejudices to be positively significantly correlated (Sanchez et al., 2017). Indeed, past research on identity cue transfer has demonstrated that White women perceive a White male evaluator who endorses anti-Black attitudes as also endorsing sexist attitudes, resulting in White women anticipating gender stigma from a racial identity threat (Sanchez et al., 2017). Extending past research on identity cue transfer for individuals who are stigmatized along one identity dimension, we propose that women of color may experience a threat to both their racial and gender identities from an identity threat which targets only one of their stigmatized identities, and identity safety from an identity safety cue which targets only one of their stigmatized identities. Specifically, we propose an experience of dual identity cues from a single identity cue.

## Identity Cue Transfer

Research has indicated that people from both high and low-status groups hold a lay understanding of the generalized nature of prejudice, such that racism and sexism are perceived as intersecting attitudes, with expressions of racism signaling sexism and vice versa (Chaney et al., 2016; Sanchez et al., 2017). Known as "identity cue transfer", a series of studies found that White women anticipated gender discrimination (Sanchez et al., 2017) when anticipating an evaluation by a person who endorsed negative attitudes towards Black Americans. Likewise, Black

and Latino men anticipated racial discrimination from a person who expressed sexist attitudes towards women (Sanchez et al., 2017). Similarly, Black men anticipated more just racial treatment at a company with gender diversity awards, while White women anticipated more equitable gender treatment at a company with racial diversity awards (Chaney et al., 2016; for review, see Chaney et al., 2019).

Critically, the extent to which individuals endorse a lay theory of generalized prejudice moderates experiences of stigma by prejudice transfer (Chaney et al., in press; Sanchez et al., 2018), such that those who more strongly believe prejudices co-occur report and experience stigma by prejudice transfer more than those who do not perceive prejudices as co-occurring. Holding a lay theory of generalized prejudice is a (somewhat) accurate notion of sexism and racism co-occurring and prejudices against devalued social groups stemming from common, underlying ideologies. Specifically, past research on generalized prejudice demonstrates that negative attitudes towards women and people of color often co-occur and stem from a common underlying ideology (Duckitt & Sibley, 2007; Sibley & Duckitt, 2008; Sidanius & Pratto, 1999). Thus, identity cue transfers occur, in part, due to inferences about a broader ideology that the perpetrator or organization endorses.

To this point, research on identity cue transfer has focused on individuals stigmatized along a single identity dimension (i.e., White women, men of color) to demonstrate that stigma transfers in response to bias against, or inclusion of, outgroup members. Yet, these findings have implications for individuals with multiple stigmatized identities as well, such as women of color. We propose that for individuals with multiple stigmatized identities, expressions of prejudice against one of their stigmatized identities (e.g., race) may have implications for a second dimension of their identity (e.g., gender). As such, the present research proposes that women of color who face a single identity dimension threat (e.g., racism), will report a threat towards their other stigmatized identity (e.g., gender) as well as their racial identity, i.e., experience a simultaneous dual

threat. Similarly, we propose that women of color who face a single identity dimension inclusion cue (e.g., feminist ally), will report identity safety for their other stigmatized identity (e.g., racial ally), indicating dual safety.

To our knowledge, no research to date has examined how identity cues may transfer meaningfully to other seemingly untargeted dimensions of one's identity for women of color. Examining within-person identity cue transfers has important implications because it will demonstrate how difficult it is to isolate the potential additive effects of being a multiply stigmatized group member when instances of one form of prejudice conjure concerns of other forms of prejudice (e.g., sexism conjures concerns of racism) and vice versa. Moreover, identifying how women of color perceive intergroup attitudes as similar, such that one intergroup attitude (e.g., racism) is perceived as indicative of a second intergroup attitude (e.g., sexism), highlights a novel avenue through which intersectionality can identify common grounds between groups (see Cole, 2009 for review).

### Intersectionality

Intersectionality, defined as an approach that involves the contextualization of one social identity by the other social identities an individual possesses (Crenshaw, 1989; Warner, 2008) allows for a nuanced and thorough examination of the experiences of individuals who hold one or more stigmatized identity. For example, it is well accepted that women of color's experiences as women are shaped by their experiences as members of their racial group, and their experiences as members of their racial group are shaped by their experiences as women (Warner, 2008; Woods-Giscombé & Lobel, 2008). Yet, there is less consensus surrounding how these identities intersect to create novel experiences and how best to approach, understand, and measure these novel experiences.

Specifically, research on double jeopardy indicates that women of color's experiences of discrimination are additive, or compounded, such that they face double the challenges as individuals who are stigmatized on only one identity dimension (e.g., White women; Beale, 1979; Settles, 2006; see also Remedios et al., 2016). In support of double jeopardy, women of color (including Asian, Black, and Latina women) report experiencing significantly more discrimination than White women and men of color (Berdahl & Moore, 2006) and individuals with more than one stigmatized identity dimension (including race, gender, sexual orientation, and social class) report experiencing significantly more unfair treatment and greater stereotype concern than individuals with only one stigmatized identity dimension (Remedios & Snyder, 2018).

In opposition to this viewpoint, the ethnicprominence account indicates that Black women more frequently attribute experiences of discrimination to their race than to their gender (e.g., King, 2003), and their rates of reported discrimination are not significantly different from those of Black men (Levin et al., 2002). Indeed, as Black women are often masculinized, their gender identities may be subverted by their racial identities (Goff et al., 2008). Other research in line with the ethnic-prominence account has found that Asian women report greater racism than sexism in their environments (Remedios et al., 2012). As such, the ethnic-prominence hypothesis suggests that women of color are most susceptible to, and most aware of, racially based discrimination (see Purdie-Vaughns & Eibach, 2008 for integration and review of these hypotheses).

Thus, women of color's unique experiences of discrimination remain a developing area of research integral to providing a more complete understanding of experiences of stigma for women of color. Guided by an intersectional approach, we propose that women of color may experience a dual identity cue in response to an identity cue which targets only one of their stigmatized identity dimensions. Specifically, we propose that threats to a woman of color's racial identity will signal not only a racial identity threat, but also a gender identity threat, and vice versa. Indeed, we propose that the notion that sexism and racism could have additive, compound effects for women of color or that experiences of racism

are predominant for women of color may ignore the extent to which sexism perceptions are both a product of, and an outcome of racism perceptions. Notably, the present research is focused on Black and Latina women as these racial groups are typically conferred low social status (Fiske et al., 2002; Zou & Cheryan, 2017) and were thus our primary focus.<sup>1</sup>

### Current Research

In a novel contribution to the growing intersectional literature and integrating past research on identity cue transfer (e.g., Sanchez et al., 2017) the present research examined the extent to which Black and Latina women anticipate gender identity cues from a racial cue, and racial identity cues from a gender cue. Across three studies, we examine whether Black and Latina women expect gender discrimination when anticipating being evaluated by a White man who holds negative attitudes about their racial ingroup (Studies 1 and 2). We propose that Black and Latina women will anticipate gender discrimination when exposed to either racism or sexism (Studies 1 and 2) and anticipate racial discrimination when exposed to either racism or sexism (Study 2).

Moreover, in a direct comparison of women of color and White women, we examine the extent to which a White male professor who purports negative attitudes towards women (gender threat), signals he is an ally for women (gender safety), or whose attitudes towards women are unknown is expected to discriminate against students because of their race and gender (Study 3). We propose that women of color will anticipate greater racial and gender discrimination from a gender-threatening professor compared to a control professor, and less racial and gender discrimination from a gender-safety professor. In comparison, we anticipate that White women will not report differences in racial-based discrimination as White women hold a high-status racial identity but will mirror women of color's anticipated gender discrimination. Notably, the present research independently measures anticipated racebased treatment and anticipated gender-based

treatment to allow for full analyses and measurements of anticipated treatment based on each of women of color's stigmatized identities. While we propose women of color will experience dual identity cues from a single identity cue, we anticipate significantly greater reported threat (safety) towards the targeted identity (e.g., greater racial threat than gender threat from a racism threat) than the non-targeted identity, but significantly greater threat (safety) for both identities compared to individuals exposed to the no threat (safety), control condition.

Notably, the present research is not inherently a test of compounded discrimination or ethnicprominence. Rather, we are proposing that women of color may experience a dual identity cue towards both their gender and racial identities from a specific singular identity cue. Specifically, an abundance of past evidence supporting compounded discrimination has been documented, with women of color recalling significantly more past experiences of discrimination than individuals who are stigmatized on only one identity dimension (Berdahl & Moore, 2006; Remedios et al., 2016), or in examinations of perpetrated discrimination against women of color compared to White women (e.g., Rosette & Livingston, 2012). In comparison, the present research is examining women of color's prospective, anticipated discrimination based on known intergroup attitudes about one of their stigmatized identities, and how this may transfer to create anticipated discrimination towards both of their stigmatized identities. As such, we are proposing that women of color may not only experience more discrimination as suggested by research on compounded discrimination, but they may also anticipate dual discrimination when only one threat is present. Thus, we are suggesting a nuance to previous assumptions about how women of color may experience stigma from an identity threat cue targeting a single identity dimension. Yet, the inclusion of White women in Study 3 does allow for a comparison of women of color's and White women's anticipated race- and gender-based treatment, thus allowing an examination of prospective compounded discrimination.

### Study 1

Study 1 examined reported anticipated gender and racial discrimination for women of color (Black and Latina women) when they anticipate an interaction with a White man who they learn either endorses negative attitudes about their racial group or not. We propose that women of color perceive a White male evaluator who holds negative attitudes about their racial ingroup as also holding sexist attitudes, resulting in more negative anticipated racial and gender treatment during an upcoming interaction with this individual compared to an individual who does not endorse negative attitudes about their racial ingroup. Lastly, the present research included a self-report measure of liking of the ostensible other in order to account for a generic liking penalty applied to prejudiced people as in past work on stigma by prejudice transfer (Chaney et al., 2018; Sanchez et al., 2018; Sanchez et al., 2017).

### Method

Participants. In all, 169 undergraduate women enrolled in introductory psychology at a large Northeastern university in the US who identified as Black or Latina during a prescreen survey were recruited to take part in an in-lab study in exchange for partial course credit. However, three participants were excluded from analyses for incorrectly responding to two instructional attention checks, leaving a final analytic sample of 166 participants (83 Black, 83 Latina;  $M_{\text{age}} = 19.00$ , SD = 1.70). An a priori power analysis for a 2(condition) 2(participant race) x 2(identity measure) ANCOVA with one covariate (liking) for a medium effect size (d = 0.50) with 90% power and a medium correlation between identity measure variables (r = .40) indicated a data collection stop point of 165. No previous effect size was known.

Procedure. After providing basic demographic information, participants were randomly assigned to form impressions of an ostensible other participant (Sanchez et al., 2017) with whom they would soon interact. Participants learned that they had been randomly assigned to the role of a

"presenter", and the other participant had been assigned the role of the "evaluator", for an upcoming task that would be completed in-person, in a room down the hallway. Based on random assignment, the evaluator was either presented as holding negative attitudes towards the participants' racial ingroup (i.e., Black participants learned this individual held anti-Black attitudes), or no information was given about their racial attitudes (e.g., control). This manipulation was presented to participants in a "personality profile packet" that the other individual had ostensibly completed (following Sanchez et al., 2017), and which included demographic information and filler personality measures (e.g., the Ten Item Personality Inventory). Additionally, participants assigned to the racism condition also saw this individual's responses to the Modern Racism Scale (McConahay, 1986) adjusted to the participant's racial ingroup and which was filled out to be moderately racist (Sanchez et al., 2017). All participants learned that this individual was an 18-year-old White male who was neutral on the personality measures (e.g., responses were not extreme, M = 4.5/7 for extraversion on the Ten Item Personality Inventory). After reviewing the profile packet, participants evaluated the individual on various measures, including perceived racism and sexism of the individual, as well as anticipated negative gender- and race-based treatment should the participant interact with the individual in the future. Participants completed measures of perceived racism and perceived sexism randomized, then negative gender- and racebased treatment randomized.<sup>2</sup> Lastly, participants completed a measure of overall liking of the individual before being informed that no such evaluator existed and there would be no upcoming presentation during the debriefing.

#### Materials

Perceived Bias. Participants completed a threeitem measure of perceived racism ( $\alpha = .88$ ; Sanchez et al., 2017) on a scale from 1 (very slightly or not at all) to 5 (extremely or a lot). Items included, "How likely is this person to discriminate based on race?", "How likely is it that this person treats racial minorities fairly?" (reverse coded), and "How likely is this person to discriminate based on ethnicity?". Similarly, participants completed a three-item measure of perceived sexism ( $\alpha$  =.77; Sanchez et al., 2017). The scale and first two items were identical to the perceived racism scale but substituted "gender" for "race" and "women" for "racial minorities" and the third sexism item was "How likely is it that this person is sexist?"

Identity-Based Treatment. Participants indicated on three items how negatively they anticipated being treated due to their gender during the upcoming presentation task ( $\alpha = .95$ ; Sanchez et al., 2017). Items were, "How likely is it that your partner will. . ." "Not treat you with respect because of your gender", "Not treat you fairly because of your gender", and "Not treat you favorably because of your gender?" and were responded to on a scale from 1 (not at all) to 7 (very much). Participants also completed a measure of race-based treatment, which included the same three items as the gender-based treatment measure above, but replacing "because of your gender" with "because of your race" ( $\alpha = .99$ ; Sanchez et al., 2017).

Liking. Participants completed three items regarding liking for the profiled individual (Sanchez et al., 2017), including "How much would you enjoy interacting with this person?" and "How much would you like to meet this person?" Participants answered on a scale from 1 (very slightly or not at all) to 5 (extremely or a lot), and the measure was reliable ( $\alpha = .80$ ).

### Results

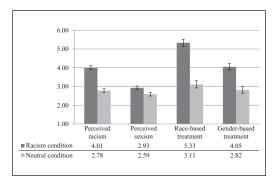
As an initial 2(participant race: Black, Latina) x 2(condition: racism, control) ANOVA revealed a significant effect of condition on liking, F(1, 162) = 75.63, p < .001,  $\eta_p^2 = .32$ , such that participants liked the racist individual (M = 1.63, SE = 0.08) significantly less than the control individual (M = 2.63, SE = 0.08), we included liking as a covariate in the following analyses. There was no effect of participant race, F(1, 162) = 0.09, p = .76,  $\eta_p^2 = .001$ , nor

a participant race x condition interaction, F(1, 162) = 0.75, p = .39,  $\eta_p^2 = .01$ , on liking. Analyses not controlling for liking do not significantly differ from those reported below and are reported in the online supplemental material.

Perceived Bias. A 2(participant race) x 2(condition) x 2(perceived bias: racism, sexism) mixed ANCOVA with perceived bias as a within-subject factor revealed no main effect of participant race,  $F(1, 161) = 1.08, p = .30, \eta_p^2 = .01, a \text{ main effect}$ of perceived bias, F(1, 161) = 25.07, p < .001, $\eta_p^2 = .14$ , and a significant main effect of condition, F(1, 161) = 33.44, p < .001,  $\eta_p^2 = .17$ . Moreover, the race x perceived bias interaction,  $F(1, 161) = 0.37, p = .55, \eta_p^2 = .002$ , and the race x condition interaction, F(1, 161) = 0.93, p= .34,  $\eta_p^2$  = .006, were not significant, but the condition x perceived bias interaction was significant, F(1, 161) = 33.33, p < .001,  $\eta_p^2 = .17$ . Lastly, the three-way interaction was not significant,  $F(1, 161) = 0.02, p = .88, \eta_p^2 < .001.$ 

Demonstrating successful manipulation of racism, simple effect analyses of the condition x perceived bias interaction revealed that participants perceived the evaluator as more racially biased in the racism condition (M = 4.01, SE =0.10) than the neutral condition (M = 2.78, SE =0.10), F(1, 163) = 61.71, p < .001,  $\eta_p^2 = .28$ . Critical to our dual threat hypothesis, participants perceived the racist individual as significantly more sexist (M = 2.93, SE = 0.10) than the neutral individual (M = 2.59, SE = 0.10), F(1, 163)= 5.15, p = .03,  $\eta_p^2 = .03$ . Breaking down the interaction the other way, no significant difference emerged between perceived racial and gender bias in the neutral condition, F(1, 80) = 0.33, p = .57,  $\eta_p^2 = .004$ , but a significant difference emerged in the racism condition, F(1, 82) =47.14, p < .001,  $\eta_p^2 = .37$ , such that participants perceived greater racial bias than gender bias in the racism condition (see Figure 1).

Identity-Based Treatment. A 2(participant race) x 2(condition) x 2(identity treatment) mixed ANCOVA with identity treatment as a within-subject factor revealed no main effect of participant



**Figure 1.** Effect of condition on perceived bias and perceived identity treatment, collapsed across participant race, Study 1.

race, F(1, 161) = 0.09, p = .77,  $\eta_p^2 = .001$ , a significant main effect of condition, F(1, 161) = 48.23, p < .001,  $\eta_p^2 = .23$ , and a significant main effect of identity treatment, F(1, 161) = 13.68, p < .001,  $\eta_p^2 = .08$ . While the identity-based treatment x race interaction was not significant, F(1, 161) = 3.10, p = .08,  $\eta_p^2 = .02$ , the condition x race interaction was significant, F(1, 161) = 4.16, p = .043,  $\eta_p^2 = .03$ , as was the identity treatment x condition interaction, F(1, 161) = 13.91, p < .001,  $\eta_p^2 = .08$ . The three-way interaction was not significant, F(1, 161) = 1.17, p = .28,  $\eta_p^2 = .01$ .

Simple effect analyses of the identity treatment x condition interaction revealed that participants anticipated significantly more negative race-based treatment in the racism condition (M = 5.33, SE = 0.19) than in the neutral condition (M = 3.11, SE = 0.19), F(1, 163) = 58.19, p <.001,  $\eta_p^2$  = .26. In support of a dual threat hypothesis, participants also expected significantly more negative gender-based treatment in the racism condition (M = 4.05, SE = 0.17) than in the neutral condition (M = 2.82, SE = 0.18),  $F(1, 163) = 20.53, p < .001, \eta_p^2 = .11$ . Breaking down the interaction the other way, participants anticipated significantly more negative race-based than gender-based treatment in the racism condition, F(1, 82) = 23.31, p < .001,  $\eta_p^2 = .22$ , but not in the neutral condition, F(1, 80) = 0.66, p =.42,  $\eta_p^2 = .01$  (see Figure 1).

To analyze the condition x participant race interaction, we computed participants' mean

anticipated negative treatment across the raceand gender-based treatment measures. Simple effect analyses on this average treatment measure revealed significant effects of condition for both Latina women, F(1, 80) = 9.59, p = .003,  $\eta_p^2 =$ .11, and Black women, F(1, 80) = 47.49, p <.001,  $\eta_p^2 = .37$ , though the effect of condition was significantly greater for Black women. Latina women anticipated significantly more negative treatment in the racism condition (M = 4.39, SE = 0.24) than in the neutral condition (M = 3.24, SE = 0.24), as did Black women ( $M_{\text{racism}} = 4.95$ , SE = 0.21;  $M_{\text{control}} = 2.73$ , SE = 0.21). There was no effect of participant race on averaged anticipated treatment for participants in the neutral condition,  $F(1, 79) = 1.38, p = .25, \eta_p^2 = .02,$ or in the racism condition, F(1, 81) = 3.13, p = $.08, \eta_{p}^{2} = .04.$ 

### Discussion

Study 1 is the first study, to our knowledge, to reveal that women of color anticipate dual identity threats from a single identity threat. Specifically, Study 1 demonstrated that women of color perceived a White man with racist attitudes as more sexist and anticipated significantly more negative gender-based treatment in a future interaction compared to a White man whose racial attitudes were unknown. Specifically, Black and Latina women anticipated that a White man who held negative attitudes about their racial ingroup also held negative attitudes about women, and thus anticipated a negative future interaction with him that was shaded by anticipated negative genderbased treatment. Moreover, these cognitive evaluations of anticipated gender-based treatment are separate from a general negativity bias as results remain when controlling for dislike of the evaluator. Yet, it is unclear whether a sexist White male evaluator may signal negative racial attitudes and treatment as well.

# Study 2

In Study 2, we added an additional condition in which participants were presented with an ostensibly sexist evaluator in order to compare the effects of single threats directed at each of women of color's stigmatized identities. Specifically, to fully test the dual threat hypothesis, we sought to demonstrate that women of color would not only anticipate sexism from racism, as demonstrated in Study 1, but also anticipate racism from a White man who endorses sexist attitudes, including negative race-based treatment from the individual in a future interaction. As such, in Study 2 we sought to examine the effects of both a racial and gender threat, independently, compared to a neutral condition, and anticipated support for our dual threat hypothesis, such that Black and Latina women would report both racial and gender threat from an identity threat cue which targeted only one of their stigmatized identities.

### Method

Participants. In all, 199 participants enrolled in introductory psychology at a large Northeastern university in the US who identified as Black or Latina women during a prescreen survey were recruited to take part in an online study in exchange for partial course credit. However, eight participants were excluded for incorrectly responding to two instructional attention check questions, leaving a final sample of 191 (77 identified as Black/African American, 114 identified as Latina/Hispanic) with a mean age of 19.20 years (SD = 2.46, range = 18-44). We set a data collection stop point at 206 based on an a priori power analyses for a 3(condition) x 2(participant race) x 2(identity measurement) ANCOVA with one covariate for a medium effect size (d = 0.50) at 90% power and a medium correlation between identity measurement variables (r = .50).

Procedure. Study 2 was identical to Study 1 except for the following change. An additional condition was added such that some participants were randomly assigned to receive a packet of information ostensibly filled out by a sexist White man who would be their evaluator. This condition was thus identical to the racist condition from Study 1, but in place of a completed Modern Racism scale, there was a completed Old Fashioned Sexism

Scale (Swim et al., 1995), which indicated moderately sexist responses. Thus, participants were randomly assigned to receive the packet of an ostensible White male evaluator whose intergroup attitudes were either unknown (neutral), who endorsed negative attitudes about the participant's racial ingroup (racist), or who endorsed negative attitudes about women (sexist). After reviewing the packet, participants then completed the same measures from Study 1 before being debriefed.

*Materials.* Participants completed the same measures of perceived racism ( $\alpha = .84$ ), perceived sexism ( $\alpha = .82$ ), gender-based treatment ( $\alpha = .96$ ), race-based treatment ( $\alpha = .97$ ),<sup>3</sup> and liking ( $\alpha = .82$ ), as in Study 1.

### Results

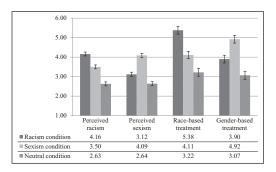
A 3(condition) x 2(participant race) ANOVA for liking of the profiled individual revealed no effect of participant race, F(1, 185) = 0.01, p =.92,  $\eta_p^{\ 2}$  = .001, a significant main effect of condition, F(2, 185) = 25.29, p < .001,  $\eta_p^2 = .22$ , and no significant interaction, F(2, 185) = 0.70, p = .50,  $\eta_p^2 = .008$ . Fisher's Least Significance Difference (LSD)-corrected post hoc analyses revealed that participants liked the racist individual (M = 1.68, SE = 0.11) and the sexist individual (M = 2.07, SE = 0.11) significantly less than the neutral individual (M = 2.79, SE =0.11), ps < .001. Moreover, participants liked the racist individual significantly less than the sexist individual, p = .014. As such, we again controlled for liking in the following analyses. Analyses not controlling for liking do not substantially change the direction or significance of results and are reported in the online supplemental material.

Perceived Bias. A 3(condition) x 2(participant race) x 2(perceived bias) mixed ANCOVA with perceived bias as a within-subject factor revealed no main effect of participant race, F(1, 184) = 0.81, p = .37,  $\eta_p^2 = .004$ , no main effect of perceived bias, F(1, 184) = 3.01, p = .08,  $\eta_p^2 = .02$ , and a significant main effect of condition, F(2, 184) = 43.14, p < .001,  $\eta_p^2 = .32$ . Moreover, while the participant race x condition interaction, F(2, 184)

= 1.79, p = .17,  $\eta_p^2$  = .02, and participant race x perceived bias interaction, F(1, 184) = 0.98, p = .32,  $\eta_p^2$  = .01, were not significant, the perceived bias x condition interaction was significant, F(2, 184) = 69.25, p < .001,  $\eta_p^2$  = .43. This was qualified by a significant perceived bias x condition x participant race interaction effect, F(2, 184) = 4.02, p = .02,  $\eta_p^2$  = .04. Notably, simple effect analyses revealed significant condition x perceived bias interactions for both Black, F(2, 73) = 14.58, p < .001,  $\eta_p^2$  = .29, and Latina women, F(2, 110) = 70.46, p < .001,  $\eta_p^2$  = .56. As such, we next examined the effect of condition on perceived racial bias and perceived gender bias for both Black and Latina women.

For perceived racial bias, there was a significant condition effect for Black women, F(2, 73) = 14.83, p < .001,  $\eta_p^2 = .29$ , and Latina women,  $F(2, 110) = 54.15, p < .001, \eta_p^2 = .50$ , though the effect of condition was significantly greater for Latina women. Critical to the dual threat hypothesis, LSD post hoc analyses of the effect of condition revealed that Black women perceived both the racist (M = 3.98, SE = 0.16) and the sexist (M = 3.86, SE = 0.15) individual as significantly more racially biased than the neutral individual (M = 2.80, SE = 0.16), ps < .001. Black women demonstrated no significant difference in perceptions of racial bias between the racist and sexist individuals, p = .60. Latina women similarly demonstrated a dual threat, such that they perceived both the racist (M = 4.41, SE= 0.12) and sexist individual (M = 3.31, SE =0.12) as more racially biased than the neutral individual (M = 2.47, SE = 0.13), ps < .001. Unlike Black women, however, Latina women also perceived the racist individual as significantly more racially biased than the sexist individual, p < .001.

For perceived gender bias, there was a significant condition effect for Black women, F(2, 73) = 20.36, p < .001,  $\eta_p^2 = .36$ , and Latina women, F(2, 110) = 25.52, p < .001,  $\eta_p^2 = .32$ . LSD post hoc analyses of the effect of condition revealed that Black women perceived the sexist individual (M = 4.16, SE = 0.17) as more gender biased than the neutral individual (M = 2.67, SE = 0.18), p < .001. However, they did not perceive the racist



**Figure 2.** Effect of condition on perceived bias and perceived identity treatment, collapsed across participant race, Study 2.

individual (M = 3.14, SE = 0.18) as more gender biased than the neutral evaluator, p = .09, and perceived the racist individual as less gender biased than the sexist individual, p < .001. In support of the dual threat hypothesis, Latina women perceived the sexist individual (M = 4.09, SE = 0.14) as more gender biased, p < .001, and the racist individual (M = 3.16, SE = 0.15) as more gender biased, p = .02, than the neutral individual (M = 2.60, SE = 0.16). Moreover, Latina women perceived the sexist individual as more gender biased than the racist individual, p < .001 (see Figure 2 for effects by condition, collapsing across race).

As such, Black and Latina women perceived both the racist and sexist individual as more racially biased than the neutral individual. While both Black and Latina women also perceived the sexist individual as more gender biased than the neutral individual, only Latina women also perceived the racist individual as more gender biased than the neutral individual.

Identity-Based Treatment. The 3(condition) x 2(participant race) x 2(identity-based treatment) mixed ANCOVA with identity-based treatment as a within-subject factor revealed no main effect of participant race, F(1, 184) = 0.48, p = .49,  $\eta_p^2 = .003$ , no main effect of identity-based treatment, F(1, 184) = 0.05, p = .82,  $\eta_p^2 = .001$ , and a significant main effect of condition, F(2, 184) = 15.54, p < .001,  $\eta_p^2 = .15$ . This effect was qualified by a significant identity-based treatment x condition interaction, F(2, 184) = 48.68, p < .001,

 $\eta_p^2$  = .35, and a significant identity-based treatment x participant race interaction, F(1, 184) = 11.59, p = .001,  $\eta_p^2$  = .06. The participant race x condition interaction, F(2, 184) = 2.50, p = .09,  $\eta_p^2$  = .03, and the three-way interaction, F(2, 184) = 0.01, p = .99,  $\eta_p^2$  = .001, were not significant.

Simple effect analyses for the identity-based treatment x condition interaction revealed a significant effect of condition on anticipated negative race-based treatment, F(2, 187) = 26.54, p < .001,  $\eta_p^2 = .22$ . Critical to our dual threat hypothesis, participants anticipated significantly more negative race-based treatment from the sexist individual (M = 4.13, SE = 0.19) than the neutral individual (M = 3.21, SE = 0.21), p = .002, as well as significantly more negative race-based treatment from the racist individual (M = 5.47, SE = 0.21) than the neutral individual, p < .001. Participants also anticipated significantly more negative race-based treatment from the racist individual than the sexist individual, p < .001.

Further simple effect analyses of the identity-based treatment x condition interaction revealed a significant effect of condition on gender-based treatment,  $F(2, 187) = 20.92, p < .001, \eta_p^2 = .18$ . Participants anticipated significantly more negative gender-based treatment from the racist individual (M = 3.92, SE = 0.21) than the neutral individual (M = 3.05, SE = 0.22), p = .007, indicating dual threat, and significantly more negative gender-based treatment from the sexist individual (M = 4.95, SE = 0.20) than the neutral evaluator, p < .001, and compared to the racist individual, p < .001 (see Figure 2).

Notably, simple effect analyses of the significant identity-based treatment x participant race interaction revealed that there was no effect of participant race on anticipated negative race-based treatment,  $F(1, 188) = 0.45, p = .51, \eta_p^2 = .002, (M_{Black} = 4.36, SE = 0.20; M_{Latina} = 4.19, SE = 0.17), or on anticipated negative gender-based treatment, <math>F(1, 188) = 3.69, p = .056, \eta_p^2 = .02, (M_{Black} = 3.69, SE = 0.20; M_{Latina} = 4.19, SE = 0.16).$  Breaking down the interaction by participant race instead, Latina women's anticipated race- and gender-based treatment did not significantly differ,  $F(1, 112) = 0.06, p = .81, \eta_p^2$ 

= .01, though Black women anticipated significantly more negative race-based treatment than gender-based treatment,  $F(1, 75) = 5.69, p = .02, \eta_p^2 = .07.$ 

### Discussion

Study 2 demonstrated a dual threat for Black and Latina women, such that they anticipated both racial and gender discrimination from an identity threat cue that targeted only one of their stigmatized identity dimensions. Specifically, Black and Latina women anticipated more negative racebased treatment from a White man with negative attitudes about women compared to a neutral White man during an anticipated evaluation. Moreover, Study 2 replicated the findings in Study 1, such that Black and Latina women anticipated more negative gender-based treatment from a White man with negative attitudes about the women's racial ingroup compared to a White man with unknown intergroup attitudes during an anticipated evaluation. Notably, while Black women did not perceive the racist individual as more gender biased than the neutral individual, they did still anticipate more negative genderbased treatment from the racist individual than the neutral individual. As such, Black and Latina women demonstrated dual identity threat from identity threats which targeted only one of their stigmatized identities. Yet, Studies 1 and 2 did not allow for a comparison in women of color's anticipated discrimination from the dual threat hypothesis to White women who should not experience dual threat due to their high-status racial identity.

### Study 3

In line with past research on double jeopardy, Studies 1 and 2 demonstrate that Black and Latina women anticipated facing discrimination for both their racial and gender identities from an identity threat cue which targeted only one of these identities. Yet, Studies 1 and 2 do not directly compare anticipated gender and racial bias for women of color compared to White women, a critical

component of double jeopardy. As such, one goal of Study 3 was to include a sample of White women to compare anticipated negative race- and gender-based treatment between women of color and White women. Given the minimal differences found between Black and Latina women in Studies 1 and 2, Study 3 did not seek to compare Black and Latina women, and instead collapsed these groups to create a sample of women of color.

A second goal of Study 3 was to examine whether women of color may experience dual safety from a single identity cue of gender identity safety, as past research on a lay theory of generalized prejudice has demonstrated that positive attitudes towards stigmatized social groups are also perceived to co-occur in samples of men of color and White women (Chaney et al., 2016). Lastly, as controlling for liking of the evaluator did not significantly change results in Studies 1 and 2 and has not significantly changed results in past research on identity cue transfer (e.g., Sanchez et al., 2017), it was not measured in the present study.

### Method

Participants. In all, 281 participants enrolled in introductory psychology at a large Northeastern university in the US who identified as Black, Latina, or White women during a large prescreen survey completed an online survey in exchange for partial course credit. However, five participants failed two or more instructional attention check items and were thus excluded from analyses, leaving a sample of 276 women (149 White, 81 Latina, 46 Black;  $M_{\text{age}} = 18.55 \text{ years}, SD = 1.06, \text{ range} = 18-25$ ). Anticipating exclusions, we set a data collection goal of 272 based on an a priori power analyses for a 3(condition) x 2(participant race) x2 (identity measurement) ANOVA for a medium effect size (d = 0.50) at 95% power and a medium correlation between identity measurement variables (r = .50).

Procedure. After providing basic demographic information, participants were told that they would be randomly assigned to read the website of a professor and should imagine that they are

enrolled in a course with this professor. All participants were then told they would be viewing the profile of a male professor (Collin Engle) who studies ocean engineering, followed by two pages from the professor's website: a "home" page providing background education information and an "about me" page providing information about hobbies (e.g., sailing). Next, participants were randomly assigned to see a "blog" page from the professor's website which included the titles of four blog posts the professor had written. Based on random assignment, participants either saw four neutral blog posts (control condition), three neutral articles and one gender-threat blog post (gender-threat condition), or three neutral articles and one gender-safety blog post (gender-safety condition) ostensibly written by the professor. All participants then read in detail two of the four blog posts, including a neutral post about developing a human civilization on Mars, and either an additional neutral blog post titled "Are earthquakes becoming more frequent?", a blog post highlighting the sexism faced by women politicians ("Sexism is already plaguing female candidates"; gender safety), or a blog post claiming women complain about non-existent sexism ("Stop complaining about sexism already"; gender threat). Afterwards, participants completed measures of perceived racism, and sexism of the professor, as well as a measure of classroom identity-based treatment before being debriefed.

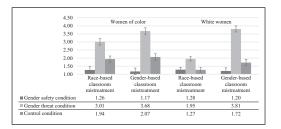
*Materials.* Participants completed the same measures of perceived racism ( $\alpha=.83$ ), and perceived sexism ( $\alpha=.94$ ), as in Studies 1 and 2, adjusted to perceived ideology of the professor. Lastly, participants completed measures of race- and gender-based classroom treatment. Participants responded to three items: "When you are enrolled in the class with Professor Collin Engle, do you think he would. . ", "Discount your opinion in class because of your race [gender]?", "Treat you like you are unintelligent because of your race [gender]?" and "Not call on you when you raise your hand in class because of your race [gender]?" on a scale from 1 (not at all) to 7 (very much),  $\alpha$ s > .96.

### Results

Perceived Bias. A 3(condition) x 2(participant race) x 2(perceived bias: sexism, racism) mixed ANOVA with perceived bias as a within-subject factor revealed a main effect of perceived bias,  $F(1, 270) = 43.24, p < .001, \eta_p^2 = .14$ , a significant main effect of condition, F(2, 270) = 117.69, p < .001,  $\eta_p^2 = .47$ , and no main effect of participant race, F(1, 270) = 3.02, p = .08,  $\eta_p^2 = .01$ . The significant main effects of perceived bias and condition were qualified by a significant perceived bias x condition interaction, F(2, 270) =45.26, p < .001,  $\eta_p^2 = .25$ . The perceived bias x participant race interaction, F(1, 270) = 1.70, p =.19,  $\eta_p^2$  = .01, participant race x condition interaction,  $F(2, 270) = 1.93, p = .15, \eta_p^2 = .01,$ and three-way interaction, F(2, 270) = 1.35, p =.26,  $\eta_p^2 = .01$ , were not significant.

Simple effect analyses of the perceived bias x condition interaction by perceived bias revealed significant main effect of condition on perceived sexism, F(2, 273) = 132.16, p < .001,  $\eta_p^2 = .49$ , and perceived racism, F(2, 273) = 56.47, p < .001, $\eta_p^2$  = .29. Indicating successful manipulation of attitudes towards women, participants perceived the gender-threat professor as significantly higher in sexism (M = 3.47, SE = 0.10) than the control professor (M = 1.84, SE = 0.10), and the gendersafety professor (M = 1.34, SE = 0.10), ps < .001. Moreover, participants perceived the gendersafety professor as significantly less sexist than the neutral professor, p < .001. Indicating identity cue transfer, participants also perceived the genderthreat professor as being significantly higher in racism (M = 2.56, SE = 0.08) than the control professor (M = 1.77, SE = 0.08) and the gendersafety professor (M = 1.41, SE = 0.08), ps < .001. Moreover, participants perceived the gendersafety professor as significantly less racist than the control professor, p = .002.

Classroom Identity Treatment. A 3(condition) x 2(participant race) x 2(classroom identity treatment: gender, race) mixed ANOVA with classroom identity treatment as a within-subject factor revealed significant main effects of classroom identity treatment, F(1, 270) = 47.57, p < .001,



**Figure 3.** Effect of condition on race- and gender-based classroom treatment by participant race, Study 3.

 $\eta_p^2 = .15$ , condition, F(2, 270) = 74.90, p < .001,  $\eta_{\rm p}^{2} = .36$ , and participant race, F(1, 270) = 5.89, p = .02,  $\eta_p^2 = .02$ . Additionally, there were significant classroom identity treatment x condition,  $F(2, 270) = 32.38, p < .001, \eta_p^2 = .19$ , and classroom identity treatment x participant race interactions,  $F(1, 270) = 12.76, p = .001, \eta_p^2 = .05$ , but no condition x participant race interaction, F(2, 270) = 1.70, p = .18,  $\eta_p^2$  = .01. These effects were all qualified by a significant three-way interaction of condition, race, and treatment, F(2, 270)= 6.34, p = .002,  $\eta_p^2$  = .05. Simple effect analyses of the three-way interaction by participant race were conducted and revealed significant classroom identity treatment x condition interactions for women of color, F(2, 124) = 6.51, p = .002,  $\eta_p^2 = .10$ , and for White women, F(2, 146) = $30.02, p < .001, \eta_p^2 = .29$  (see Figure 3). We next examined the effect of condition on gender- and race-based classroom treatment for women of color, followed by the effect of condition on gender- and race-based classroom treatment for White women.

For women of color's anticipated gender-based classroom treatment, there was a significant main effect of condition, F(2, 124) = 38.48, p < .001,  $\eta_p^2 = .38$ . LSD post hoc tests revealed that women of color perceived the gender-threat condition professor as significantly more likely to treat them negatively because of their gender (M = 3.68, SE = 0.20) than the control condition professor (M = 2.07, SE = 0.20) and the gendersafety condition professor (M = 1.17, SE = 0.21), ps < .001. Moreover, women of color anticipated significantly more negative genderbased treatment from the control condition

professor than the gender-safety condition professor, p = .002.

There was also a significant main effect of condition on women of color's anticipated racebased classroom treatment, F(2, 124) = 20.03, p< .001,  $\eta_p^2 = .24$ . LSD post hoc tests revealed that women of color perceived the gender-threat condition professor as significantly more likely to treat them negatively because of their race (M =3.01, SE = 0.20) than the control condition professor (M = 1.94, SE = 0.19) and the gendersafety condition professor (M = 1.26, SE =0.20), ps < .001. Women of color also anticipated significantly more negative race-based treatment from the control condition professor than the gender-safety condition professor, p = .014. As such, women of color anticipated significantly more negative gender- and race-based classroom treatment from the gender-threat professor compared to the control condition professor, and significantly less negative gender- and race-based classroom treatment from the gender safety professor compared to the control condition professor.

Next, examining the classroom identity treatment x condition interaction for White women, there was a significant main effect of condition on White women's reported gender-based classroom treatment,  $F(2, 146) = 54.57, p < .001, \eta_p^2$ = .43. LSD post hoc tests revealed that White women perceived the gender-threat condition professor as significantly more likely to treat them negatively because of their gender (M = 3.81, SE = 0.19) than the control condition professor (M = 1.72, SE = 0.20) and the gender-safety condition professor (M = 1.20, SE = 0.19), ps < .001. White women did not anticipate more negative gender-based treatment from the control condition professor than the gender-safety condition professor, p = .061.

Unexpectedly, there was a significant main effect of condition on White women's anticipated race-based classroom treatment, F(2, 146) = 8.33, p < .001,  $\eta_p^2 = .10$ . LSD post hoc tests revealed that White women perceived the gender-threat condition professor as significantly more likely to treat them negatively because of their

race (M=1.95, SE=0.13) than the control condition professor (M=1.27, SE=0.14) and the gender-safety condition professor (M=1.28, SE=0.14),  $p_S=0.001$ . There was no significant difference between the control and gender-safety condition professor, p=0.96. As such, White women anticipated significantly more negative gender- and race-based classroom treatment from the gender-threat professor compared to the control condition and gender-safety condition professor, though there were no significant differences between the control and gender-safety conditions.

Prospective Compound Discrimination. While above the three-way interaction was examined by participant race, we next examined the significant classroom identity treatment x condition x participant race interaction by condition in order to directly compare women of color's and White women's anticipated negative identity-based treatment. Specifically, here we break down the threeway interaction in another way, examining the effect of participant race on anticipated classroom identity threat within each condition. In the gender threat condition, there was a significant classroom identity treatment x participant race interaction,  $F(1, 93) = 10.31, p = .002, \eta_p^2 = .10.$ Further analyses revealed a significant effect of participant race on race-based classroom treatment,  $F(1, 93) = 12.36, p = .001, \eta_p^2 = .12$ , such that women of color anticipated significantly more negative race-based treatment than White women; however, there was no significant effect of participant race on gender-based classroom treatment, F(1, 93) = 0.14, p = .71,  $\eta_p^2 = .001$ . In other words, when anticipating treatment from a White male professor who showed gender bias, women of color anticipated more unfair treatment based on their race, but not gender compared to White women, resulting in greater overall anticipation of negative treatment.

In the control condition, there was a significant classroom identity treatment x participant race interaction, F(1, 90) = 4.98, p = .03,  $\eta_p^2 = .05$ . Further analyses revealed a significant effect of participant race on race-based treatment,

 $F(1, 90) = 8.26, p = .005, \eta_p^2 = .08$ , such that women of color anticipated significantly more negative race-based treatment than White women; however, there was no significant effect of participant race on gender-based classroom treatment,  $F(1, 90) = 1.83, p = .18, \eta_p^2 = .02.$ In other words, women of color were more likely to anticipate race-based mistreatment (without any explicit cues in the context to suggest racial or gender bias), but not gender-based mistreatment compared to White women, resulting in greater anticipated mistreatment overall for women of color. In the gender-safety condition, the classroom identity treatment x participant race interaction was not significant,  $F(1, 87) = 0.10, p = .93, \eta_p^2 = .001$ , and the classroom identity treatment main effect was not significant,  $F(1, 87) = 2.03, p = .16, \eta_p^2 =$ .02. Thus, in the presence of a gender safety cue, women of color and White women did not significantly differ in overall anticipated treatment.

### Discussion

Study 3 replicated the effect of dual threat for women of color in a novel gender-threat paradigm. Moreover, Study 3 demonstrated that women of color also experienced dual identity safety from a professor who indicated he was an ally to women, expanding past research on identity safety cue transfers (e.g., Chaney et al., 2016). While the present study did not examine whether a White man expressing race allyship would similarly signal dual identity safety for women of color, we propose such dual safety from race allyship is likely but encourage future research to examine this empirically.

Notably, past research has found that Latina women anticipate less belonging at science, technology, engineering, and mathematics (STEM) companies with White male or female scientists compared to Latino/a scientists (Pietri et al., 2019) and Black women anticipated feeling greater trust and belonging at a STEM company with a Black woman scientist compared to a White woman scientist, except when the White women demonstrated racial

allyship (Pietri et al., 2018). Integrating the present study and past research by Pietri and colleagues, White gender or racial allies are likely to signal not only less negative racial- and gender-based treatment, but also greater belonging in STEM. In contrast, dual threats in STEM settings may significantly decrease sense of belonging, potentially leading to disengagement from STEM in an effort to avoid experiences of identity threat or discrimination. We encourage future research to examine these important downstream consequences of dual threat and dual safety in STEM classroom contexts for women of color.

Interestingly, White women also reported anticipating more negative race-based treatment in the gender-threat condition compared to the control or gender-safety conditions, though significantly less than women of color in the gender-threat condition. These findings were unexpected, as White women hold a high-status racial identity, and past work has found that White men did not anticipate facing racial stigma from an evaluator who endorses anti-Black attitudes (Sanchez et al., 2017). This finding may suggest that White women are making broader inferences about the attitudes of the sexist professor, beyond perhaps what is relevant for them as members of a high-status racial group. Additionally, we suggest this finding may demonstrate the difficulty in separating one's social identities. For example, research has shown that White women encounter unique stereotypes as a result of their specific identities as White and female (Ghavami & Peplau, 2013) compared to Black or Latina women. Perhaps, in contexts of threat, these identities are intertwined and simultaneously devalued. Importantly, the effect of condition on anticipated race-based treatment was stronger for women of color  $(\eta_p^2 = .43)$ than White women ( $\eta_p^2 = .10$ ), suggesting a stronger focus on race-based treatment for women of color.

Lastly, analyses for prospective compound discrimination suggest that women of color anticipated more negative treatment overall because of their race and gender compared to

White women in both the gender-threat and control conditions due to women of color expecting more negative race-based treatment than White women, indicating that dual threats translate to prospective compound discrimination. Yet, women of color and White women did not significantly differ in overall anticipated treatment in the gender-safety condition, suggesting such effects of compounded discrimination can be mitigated.

### **General Discussion**

Across three studies, we demonstrate that Black and Latina women perceive racism and sexism as intersecting ideologies, such that when expecting an interaction with, or enrolling in a course with, a White man who endorsed negative attitudes about one of their stigmatized identity dimensions (e.g., racial identity), they expected to face discrimination due to not only their targeted identity, but also their untargeted stigmatized identity (e.g., gender). Conversely, when women of color were exposed to a White male gender-ally, they anticipated less gender- and race-based discrimination in a course with him compared to a neutral White male professor. While anticipated threat from congruent attitudes (e.g., anticipated negative race-based treatment from racism) was often larger than anticipated threat from incongruent attitudes (Studies 1-3), such identity threat transfer can carry negative downstream consequences (e.g., Chaney et al., in press), and may be especially detrimental for women of color. The present research provides a novel and intersectional perspective by demonstrating that women of color experience a dual cue from specific singular identity cues, resulting in dual threat and dual safety from singular identity threat and identity safety cues respectively. Thus, the present research demonstrates that women of color may face a unique challenge when coping with discrimination, such that when interacting with individuals who espouse negative attitudes towards one of their stigmatized identities (e.g., race), they simultaneously anticipate negative treatment due to their other stigmatized identities (e.g., gender). As such, women of color experience multiple threats from

a single identity dimension threat cue, indicating identity threat cues can transfer across an individuals' own stigmatized identity dimensions.

While past research on identity cue transfer has demonstrated that individuals who are stigmatized along one identity dimension (e.g., White women, Black men) anticipate identity threats from incongruent cues (e.g., White women anticipate sexism from a racist other; Sanchez et al., 2017), the present studies are the first to demonstrate that identity cue transfer can occur within a single individual's identity dimensions. Although past research has demonstrated an ethnic-prominence effect, in which Black and Latina women's expectations of discrimination were primarily driven by their racial identity (Levin et al., 2002), the present research indicates that this is not the complete story. Specifically, women of color anticipate both racial and gender discrimination from a single cue of racial prejudice (Studies 1 and 2), and racial and gender discrimination from a single cue of sexism (Studies 2 and 3). Moreover, in the control conditions where no intergroup attitude information was known, Black and Latina women's anticipated levels of race- and gender-based treatment did not significantly differ, suggesting that individual-level perceptions of gender and racial discrimination from a White man may differ from societal-level perceptions of discrimination documented in past ethnic-prominence research (Levin et al., 2002).

In a direct comparison of the levels of anticipated gender bias for women of color compared to White women, the present research indicates that women of color anticipate experiencing double jeopardy, or compounded discrimination (Settles, 2006) from a single identity threat. In Study 3, women of color anticipated significantly more discrimination overall from a single identity threat compared to White women because they anticipated facing discrimination for both their gender and their race while White women primarily anticipated only gender discrimination. As such, the present research provides a nuanced understanding of the experience of stigma for individuals with multiple visible stigmatized identities and contributes to research on double jeopardy. Specifically, we propose that greater reports of discrimination by women of color compared to White women or men of color, may be, in part, due to dual threats increasing the salience of identity threats and discrimination experiences for women of color.

Such dual threats may have important implications for women of color's working memory and cardiovascular threat in response to identity threat cues. Specifically, past research has demonstrated that White women demonstrate decreased working memory and greater cardiovascular stress profiles when anticipating sexism (e.g., Logel et al., 2009; Salomon et al., 2015). The present demonstration of dual threat for women of color indicates potential compounded decreases in working memory or compounded increases in cardiovascular stress. Similarly, anticipated compound discrimination may result in increased vigilance to potential identity threats. Increased vigilance to prejudice is associated with negative health outcomes (e.g., Himmelstein et al., 2015), which may further negatively impact women of color's wellbeing. As such, we encourage future research taking an intersectional approach to consider how lay beliefs about generalized prejudice may uniquely impact the cognitive performance and wellbeing of individuals with multiple stigmatized identities.

### **Future Directions**

We encourage future research to examine these effects among other individuals with multiple stigmatized identities, including other women of color (e.g., Asian women) and individuals stigmatized on different identity dimensions (e.g., gay men of color). Stereotype content differs for Asian women compared to Black women (Ghavami & Peplau, 2013) while men of color who are described as homosexual are perceived as less stereotypical members of their racial ingroup (Petsko & Bodenhausen, 2019). Such nuances in stereotype content have been demonstrated to effect identity cue transfers when examining the types of bias Asian Americans anticipate facing from someone who endorses anti-Black compared to anti-Latino bias (Sanchez et al., 2018) and when examining what allies serve as cues of

identity safety (Chaney et al., 2018). Additionally, while there were minimal differences between Black and Latina women in Studies 1 and 2, certain types of bias (e.g., anti-immigration) may be more salient for Latina women (Zou & Cheryan, 2017), potentially leading to greater experiences of dual threat for Latina women than Black women.

Critically, other research proposes that the intersection of two stigmatized identities may be of more importance than the sum of experiences related to single identities, such that one's identity as a Black woman may be more critical in the experience of stigma than one's identification as both a woman and as Black (Remedios & Snyder, 2015; Settles, 2006). Moreover, androcentric and ethnocentric ideologies result in prototypical people of color being conceptualized as men, and prototypical women being conceptualized as White (Purdie-Vaughns & Eibach, 2008). Thus, such research proposes that women of color do not experience compounded discrimination per se but encounter unique forms of discrimination not experienced by their singularly stigmatized counterparts due to holding two or more stigmatized identities (Crenshaw, 1989). As such, we encourage future research to consider how the presently identified dual threats experienced by women of color may be influenced by the unique forms of discrimination experienced by women of color, especially when unique intersectional tropes or stereotypes are made salient.

### Conclusion

Across three studies the present research demonstrates, for the first time, that single identity dimension cues of safety or threat can transfer within individuals, such that women of color anticipate gender stigma from a racial threat cue (Studies 1 and 2) and racial stigma from a gender threat cue (Studies 2 and 3). As such, women of color anticipated significantly more discrimination than White women from a gender threat, demonstrating anticipated double jeopardy. Moreover, women of color anticipated both gender and racial identity safety from a gender identity safety

cue. Together, the present research provides a nuanced account of how women of color experience discrimination by demonstrating that Black and Latina women report dual identity cues from a cue which targets only one of their stigmatized identity dimensions. Moreover, the present findings expand past research on identity cue transfer and highlight the importance of considering how lay understandings of the relationship between prejudices may shape experiences of stigma.

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### ORCID iDs

Kimberly E. Chaney https://orcid.org/0000-0001

Diana T. Sanchez Dhttps://orcid.org/0000-0002

### Supplemental material

Supplemental material for this article is available online.

#### Notes

- 1. See online supplemental material for a study we conducted earlier in theorizing of this work that included Asian, Latina, and Black American women, though which was not significantly powered to examine effects of participant race. While Asian Americans are perceived to hold a higher social status than Black or Latina women (Fiske et al., 2002), which may inhibit experiences of dual threats, the unique overlap of Asian American and female stereotypes (Johnson et al., 2012) may facilitate such experiences. Research on Asian American women's stigma by prejudice transfer may therefore provide unique insights.
- Note, participants first completed a measure of perceived Social Dominance Orientation (SDO) of the evaluator (Sanchez et al., 2017) as perceived SDO has been identified as a mediator in past

- research on identity cue transfer. As mechanism was not the primary goal of this research, these results are reported in the online supplemental material and replicate past research. Additionally, participants completed measures of anticipated racial and gender stigma after measures of anticipated treatment. These results are reported in the supplemental material and mirror findings for identity-based treatment.
- Participants again completed measures of perceived SDO, anticipated gender stigma, and anticipated race stigma as in Study 1. Results are reported in the online supplemental material and mirror findings from Study 1.

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