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# CAN ANGRY BLACK AND WHITE WOMEN GET AHEAD IN THE ERA OF #METOO?: SOCIAL DYNAMICS IN EMOTION APPROPRIATENESS

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Psychology and Women's, Gender, and Sexuality Studies

by

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#### ABSTRACT

Perceptions of emotional appropriateness occur within a complex system, rife with social dynamics. Using intersectionality theory as an analytic framework, I proposed we could map how third party emotional appropriateness judgments may be affected by who expresses anger, and by the social influence that accompanies the intersectional position of someone who invalidates or affirms that anger. Across four studies, I sought to replicate findings on perceptions of White women and White men's workplace anger (Studies 1a and 1b) and to clarify conflicting findings on perceptions of Black women's workplace anger (Studies 2 and 3). Additionally, I aimed to extend findings on Black women's, White women's, and White men's workplace anger into the domains of invalidation (Studies 1a, 1b, and 2) and affirmation (Study 3) by examining the effects of a comment from an onlooker on perceivers' (i.e., participants') judgments of an angry protagonist's appropriateness. In contrast to findings in the literature, in Study 1a, participants (N=234) rated White women protagonists as experiencing emotion of a more appropriate type and intensity than they did White men protagonists. Study 1b (N=245) replicated Study 1a and further demonstrated ratings of White women protagonists' anger as of a more appropriate emotional intensity than White men protagonists' depended on evaluations from participants high in news engagement. Results of Study 2 (N=255) replicated the interactive pattern of Study 1b but with Black women and White men protagonists and with belief in workplace opportunities as gendered as the moderating factor. Study 3 (N=273) replicated Study 2 but examined the effect of an affirming, rather than invalidating, comment from an onlooker. In Study 3, both effects of Black women protagonists' anger being evaluated as of a more appropriate type and intensity than White men protagonists' depended on ratings from participants high in belief in workplace opportunities as gendered. In Studies 1a, 1b, and 2, onlookers' comments did not affect participants' judgments of protagonists' appropriateness. However, in Study 3 onlooker

affirmation did positively influence perceivers' judgments of the appropriateness of a protagonist's emotional intensity. Across studies, protagonist and invalidator/affirmer intersectional positions did not interact to affect participants' ratings of protagonist appropriateness. Together, findings suggest affirmation and invalidation are distinct social processes, support effectiveness of the emotion storyboard method for manipulating intersectional positions in social context, and, perhaps most importantly, suggest urgency for social psychology to consider historical context in the study of stereotypes and attitudes.

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# Chapter 1

# Introduction

During the 2016 Commander-in-Chief forum, Republican National Committee Chairman, Reince Priebus, tweeted that former Secretary-of-State Hillary Clinton, the first woman in the United States to win the presidential nomination from a major governing party, "was angry [and] defensive the entire time - no smile...uncomfortable - upset..."(Priebus, 2016, September 08). Clinton's campaign later responded, "Actually, that's just what taking the office of President seriously looks like" (Clinton, 2016, September 08). How might Priebus' remarks have influenced viewers' perceptions of Clinton's emotion as they watched her on television? Further, what might have happened to viewers' evaluations of Clinton's emotion if another person had affirmed her emotion? Indeed, Clinton's communications director, Jennifer Palmieri, later did just that and highlighted the absurdity of Preibus' comment, stating, "Reince actually said HRC needed to smile more..." (Palmieri, 2016, September 08). How too, might this process of creating narratives about others' emotional appropriateness unfold in people's everyday lives?

Perceptions of emotion and emotional appropriateness do not simply occur within a dyad or between two groups; rather, these phenomena occur with a complex system, rife within social dynamics. In my dissertation, I interrogated the role of social group stereotypes and intersectional positions. Intersectionality, a framework inspired by 19<sup>th</sup> century African American feminist thought, connects people's social identities to structural power relations and axes of oppression. Intersectionality also centers on the idea that people's multiple social identities constitute one another to create people's lived experiences (e.g., May, 2015), rather than people's multiple identities being mutually exclusive from one another (the way identity is conventionally parsed in the majority of psychology studies). Using intersectionality theory as an analytic framework, I proposed we could map how third party emotional appropriateness judgments are affected by who expresses anger, and by the social influence that accompanies the intersectional location of a person who invalidates that anger.

Research on whose emotion is perceived as appropriate reveals a pattern of inequity for those of particular social group memberships (e.g., Hall & Livingston, 2012; Power, Frederickson, and Cole, 2010). But *who* determines whose emotion is appropriate remains an open question. I propose that in addition to perceivers, other social actors who comment on a protagonist's emotion might be able to act as the "who" in emotional appropriateness such that comments on another's emotion by social actors with relative structural power could have ripple effects on third party perceivers. I also propose an onlooker, especially a person in a high status intersectional position, might be able to buffer perceptions of a protagonist's anger by providing an affirming comment to positively influence perceivers' judgments that a protagonist's emotion is appropriate.

Throughout my dissertation I use an intersectional framework. Without an explicit intersectional framing, when people are asked to compare women and men without any other indications of *which* women and men to compare, people are likely to think about White, middleclass, young, able-bodied, heterosexual men and women due to the positions of these categories as dominant, unmarked groups (e.g., Livingston & Pearce, 2009). Therefore, in my examination of White men's, White women's, and Black women's anger, the intersections of most interest in my investigation of anger invalidation and affirmation given findings in the literature thus far, I compare protagonists and invalidators/affirmers based on their intersectional positions with respect to gender and race rather than single identity dimensions (i.e., gender or race). Furthermore, I propose that an intersectional framework facilitates the connection of social group memberships with status-based processes such as invalidation.

To test the role of social dynamics in emotional appropriateness, I examined the invalidation and affirmation of Black and White women's anger in the workplace. I choose to focus on anger because anger is evoked when one feels they have been wronged, and is accompanied by an action tendency to do something to change the situation (e.g., Rozin, Lowery, Imada, & Haidt, 1999). Thus, for whom anger is deemed appropriate may tell us something about societal power structures: people's evaluations of certain social group members' anger as inappropriate may reveal people's beliefs about who is entitled to feel their individual rights have been violated and who can seek justice. I focused on Black and White women's anger, to: a) replicate and extend findings about the negative perceptions of White women's anger relative to White men's (e.g., Brescoll & Uhlmann, 2008), and b) examine how Black women's anger is perceived given contradicting stereotypes about Black women as overly angry (e.g., Harris-Perry, 2011) yet less emotional than White women (Landrine, 1985). I limit the context of these studies to the business workplace as emotion perception is context-dependent, and the stakes of anger expression in the workplace can be high. Indeed, although expressing anger in this context can result in gaining status for White men, anger expression for White women can lead to decreased status (e.g., Ragins & Winkel, 2011). The relationship between Black women's anger and status in the workplace has, to my knowledge, yet to be conclusively examined in experimental psychology, however in the context of work behaviors, support for predictions appears mixed. For instance, Black women leaders did not face backlash for agentic behaviors (Livingston, Rosette, & Washington, 2012) yet faced especially harsh penalties for failure (Rosette & Livingston, 2012). Thus, in the studies that follow I sought to investigate Black women's and White women's anger in the workplace relative to White men's, and to extend these findings into the domain of invalidation and affirmation to examine the effects of an onlooker's comment on perceivers' judgments of protagonists' appropriateness.

#### Whose emotion is appropriate and how might this judgment be political?

Even basic perception of an emotion can be affected by social factors. Both the person experiencing the emotion (referred to throughout as "the protagonist"), and the perceiver, can affect how a perceiver evaluates a protagonist's emotion. Indeed, according to the social perception of emotion in context model (Hareli & Hess, 2012), to interpret a protagonist's emotion, perceivers rely on their prior knowledge of the protagonist, the protagonist's situation, and emotion norms, and are also influenced by their own expertise, needs, goals, and emotions. Therefore, on the perceiver end, factors such as context, protagonist's personality, and perceiver's motives combine in the perceiver's determination of which emotion a protagonist is experiencing. Social dimensions of the protagonist, such as social group membership, influence perceivers' emotion perceptions as well. Often, perceivers lack access to key sources of information, such as knowledge about the protagonist (e.g., personality information) and the situation. When situations and other information are ambiguous, perceivers therefore may rely on social group stereotypes to evaluate others' emotion (e.g., Plant, Hyde, Keltner, & Devine, 2000). Further, perceivers often stereotype regardless of their own social group memberships (e.g., Haines, Deaux, Lofaro, 2016; Plant et al, 2000; Simon & Hamilton, 1994). Upon seeing a White woman smiling, for instance, perceivers may rely on a gender-emotion stereotype that it is typical for women to frequently experience happiness, and may thus conclude this particular smiling White woman is happy; despite the fact that the same functional emotion signal, such as a smile, can serve several different functions, e.g., happiness thinking of a friend, enjoyment of a joke, an attempt to appease (e.g., Hess, Kappas, & Banse, 1995). Therefore, protagonists' social group memberships and perceivers' biases can affect perceivers' emotion perceptions.

A perception that is more subjective, yet possibly even more consequential, is a perceiver's judgment of the appropriateness of a protagonist's emotion. Emotional

appropriateness determinations are based in tacit social rules about what makes emotion appropriate for a situation. The concept of emotional appropriateness is closely related to concepts of display rules and feeling rules. Early conceptualizations of display rules included ideas about expressing emotions in such a way that understanding is promoted between social interaction partners, such as displaying frowns to convey sadness (e.g., Ekman & Friesen, 1975). Modern formulations of display rules emphasize emotion displays' appropriateness as closely tied to specific situations (e.g., Matsumoto, 1990, 1993; Diefendorff & Greguras, 2009). Hochschild's (1979) feeling rules, in contrast, center on the idea that a particular situation often has an emotion-relevant frame that involves what type of felt emotion (i.e., emotional experience) is appropriate for the situation. For instance, the situation of a birthday party would involve the frame of a time to celebrate, and thus it would be appropriate for one to feel happy during this event. Feeling rules also include components as to the extent of the emotion, the direction of emotion, and the duration of an emotion. Further, feeling rules include a consideration of emotion management, for instance, if one is presented with a less than excitable gift at the birthday party, it would be appropriate to manage that low enthusiasm and project gratitude. The emotion one feels, and emotion one is trying to feel, in Hochschild's formulation, is thus explained by motivation (what one wants to feel). Thus, display rules and feeling rules both connect the situation and social understanding to emotional appropriateness.

Similar to the components suggested by Hochschild (1979), Warner and Shields (2009a) empirically demonstrated emotional appropriateness judgments are comprised of three distinct dimensions: the types of emotion present, the types of emotion absent, and the intensity of the emotion. Thus, emotion could be classified as inappropriate if one was happy at a funeral (wrong emotion type present), unhappy at a wedding (right emotion type missing), or hugged someone in gratitude for holding a door (inappropriate intensity). Shields (2005) further argues, however, that judgments of others' emotional appropriateness also have a political dimension: beliefs about when and how emotion should be expressed and experienced are interpreted in the interest of regulating social group hierarchy. In other words, whose emotion is judged as appropriate and whose is judged as inappropriate in a given situation can reflect social group stereotypes and structural power.

#### **Politics in emotional appropriateness**

What Shields' terms the "politics of emotion in everyday life" (2005) becomes illuminated when we look across different social groups and discover the rules for what constitutes appropriate emotion often change depending on who's expressing the emotion. Emotional appropriateness, therefore, takes on a political dimension as some people's right to particular emotions, and rights to be seen as legitimate or authentic, become contested (e.g., Shields, 2002, 2005; Warner & Shields, 2009b; Zammuner, 2000). Shields (2005) identified three particular ways in which appropriateness is contested: contestations of whether an emotion is wrong for a given situation, double binds that make it difficult or impossible to achieve contradictory demands, and what Shields' calls "emotional borderlands" or the ambiguous space between the right amount, and too much, or too little, emotion. Because determinations of emotional appropriateness occur in contested space, determinations of inappropriateness are an insidious way to dismiss people's legitimacy. Indeed, unequal patterns of inappropriateness judgments, depending on people's social group memberships, can lead us to question whose emotion is thought of as appropriate (Shields, 2005), and who has the right to determine authentic emotion (Warner & Shields, 2009b).

#### Stereotypes and social hierarchy

Empirical work examining whose emotion is deemed appropriate reveals the influence of social group stereotypes on appropriateness judgments. Indeed, identical emotion behavior can be viewed differently depending on the social group membership of the actor. In a study in which the authors manipulated the race of football players (Hall & Livingston, 2012), for instance, Black and White male football players were depicted celebrating touchdowns and were perceived as equally arrogant, regardless of race. The Black male athletes, however, were punished to a greater degree than the White male athletes for their celebration, in the form of lower compensation, and perceptions of arrogance mediated this relationship between celebration and compensation. Thus, although perceived as being equally arrogant in their displays, Black players' emotional displays resulted in negative consequences that White players' displays did not. Participants, therefore, likely had differing beliefs, along racial lines, about whose arrogance is more appropriate and justified. Further, people's judgments of the appropriateness of others' emotion can depend on people's relative position in the social hierarchy to those they are evaluating. Power, Frederickson, and Cole (2010), for instance, found in a comparison of responses to appeals for assistance from a White poor woman who either expressed shame or anger, middle-class participants preferred the shame appeal to the anger appeal. Thus, people in relatively higher status positions to a protagonist perceived the emotion that reinforced the status quo as more appropriate than the emotion that would disrupt it.

#### Emotion that lacks rationality

People also dismiss others' appropriateness by evaluating their emotion as emotionality or as emotion too uncontrolled or unrefined to be rational. Indeed, people evaluated their own attitudes and the attitudes of their ingroup members, as attitudes held due to rational reasoning. People evaluated the attitudes of outgroup members, however, as held due to emotional reasoning (Kenworthy & Miller, 2002). In related work, people perceived outgroup members as having less complex emotions than their own ingroup members (e.g., were described to be experiencing sadness as opposed to sympathy or remorse; Leyens et al., 2000, 2001). By denying outgoup members' secondary emotions, outgroup members are denied attributions of rationality, an essence of humanity. Thus, people ascribe evaluations of appropriateness and rationality to themselves and to people like them, but dismiss those different from them by casting them as less emotionally appropriate. Deeming a person's emotion as inappropriate is an effective way of thus casting people as lacking reason, and in a sense, humanity.

## Emotional double binds

Emotional appropriateness judgments are also maintained through the use of emotional double binds that make appropriateness near impossible to achieve. Presidential candidate Hillary Clinton in her 2008 election run, for instance, was simultaneously described as inappropriate for displaying too much emotion (i.e., being emotional) and too little emotion (i.e., being too robotic, too emotionally manipulative; Bligh, Merolla, Schroedel, & Gonzalez, 2010; Carlin & Winfrey, 2009). Similarly, in a study on debt firm employees, women employees were praised for their ability at work to switch from warmth in their expressions, to anger, and back to warmth. When compared with the believed emotional trait, and was attributed to women's "essential emotion plasticity" (Tufail & Polletta, 2015). Thus, for people in particular social groups who are attempting to disrupt the status quo, emotional appropriateness can be levied against them regardless of how they behave.

#### Status quo-maintaining motives

Power relations and motives also play a role in appropriateness judgments. In one study, voters in the United States, for instance, used emotional inappropriateness accusations against political candidates who represented the party opposite their own (Shields & MacDowell, 1987). Prejudiced attitudes, too, can predict which emotion is considered emotionally appropriate for certain social group members. For example, men high in hostile sexism attributed fewer positive emotions to women than men low in hostile sexism did. Men high in benevolent sexism, however, attributed a greater number of positive emotions to women than men low in believed to be emotionally appropriate can thus be manipulated to match one's own attitudes. Similarly, for White participants, higher implicit racial bias was associated with detecting anger more quickly on Black faces (Hugenberg & Bodenhausen, 2003). Similarly, implicit racial prejudice was more strongly related to categorizing racially ambiguous faces expressing hostility as Black, than categorizing racially ambiguous faces expressing hostility as Black, than categorizing racially ambiguous faces may make one especially predisposed to expect emotion behavior in line with social group stereotypes.

#### The Case of Anger Appropriateness

I chose to examine anger in the present research because of anger's connection to reinforcing status cycles (Tiedens, 2000), cycles that affect people differently depending on their intersectional position. I describe these cycles in more detail in a later section, and turn now to how I am conceptualizing anger.

Anger can be conceptualized in multiple ways (e.g., Lindebaum & Geddes, 2015). Indeed, Batson et al., (2007) distinguished between moral outrage (i.e., anger in response to a violation of a moral standard), personal anger (i.e., anger about being harmed), and empathic anger (i.e., anger at the harming of a cared for other). I am defining anger here, more broadly, as an emotion state evoked in response to injustice, or evoked when one feels theirs' or others' rights or entitlements have been violated (e.g., Lerner, 1985; Rozin, Lowery, Imada, & Haidt, 1999; Shields, 2002). I consider anger's action readiness as well, or an experienced motivation one feels when angry to approach the cause of the anger to right the wrong one feels they have experienced (e.g., Frijda, Kuipers, & Ter Schure, 1989). Thus, I am conceptualizing anger as both a signal to others that one has been treated unfairly, and an emotion that can motivate a person to take action to remediate an unjust situation.

I am also conceptualizing anger in the women's studies tradition, by considering anger's inherently political dimension. Expressing anger can thus be thought of as claiming respect (Frye, 1983), and expressing the objective of change (Lorde, 1984). Conceptualizing anger in this way, illustrates why a reluctance to recognize people's anger has high stakes for the angry person. Indeed, dismissing a protagonist's anger allows for the dismissal of situations of importance to a protagonist, and in doing so, dismisses the protagonist's right to object to change the situation (e.g., Campbell 1994). As Frye (1983) writes, for anger to have an effect, anger needs "uptake" from the person the anger is directed at. In dismissing someone as emotional, attention is drawn away from the cause of their anger, and attention instead becomes focused on the questioning of their mental stability. Indeed, by calling anger emotionality instead of the specific emotion it is, invalidators can free themselves from the need to give the protagonist's anger uptake (Campbell, 1994). In this sense, anger can also be viewed as a collaborative process between the social actors involved in the negotiation of appropriateness.

In this project, I was particularly interested in examining anger invalidation in the workplace. Although anger is often thought of as antisocial, negative, and aggressive, in the workplace context specifically, I also agree with Geddes' and Callister's (2007) interpretation that anger at work is not inherently negative. The authors argue that others' judgments and reactions contribute to anger expression, resulting in either positive or negative outcomes. In their theoretical model of anger expression in context, the authors propose a dual-threshold model comprised of both an expression threshold (the move from suppression to expression) and an impropriety threshold (the move from anger which is expressed in line with organizational display norms to that which violates such norms) to explain when anger may help versus hurt. Although anger is often conceptualized as a negative emotion which can cause interpersonal damage and damage to organizations, Callister, Geddes, and Gibson (2017) further suggest anger expression may be beneficial to organizations, resulting in the promotion of discussions of differences than can lead to beneficial interpersonal and organization change. In an experiment examining supervisor and subordinate anger in the workplace, the most negative outcomes of anger in the workplace came out of situations in which supervisors expressed anger toward subordinates. On a perceptual level, judgments of whose anger is appropriate might therefore also be affected by status cues such as place in the work hierarchy and diffuse status characteristics such as intersectional position of the angry person.

The vast majority of the research on gender and anger has examined White women and men, or women and men with race/ethnicity unmarked (and thus is likely also only capturing the experience of women and men with other dominant, unmarked identity dimensions). Most finds that White women's anger is judged as inappropriate and White men's anger is judged as appropriate. Thus, the findings I discuss here are primarily reflective of White women in anger. Less experimental psychological work has examined Black women's anger, yet Black women's anger is especially of interest in the present project, given contradictory stereotypes about Black women that might result in differential judgments of their anger appropriateness. In the following section I turn to research that has explicitly examined Black women and anger.

#### White women and anger

In general, people believe women's (race/ethnicity unmarked) anger is less common and less appropriate than men's anger (e.g., Fabes & Martin, 1991; Plant et al., 2000; Sharkin, 1993); although few differences in women and men's actual experiences and expressions of anger are found (e.g., Averill, 1983). On a perceptual level, people more easily identify faces as female when facial expressions of happiness are displayed, and faces as male when facial expressions of anger are displayed (Becker, Kenrick, Neuberg, Blackwell, & Smith, 2007; Hess, Adams, Grammer, & Kleck, 2009; Smith, LaFrance, Knol, Tellinghuisen, &, 2015). Indeed, White undergraduates had a more difficult time classifying the gender of a protagonist as female when a White woman expressed anger than they did classifying the gender of a protagonist as male when a White man expressed sadness, fear, or happiness (though just as in the anger case, women are stereotypically expected to display these three emotions more so than men; Švegar, Fiamengo, Grundler, & Kardum, 2016). Even when women (race/ethnicity unmarked) were pictured as unambiguously angry, they were classified as both angry and sad (Plant et al., 2000). Thus, both qualitatively and perceptually people show resistance toward associating White women with anger.

Similarly, people believe women (race/ethnicity unmarked) are motivated to be relational and are therefore less reluctant to express powerless emotions, and men (race/ethnicity unmarked) are motivated to remain in control and therefore express powerful emotions (Timmers, Fischer, & Manstead, 1998). White women's anger is often believed by others to be an emotional response caused by women's stereotypically emotional dispositions, rather than believed to be an expression of anger caused by the situation (e.g., Barrett & Bliss-Moreau; Brescoll & Uhlmann, 2008). Thus, White women's anger expression can be perceived as mere emotionality, lessening White women's social influence when angry (e.g., Salerno & Peter-Hagene, 2015), and reinscribing the lower status of White women expressing anger (e.g., Brescoll & Uhlmann, 2008).

#### Black women and anger

Due to intersecting gender and race stereotypes, Black women occupy a less prototypical category for both their race and gender. People are more likely to imagine a Black man than Black woman when asked to imagine a Black person (Schug, Alt, & Klauer, 2015) and gender stereotypes are least similar to stereotypes about Black women than women of other ethnic and racial groups (Ghavami & Peplau, 2012). Purdie-Vaughns and Eibach (2008) put forth the term "intersectional invisibility" to describe the positioning of people with multiple subordinategroup identities. The authors argue that compared to people with a single subordinate-group identity, people with multiple subordinate-group identities can often be rendered invisible in a variety of ways due to non-prototypicality. Purdie-Vaughns and Eibach (2008) argue that Black women, relative to single subordinate-group members (i.e., White women and Black men) thus inhabit this space of intersectional invisibility. Experimentally, Sesko and Biernat (2016) demonstrated that when participants were primed to focus on differences between Black women and White women, and Black women and Black men, participants showed better recognition for Black women's faces than when they were primed to focus on similarities between Black women and these other two groups. Additionally, participants who perceived less similarity between stereotypes about women overall and stereotypes about Black women specifically, were worse at recognizing faces they had seen previously of Black women than they were at recognizing faces they had seen previously of White women, White men, and

Black men. Indeed, prejudice reduction strategies may be more effective at reducing prejudice toward prototypical members of racial minority groups. Todd and Simpson (2017), for instance, found perspective-taking, a common racial prejudice reduction strategy, had stronger effects on reducing implicit racial attitudes toward a Black male target or Asian female target (gender-race prototypical targets) than toward a Black female target or Asian male target (gender-race nonprototypical targets). Similarly, Phillis et al., (2017) found only the stereotyping of Black men, and not that of Black women, predicted racial prejudice. Thus, Black women's position of intersectional invisibility results in psychological research often obscuring their position in empirical research.

In the initial evidence we have on perceptions of Black women's anger, findings support competing predictions. One possibility is that Black women's anger will be perceived as especially inappropriate, even more so than White women's. Indeed, this possibility is supported by stereotypes that Black women have overly angry dispositions (e.g., Harris-Perry, 2011). Additionally, Black women might experience a double jeopardy effect for their anger, due to being located in a position with multiple marginalized identity dimensions (e.g., Rosette & Livingston, 2012). Alternatively, however, Black women's intersectional position may result in their anger being perceived as threatening, and as such, something to be taken more seriously than White women's (Wingfield, 2010). Indeed, college student respondents perceived Black women as strong and domineering yet perceived White women as affective and communal (Donovan, 2011). Similarly, Black women are not stereotyped as "emotional" to as large a degree as White women are (Landrine, 1985). Additionally, in a comparison of Black women to "American women in general," college students rated positive traits exhibited by Black women as less positive, but rated negative traits exhibited by Black women as less negative (Weitz & Gordon, 1993). Thus, perhaps the "negative" behavior of anger performed by Black women will be perceived as less negative than if performed by White women as well. Similarly, agentic

behavior may be proscribed more for some women than for others. For instance, Black women leaders in the workplace who displayed dominance were perceived similarly to White men leaders and were not met with backlash, though White women and Black men leaders were (Livingston, Rosette, & Washington, 2012). In an unpublished study examining perceptions of Black women's anger specifically, Black women who expressed anger were perceived to be more aggressive than White women who expressed anger; however White and Black women were perceived as equally competent, despite these different evaluations of their anger displays (Dicicco, 2015). Different mechanisms may thus explain inappropriateness evaluations for Black and White women's anger. Therefore, different reinforcing cycles of anger expression and status may exist depending on intersectional positions, yet these cycles may similarly work to disadvantage all except the most structurally powerful.

#### Anger and structural power

Overall, anger in the workplace can operate as a status reinforcing cycle as well, just as gender and race can. Indeed, anger has the potential to motivate people to fix an unfair situation, and when perceived as appropriate, expressing anger can result in valuable outcomes for a protagonist (e.g., Tiedens, 2000, 2001). For protagonists of certain social groups, however, expressing anger can instead backfire, and can serve to reinforce the protagonists' lower power position in the social hierarchy. Indeed, high status White men were believed to be more likely to experience anger in a negative situation than sadness or guilt, and protagonists expressing anger in a negative situation were believed to be more likely to be high status people than low status people. People (gender and race/ethnicity unmarked, and thus likely imagined as White male, e.g., Eagly & Kite, 1987; Hamilton, 1991) described as high in skills and abilities were also believed to be more likely to experience anger than sadness or guilt in a negative situation

(Tiedens, Ellsworth, & Mesquita, 2002). Thus, for White men, status and skills are associated with anger, and expressing anger could signal one is skilled or of high status to others. Further, in negotiation settings, people conceded more to angry negotiation partners than happy partners (gender and race/ethnicity of partners unspecified). The negotiation partner's anger evoked more fear in the participant on the other side of the negotiation, and thus angry negotiators fared better than others (Van Kleef, De Dreu, & Manstead, 2004).

Although White men's anger was in some instances associated with positive workplace outcomes, White women's anger in the workplace was associated with much less positive outcomes (e.g., Gibson, Schweitzer, Callister, & Gray, 2009). Overall, it appears the symbiotic relationship between anger and status that White men experience in the workplace is not something angry White women protagonists experience. Indeed, female leaders (race/ethnicity unmarked) were perceived unfavorably by a diverse group of undergraduates for displaying either anger or sadness, although male leaders were not perceived unfavorably if they displayed anger (Lewis, 2000). The strategy of deploying anger to achieve status backfires for White women as well. Although White men in the workplace received higher conferrals of status when expressing anger than when expressing sadness, White women who expressed anger in the workplace did not receive higher status conferrals than White women who expressed sadness, even when the women were in a position of high job status in the organization (Brescoll & Uhlmann, 2008).

Additionally, in the realm of social influence, men (race/ethnicity unmarked) on juries who expressed anger with their argument to other jurors had more social influence than men who did not express emotion when trying to convince others of an argument. For women (race/ethnicity unmarked) who made the same argument however, expressing anger with their argument resulted in them having less social influence than men who either expressed anger or expressed no emotion (Salerno & Peter-Hagene, 2015). In one of a subsequent, similarly designed set of studies, angry White women, but not angry White men, were perceived as less effective and less influential than those who expressed no emotion in a jury holdout situation. In the next study, Black holdout voters on juries who expressed anger were perceived as less effective and less influential than those who expressed no emotion. Angry White holdout voters, however, did not lose influence or effectiveness when angry. Across studies, White male holdouts voters were perceived as equally influential and effective when expressing sentiments with or without anger (Salerno, Peter-Hagene, & Jay, 2017). Thus, for White men in the workplace, powerful emotions can enhance status or not affect status, but for members of other social groups, perceptions of their emotions can reinforce lower status (e.g., Ragins & Winkel, 2011).

# Can Another Social Actor Further Affect Perceptions of Who is Appropriate? The Case of Anger Invalidation

Research on emotional appropriateness (e.g., Shields, 2005) raises the question of *who* gets to determine a protagonist's emotional appropriateness. In many ways, the research reviewed above points us to the conclusion that the perceiver does, and the perceiver likely does so in a way that maintains social power relationships through the use of social group stereotyping or other means of discrediting or bolstering a protagonist. Though the perceiver is ultimately still the one to judge a protagonist's appropriateness, I propose that other people may play a role in influencing a perceiver's judgment of a protagonist's appropriateness as well.

I propose the politics of emotional appropriateness extend to third party observers who witness people's comments about others' appropriateness. In people's everyday lives, people both inhabit positions of differing structural power and exist within a complex network of people. Thus, as people make comments about another's emotion, these comments can have downstream consequences for how third parties view others' appropriateness. I suggest these comments may carry different weights depending on the lived power position of the commenter. Thus, I propose that an invalidator can make an emotional appropriateness judgment about a protagonist, and that judgment can subsequently affect the judgment of third party perceivers. I further argue that invalidators located in intersectional positions of relative structural privilege (e.g., a White man relative to a Black or White woman) may have a stronger influence on third party perceivers' judgments of a protagonist. In other words, an invalidator's comments may create a chain reaction in which other people can dismiss a protagonist simply because it might align with social group stereotypes about that protagonist and/or because a high status other signaled inappropriateness is their view of the protagonist. In such a way, I suggest status loops are reinforced: those vulnerable to invalidation have their emotion more easily cast as inappropriate, especially when this invalidation is done by a person in a location of higher structural status.

#### The role of social influence

The degree to which people are influenced by external forces interacts with important social goals, primarily the motivations to: form and display accurate social perceptions and reactions; create and sustain meaningful social relationships with others; and, maintain a positive self-concept (e.g., Cialdini & Goldstein, 2004; Cialdini & Trost, 1998). Social influence also varies by gender, and as research examining gender differences in social influence often suggests, differences in degree of influence favors men (race/ethnicity unmarked) (e.g., Carli, 1990, 2001; Carli & Eagly, 1999; Eagly, 1983; Eagly & Wood, 1982; Instone, Major, & Bunker, 1983). Indeed, women in a lab study simulating being in a supervisor role made fewer attempts to influence others than men did (Instone, Major, & Bunker, 1983), gender differences in influence were present even in small group settings in which the participants were assigned to equally influential roles (Eagly, 1983), men had more social influence on the decision-making of others than women did (Propp, 1995), and for men and women alike, being primed with female gender

role primes increased participants' susceptibly to persuasion and decreased their attitude strength (Eaton, Visser, & Burns, 2017). Carli and Eagly (1999) identified competence perceptions, social roles in interactions, communication styles, and the gender type of the group task as factors that contribute to gender differences in social influence.

Indeed, differences in power have further been found to explain gender differences in social influence (Carli, 1999). Additionally, some studies concluded only through confirming their lower structural status relative to men, through behaviors such as expressing warmth and using tentative speech, did women improve their level of influence over men (e.g., Carli, 1990; Reid, Keerie, & Palomares, 2003). Similarly, expertise, a factor that could likely increase one's influence in groups, may be perceived differently depending on the gender of the expert. Thomas-Hunt and Phillips (2004) found, for instance, women who possessed expertise were actually less influential in a group task, and women's amount of expertise decreased group members' perceptions of the women experts as having expertise. For men, however, having expertise was positively related to perceptions of men experts. Indeed, this pattern was further echoed in performance, as groups with a woman expert underperformed compared to groups with a man expert. Therefore, as described in greater detail in the next section, it appears social influence, at least in the case of gender, operates in a reinforcing status loop whereby those with the relatively higher structural power have more influence, which in turn, boosts their status.

The social influence literature, to the best of my knowledge, also lacks connection with intersectional theory for the most part. Intersectional considerations, however, are an ideal pairing for social influence because intersectional locations are in part defined by their structural advantages and disadvantages. Using an intersectional framework in the present research therefore allows for a possible mapping of how protagonists' and invalidators' relative structural power and influence may be enacted in the social world. Thus, guided by both social influence literature and intersectionality theory, we could predict how a protagonist's and invalidator's

intersectional positions may result in third party perceivers giving certain invalidators' opinions more consideration in the appropriateness evaluation process.

#### Cycles of status and rationality

An invalidator's degree of influence on others' perceptions of a protagonist likely depends on the perceived rationality of the invalidator and protagonist, determinations closely tied to whom the invalidator and protagonist are. Indeed, the belief that women's emotionality interferes with reason, whereas men's rationality is uncompromised or even bolstered by emotion, is widespread in Western culture (e.g., Fischer, 1993; Heilman, Block, & Martell, 1995; Shields, 1987). This belief about women's emotionality, however, occurs within a social structure where women, as a group across many different cultures, have lower status, less power, and fewer resources than men do (e.g., Rhoodie, 1989). Judgments of rationality may be intertwined, therefore, with structural power.

Expectation states theory provides a way forward for understanding how status shapes emotion and emotion shapes status (e.g., Ridegway, 2006). Correll and Ridgeway (2006) describe how cultural beliefs about gender operate in a way similar to a feedback loop: cultural beliefs at the macro-level influence individual behavior, and this behavior in turn often reinforces and sustains these macro-level beliefs by confirming them. Status beliefs, beliefs which link skills with one particular social category, are maintained when people interact with others from particular social groups and observe members of a particular group that have some form of structural influence over another group (e.g., Ridgeway, 2001; Lively, 2013). For instance, high status people experienced what Correll et al. (2017) term a "status advantage, " that is, when quality of a person's contribution was uncertain, people ascribed quality based on what most people might agree is of higher quality, a decision influenced by status beliefs. Thus, the contributions of people in higher status locations can be rewarded disproportionately compared to those of people in lower status positions, thereby resulting in a reinforcing cycle of status. Additionally, Ridgeway and Nakagawa (2017) found this reinforcing cycle was further supported when high status group members conferred judgments of reasonableness on low status group members who deferred to the high status members in groups. As these differences are observed across multiple contexts, these beliefs become strengthened (e.g., Ridgeway & Bourg, 2004).

Indeed, status beliefs can influence perceptions of accomplishments and failures according to intersectional position in the workplace. For instance, in one study in which leaders had recently been credited with organizational success, participants rated the White successful leader as more effective and as possessing more leadership potential than a non-White successful leader (Rosette, Leonardelli, & Phillips, 2008). Thus, privilege begot privilege as the accomplishments of those in structurally powerful positions resulted in higher perceptions of potential for success. Similarly, when leaders across intersectional positions were credited with organizational success, those in positions with less relative structural power, in this case Black women, Black men, and White women, were still evaluated less positively than White men, those in the position of relatively higher structural power. Further, Black women leaders described as contributing to an organizational failure were perceived more negatively than White women and Black men leaders described as contributing to an organizational failure (Rosette & Livingston, 2012). Thus, in line with intersectionality theory, just as high structural power is reinforced through more positive judgments for success, lower structural power can also be reinforced through harsher judgments for failure. People in lower relative status positions, therefore, are already not given the benefit of the doubt in ambiguous situations. Thus, an invalidating comment might further influence judgments of people in relatively low status positions, ascribed by their group memberships, in a negative manner. For people in relatively higher ascribed status

positions who are more likely to be given the benefit of the doubt in an ambiguous situation, invalidation from another may have a less damaging effect on perceivers' judgments. Just as people in relatively higher ascribed status positions may be more influential as invalidators, it is also likely that people in these positions may be more strongly buffered from invalidation.

#### **Emotion Affirmation: The Other Side Of The Coin**

One hopeful aspect to this potential cycle of anger invalidation and status is that it might be possible to disrupt the cycle through affirmation. Indeed, an additional person, and especially a person in a position of relatively high structural status, might be able to buffer perceptions of a protagonist's emotion by providing an affirming comment, which supports for observers that the protagonist's emotion is appropriate. An affirming statement could operate as a microintervention, similar to the amplification strategy used by women in the Obama White House, whereby other women restated that an idea came from a particular woman to prevent it from being wrongly attributed to one of the men in the room (Eilperin, 2016). I propose that affirming the anger of another may be an effective way to act as a feminist ally, and to buffer perceptions in the eyes of others of an angry person who may be judged as inappropriate due to social group stereotypes. If invalidators can sway third party perceivers to dismiss a protagonist's anger as unjustified, perhaps an affirmer who validates the protagonist's right to anger can intervene to prevent negative judgments of a protagonist. If so, people may be able to help others at risk of having their anger dismissed, helping to restore a protagonist's right to anger and justice.

Drury and Kaiser (2014, p. 637) define an ally as one "who aligns with a disadvantaged group by recognizing the need for further progress in the fight for equal rights." In their review of the literature on the role of male allies in sexism confrontation, the authors conclude male sexism confronters, relative to female sexism confronters, are both evaluated more positively, and their

confrontations are viewed as more legitimate efforts to reduce sexism. Drury and Kaiser (2014) suggest White men may be more effective than White women at confronting sexism due to perceptions of White men as acting outside of their own self-interest when confronting. In line with this argument, female leaders who publically confronted sexism were evaluated less favorably than male leaders who confronted sexism publically (Gervais & Hillard, 2014), and callers who identified themselves to participants as a member of the LGBT community were less effective at convincing participants to donate to support marriage equality than callers who did not personalize their position (Harrison and Michelson, 2012). However, evidence also supports that confronting sexism, when done in a way that is perceived as nonaggressive, can be viewed positively when enacted by both women and men (Becker & Barreto, 2014).

Thus, Drury and Kaiser (2014) conclude overall that White men may be more effective at confronting sexism due to the appearance that they are acting outside of their own interests. The authors further suggest confronting effectiveness may be reduced for men of other, less privileged intersectional positions who may be perceived as confronting sexism due to their own vested self interest in reducing prejudice more broadly (e.g., in reducing racial or homophobic prejudice). Drury and Kaiser (2014) also consider that White male confronters (perceived as heterosexual) may be especially effective at persuading others, especially fellow White men, that sexism exists. I contend that a further possible explanation of this effect is that people across social groups are accorded differing amounts of social influence depending on their intersectional location. In other words, it is also possible that White heterosexual men's position of relative advantage to White women and to other male groups, for instance men of color, provides White men with greater social influence over others' evaluations, beliefs, and actions more generally.

#### **The Present Research**

In the studies that follow I investigated whether third party perceivers (i.e., participants) use cues from protagonists, invalidators, and affirmers to determine the appropriateness of a protagonist's anger, and if each of these characters' intersectional positions affect their influence on third party emotion perceptions. Across four studies, I sought to replicate findings on perceptions of White women and White men's anger (Studies 1a and 1b) and to help clarify conflicting findings on perceptions of Black women's anger (Studies 2 and 3). Additionally, I aimed to extend findings on Black women's, White women's, and White men's anger into the domains of invalidation (Studies 1a, 1b, and 2) and affirmation (Study 3) by examining the effects of a comment from an onlooker on perceivers' judgments of an angry protagonist's appropriateness.

Of most interest across studies were perceivers' evaluations of the appropriateness of the protagonist's anger (emotion type present and intensity judgments such as: the types of emotion displayed by the protagonist were wrong and the protagonist's emotion was too much for the situation). The intersectional position of the protagonist and invalidator/affirmer across studies was expected to influence how appropriately a protagonist's anger was evaluated to be. For conditions with the invalidator/affirmer, I predicted that the invalidator/affirmer in the intersectional position of high relative status (i.e., White men relative to others) would affect perceptions of protagonists' appropriateness more so than invalidators/affirmers in other intersectional positions. I additionally measured perceptions of the rationality of the invalidator/affirmer and predicted their perceived rationality could mediate the effects of invalidator/affirmer intersectional position on perceivers' evaluations. I predicted too that intersectional position of the protagonists and invalidator/affirmer would interact with one

another to affect perceivers' appropriateness judgments (i.e., more of an effect when the invalidator/affirmer belonged to the relatively higher status social group than the protagonist).

If invalidators and affirmers did not affect appropriateness judgments of protagonists, findings may suggest that the comments of social others are not as salient in perceivers' evaluations of protagonists than other factors (e.g., protagonist situation and emotional expression). If invalidators and affirmers did influence perceivers relative to controls but intersectional position of the invalidators/affirmers did not result in differential influence, this could suggest another's comment may provide perceivers with additional information that aids in perceivers' decisions to an equivalent degree regardless the social group memberships of those invalidators/affirmers.

Additionally, I examined a number of related exploratory measures. Protagonist's competence and the degree of status and salary perceivers would confer on the protagonist were measured to assess if the intersectional position of the protagonist and invalidator/affirmer would further affect perceivers' judgments on these consequential workplace outcomes. Similarly, rationality of protagonist and dispositional attributions of the protagonist's emotion were also measured, as they are closely related yet distinct dimensions that may operate similarly or differently to appropriateness judgments. The perceived fragility and threat of the protagonist were been deemed inappropriate that might differ based on intersectional position due to stereotypes. Findings on anger and negotiation would predict White men can be perceived as threatening when angry (e.g., Van Kleef et al., 2004), whereas findings on intersectional stereotypes might predict White women could be perceived as fragile when angry, yet Black women as threatening when angry (e.g., Landrine, 1985; Wingfield, 2010). Perceived authenticity of the protagonist's emotion was measured as well to ensure protagonists' anger did not appear dishonest or unfelt, but instead that protagonists' anger was perceived as deeply felt

# Chapter 2

# Study 1a

Study 1a examined if protagonists' anger was perceived as less appropriate when invalidated, and if invalidator intersectional position interacted with this effect. Using White women and men as a starting point, I aimed to conceptually replicate past findings (e.g., Brescoll & Uhlmann, 2008) about White women and men's anger (conditions with no invalidators), and to extend these findings to examine the role of anger appropriateness when invalidated. Additionally, to further elucidate the invalidation process, I predicted perceived rationality of the invalidator may explain the effect of invalidator intersectional position on appropriateness of protagonist anger.

# **Study 1a Hypotheses**

1.1) If intersectional position of the protagonist affects appropriateness perceptions, then perceivers (i.e., participants) will rate anger expressed by White women protagonists as less appropriate than anger expressed by White men protagonists.

1.2) If invalidators affect appropriateness perceptions, then perceivers will rate protagonist anger as less appropriate if invalidated by either a White woman or White man invalidator than if not invalidated (control).

1.3) If intersectional position of the invalidator affects appropriateness perceptions, then perceivers will rate protagonist anger as less appropriate if invalidated by a White man than a White woman.
1.4) If the effect of intersectional position of the protagonist on appropriateness perceptions depends on intersectional position of the invalidator, then the anger of a White woman protagonist will be perceived as less appropriate when the invalidator is a White man than when the invalidator is a White woman.

1.5) I predict that when contrasting the two intersectional positions of the invalidators,the effect of invalidator intersectional position on appropriateness of protagonist's anger(Hypothesis 1.3) will be mediated by perceptions of the invalidator's rationality.

#### Study 1a Method

# Design

The design of the study was a 2 (protagonist intersectional position: White woman vs. White man) X 3 (invalidator intersectional position: White woman vs. White man vs. none/control) between-subjects randomized design.

# **Participants**

An a priori power analysis conducted in G\*Power revealed 222 people needed in the sample to detect a moderate effect size (f=.21) with power of 0.8. Undergraduate psychology students participated and received course credit. The final sample had 234 people (125 women, 108 men, one prefer not to say; ages 18-27, M = 19.14, SD = 1.38) after exclusions. Participants (n=35) were removed for the following reasons: ten due to failing or not answering the comprehension check (six of whom also failed the attention check), six due to failing the attention check, two for completing the study on a phone, and 17 for failing the manipulation checks of the

gender and race of the protagonist and invalidator. The sample was predominantly White (75.6%; Asian/Asian-American, 10.3%; Latina/o, 4.7%; multiracial, 3.8%; Black, 3.4%; Middle Eastern, 0.9%; other, 1.3%). The majority of the sample reported approximately one year of work experience (range 0-12 years, M = 1.31, SD = 1.74, Mdn = 0.83) and reported no experience working in an office environment (no, 76.1%; yes 22.6%; unsure, 1.3%).

## Materials

Professionally drawn illustrated stories modeled in a graphic novel-like format (emotion storyboards) were used to depict emotion and intersectional positions. In a recent study, we found the emotion storyboard method resulted in greater comprehension for story content and greater reported clarity than written vignettes, and allowed for more precision in depictions of emotion for judgments of dimensions such as emotional control and appropriateness (McCormick-Huhn & Shields, under review). Emotion storyboards also may improve upon common race and gender manipulations, through: a) clearer depictions of race and gender than through voices and names, and b) greater control than in photographs and videos of racial prototypically (e.g., Livingston & Brewer, 2002) and gendered facial features (e.g., brow ridges), that are confounded with emotion expression (e.g., Adams et al., 2015; Hess, Adams, & Kleck, 2004, 2005; Hess, Adams, Grammer, & Kleck, 2009; Hess, Thibault, Adams, & Kleck, 2010; Zebrowitz, Kikuchi, & Fellous, 2010).

Figure 1 shows an example of the emotion storyboard used in the present study. A protagonist sits at their office desk looking at their computer that displays an email notifying the protagonist they will be reassigned to a new project. The protagonist displays anger and leaves their office, and on their phone, waits for the elevator recounting what happened and expressing their anger. Two people are pictured overhearing the protagonist on the phone before the

protagonist enters the elevator. In the conditions without invalidators, the story ends. In the conditions with invalidators, after the elevators door close, one of the onlookers makes a comment to the other about the protagonist, invalidating the protagonist's emotion. To create a situation in which stereotyping and invalidation could likely occur, the protagonists' dialogue, expressions, and self-labeling made the fact that they were angry unambiguous, yet the reason for the protagonists' reassignment was intentionally ambiguous.

Depending on condition, participants saw different combinations of White women and White men protagonists and invalidators for Study 1a. Character intersectional position (race and gender) was manipulated though identifiable characteristics (e.g., hair length, clothing type, skin tone). Gendered facial features, however, that have been found to be confounded with emotion expression judgments (e.g., Adams, Hess, & Kleck, 2015) were held constant across protagonist and invalidator identities. Other identity dimensions were held constant that could plausibly affect perceived appropriateness such as ability status, occupational status, socioeconomic status, and age, across conditions in the illustrated stories (i.e., able-bodied, business workplace, middleclass, young). Other dimensions still remained unmarked, such as sexual orientation, and thus participants likely assumed characters were dominant group members (e.g., heterosexual). Characters depicted in the emotion storyboards were piloted, outside of the emotion storyboard, to ensure participants recognized the intersectional positions (race and gender) of the characters with at least 80% consensus. Each of the protagonists and invalidators/affirmers used in the present studies were all identified by participants with over 80% consensus (see Appendix A for materials pilot studies results and Appendix B for illustrations of characters not pictured in figures in the text).

Participants in one of the two pilot studies also rated the emotion of one of the protagonists, depicted expressing anger outside of the emotion storyboard to ensure their facial expressions of emotion were rated as angry more so than other emotions. To create the

protagonists' emotional expression in their final panel of the emotion storyboard, the graphic artist modeled the expression on facial expression emotion sets commonly used in psychology studies (NimStim, Tottenham et al., 2009; Pictures of Facial Affect, Friesen & Ekman, 1976). This particular expression was also designed to be a high intensity anger expression (Horstmann, Lipp, & Becker, 2012). All three of the protagonists were rated as experiencing more anger than a number of other emotions (see Appendix A for results).



Figure 1. An emotion storyboard used in Study 1a. Illustrations by Michael Przybys.

#### Measures

Participants responded to the following measures on 7-point Likert scales ranging from 1 (Strongly disagree) to 7 (Strongly agree; see Appendix C for all items).

#### **Dependent variables**

Appropriateness of the protagonist's emotion (emotion type present subscale of the Perceived Emotional Appropriateness Scale; Warner & Shields, 2009a). Appropriateness of emotion type was measured with a four-item scale (Cronbach's  $\alpha$ =.72; e.g., "The main character's emotions were exactly the kinds that were called for").

Appropriateness of the protagonist's emotional intensity (emotional intensity subscale of the Perceived Emotional Appropriateness Scale; Warner & Shields, 2009a). Appropriateness of emotional intensity was measured with a five-item scale (Cronbach's  $\alpha$ =.83; e.g., "I think the main character was emotionally out of control," reverse-coded).

### Mediator variable

Rationality of invalidator (Adapted from Heilman, Block, & Martell, 1995). Rationality of the invalidator was measured with a three-item scale (Cronbach's  $\alpha$ =.67; e.g., "How logical was the character who commented on what the main character was saying by the elevator?").

#### Exploratory variables

*Perceived rationality of protagonist.* Rationality of the protagonist was measured using the same three-item scale as the previous measure, worded in reference to the main character (Cronbach's  $\alpha$ =.69).

Dispositional emotionality of the protagonist (adapted from Brescoll & Uhlmann, 2008 and McCormick-Huhn, Zawadzki, & Shields, in prep.). Dispositional attributions of the protagonist's emotion were measured with a six-item scale adapted from two existing scales (Cronbach's  $\alpha$ =.65; e.g., "In general, how emotional is the main character?"; "The main character became angry because he or she is an angry person").

Perceived authenticity of the protagonist's emotion (adapted from Zawadzki, Warner, & Shields, 2013). Authenticity of the protagonist's emotion was measured with a four-item scale (Cronbach's  $\alpha$ =.74; e.g., "How genuine was the main character's emotion?" ).

*Threat of the protagonist (adapted from Sinaceur & Tiedens, 2006).* Threat of the protagonist was measured with a three-item scale (Cronbach's  $\alpha$ =.85; e.g., "How much does the adjective 'intimidating' describe the main character?").

*Fragility of the protagonist (adapted from Sinaceur & Tiedens, 2006).* Fragility of the protagonist was measured with a three-item scale (Cronbach's  $\alpha$ =.83; e.g., "How much does the adjective 'weak' describe the main character?").

Competence of the protagonist (adapted from Brescoll & Uhlmann, 2008). Competence of the protagonist was measured with a two-item scale (Spearman's rho=.73, p<.001; e.g., "How skilled is the main character?").

Status conferral to the protagonist (adapted from Tiedens, 2001). Status conferral was measured with a four-item scale (Cronbach's  $\alpha$ =.88; e.g., "How much independence does the main character deserve?").

Salary conferral to the protagonist (adapted from Brescoll & Uhlmann, 2008). Salary conferral was measured with one, open-ended question that asked for the yearly salary amount the participant would pay the main character.

### Procedure

Undergraduate students participated in the study online. Participants were told they would read about one of several characters' experiences in the workplace, and that they would then be asked to answer some questions based on what they read. Participants first viewed a picture of the protagonist that they would read about, and then read the emotion storyboard. Finally, participants answered questions about the main character, the character who commented on what the main character was saying by the elevator (if in one of the invalidator conditions), answered questions in which they imagined that they were the main character's supervisor, and completed a comprehension check, an attention check, manipulation checks, and demographics.

#### **Study 1a Results**

For each of the measures, 2 (protagonist intersectional position: White woman vs. White man) X 3 (invalidator intersectional position: White woman vs. White man vs. none/control) between-subjects ANOVAs were conducted. There was homogeneity of variances for each of the measures for all combinations of protagonist intersectional position and invalidator intersectional position, as assessed through no violations of Levene's Test for Equality of Error Variances. Boxplots generated for salary amounts conferred to protagonists revealed ten extreme values. These ten values, along with two people who did not provide an amount, were excluded from analysis of salary amounts.

### Correlations

Because the primary pattern of effects were main effect differences due to protagonist intersectional position, correlations for all measures were run split by protagonist intersectional position (see Appendix D).

## Appropriateness of protagonist's emotion type

Appropriateness of the protagonist's emotion type differed based on protagonist, F(1, 228)=7.77, p=.006,  $\eta_p^2=.033$ , 90% CI [0.006 to 0.079], such that the White woman protagonist's emotion type was rated as more appropriate than the White man protagonist's (see Table 1 for means and standard errors). There was no main effect of invalidator (p=.542,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.025]) or interaction between protagonist and invalidator (p=.819,  $\eta_p^2=.002$ , 90% CI [0.000 to 0.012]).

### Appropriateness of protagonist's emotional intensity

Appropriateness of the protagonist's emotional intensity differed based on protagonist,  $F(1, 228)=5.52, p=.020, \eta_p^2=.024, 90\%$  CI [0.002 to 0.065], such that the White woman protagonist's emotional intensity was rated as more appropriate than the White man protagonist's. There was no main effect of invalidator ( $p=.051, \eta_p^2=.026, 90\%$  CI [0.000 to 0.063]) or interaction between protagonist and invalidator ( $p=.987, \eta_p^2=.000, 90\%$  CI [0.000 to 0.002]).

#### Rationality of the invalidator

For conditions with invalidators, rationality of the invalidator differed based on protagonist, F(1, 149)=4.27, p=.041,  $\eta_p^2=.028$ , 90% CI [0.001 to 0.084], such that invalidators were perceived as more rational when they invalidated White men protagonists than when they invalidated White women protagonists. There was no main effect of invalidator (p=.680,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.025]) or interaction between protagonist and invalidator (p=.560,  $\eta_p^2=.002$ , 90% CI [0.000 to 0.031]). Due to no main effect of invalidator, the hypothesized follow-up mediation analysis was not conducted.

#### **Exploratory variables**

### Rationality of the protagonist

Rationality of the protagonist did not differ based on protagonist (p=.297,  $\eta_p^2$ =.005, 90% CI [0.000 to 0.031]), invalidator (p=.216,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.042]), or the interaction of protagonist and invalidator (p=.511,  $\eta_p^2$ =.006, 90% CI [0.000 to 0.026]).

### Threat of the protagonist

Threat of the protagonist differed based on protagonist, F(1, 228)=7.13, p=.008,  $\eta_p^2=.030$ , 90% CI [0.004 to 0.075], such that White men protagonists were rated as more threatening than White women protagonists. Threat of the protagonist also differed based on invalidator, F(2, 228)=4.20, p=.016,  $\eta_p^2=.036$ , 90% CI [0.004 to 0.078]; White man invalidator M=2.69, SE=0.14; White woman invalidator M=3.15, SE=0.16; no invalidator M=3.24, SE=0.14, such that protagonists were rated as more threatening in the control condition (no invalidation) than when

invalidated by a White man (p=.007) and as more threatening when invalidated by a White woman than when invalidated by a White man (p=.035). There was no difference between being invalidated by a White woman and the control (p=.659). Threat of the protagonist did not differ based on the interaction between protagonist and invalidator (p=.367,  $\eta_p^2$ =.009, 90% CI [0.000 to 0.033]).

## Fragility of the protagonist

Fragility of the protagonist differed based on protagonist, F(1, 228)=7.71, p=.006,  $\eta_p^2=.033$ , 90% CI [0.005 to 0.079], such that the White woman protagonist was rated as less fragile than the White man protagonist. There was no main effect of invalidator (p=.402,  $\eta_p^2=.008$ , 90% CI [0.000 to 0.031]) or interaction between protagonist and invalidator (p=.101,  $\eta_p^2=.020$ , 90% CI [0.000 to 0.054]).

### Dispositional emotionality of the protagonist

Dispositional emotionality of the protagonist differed based on protagonist, F(1, 228)=7.90, p=.005,  $\eta_p^2=.034$ , 90% CI [0.006 to 0.080], such that the White woman protagonist was rated as lower in dispositional emotionality than the White man protagonist. There was no main effect of invalidator (p=.239,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.041]) or interaction between protagonist and invalidator (p=.426,  $\eta_p^2=.008$ , 90% CI [0.000 to 0.030]).

### Authenticity of protagonist's emotion

Authenticity of the protagonist's emotion did not differ based on protagonist (p=.068,  $\eta_p^2$ =.015, 90% CI [0.000 to 0.050]), invalidator (p=.239,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.041]), or the interaction of protagonist and invalidator (p=.729,  $\eta_p^2$ =.003, 90% CI [0.000 to 0.017]).

# Protagonist competence

Competence of the protagonist did not differ based on protagonist (p=.751,  $\eta_p^2$ =.000, 90% CI [0.000 to 0.014]), invalidator (p=.848,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.011]), or the interaction of protagonist and invalidator (p=.239,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.014]).

## Protagonist status conferral

Status conferred to the protagonist differed based on protagonist, F(1, 228)=6.72, p=.010,  $\eta_p^2=.029$ , 90% CI [0.004 to 0.073], such that the White woman protagonist was conferred more status than the White man protagonist. There was no main effect of invalidator (p=.501,  $\eta_p^2=.006$ , 90% CI [0.000 to 0.027]) or interaction between protagonist and invalidator (p=.889,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.007]).

#### Protagonist salary conferral

Conferred salary of the protagonist did not differ based on protagonist (p=.722,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.016]), invalidator (p=.319,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.038]), or the interaction of protagonist and invalidator (p=.072,  $\eta_p^2$ =.024, 90% CI [0.000 to 0.062]).

# Table 1

# Study 1a Means (Standard Errors)

	Protagonist Intersectional Position	
	WW	WM
Appro.Type	5.16 (0.09) <sup>a</sup>	4.81 (0.09) <sup>b</sup>
Appro.Inten.	4.88 (0.11) <sup>a</sup>	4.53 (0.10) <sup>b</sup>
Inval. Rational	3.82 (0.15) <sup>a</sup>	4.23 (0.13) <sup>b</sup>
Pro. Rational	3.38 (0.10) <sup>a</sup>	$3.24(0.09)^{a}$
Threat	2.80 (0.13) <sup>a</sup>	3.25 (0.12) <sup>b</sup>
Fragility	2.82 (0.13) <sup>a</sup>	3.30 (0.12) <sup>b</sup>
Dispo. E.	3.85 (0.07) <sup>a</sup>	4.12 (0.07) <sup>b</sup>
Authenticity	5.55 (0.09) <sup>a</sup>	$5.32(0.07)^{a}$
Competence	4.54 (0.11) <sup>a</sup>	$4.49(0.10)^{a}$
Status	4.14 (0.10) <sup>a</sup>	3.77 (0.10) <sup>b</sup>
Salary	\$57,686.21 (\$1,809.82) <sup>a</sup>	\$56,800.26 (\$1,703.38) <sup>a</sup>

*Note*: Different subscripts indicate the two protagonist conditions significantly differed from one another on the variables of interest (by at least p < .05). WW indicates White woman protagonist, WM indicates White man protagonist, Appro. Type indicates appropriateness of protagonist's emotion type, Appro. Inten. indicates appropriateness of protagonist's emotional intensity, In. Rational indicates rationality of the invalidator, Pro. Rational indicates rationality of the protagonist, Threat indicates threat of the protagonist, Fragility indicates fragility of the protagonist, Dispo. E. indicates dispositional emotionality of the protagonist, Authenticity indicates authenticity of the protagonist's emotion, Competence indicates protagonist competence, Status indicates protagonist status conferral, and Salary indicates protagonist salary conferral.

#### **Study 1a Discussion**

Predictions that a comment from an invalidator would negatively influence judgments of protagonists, and that the intersectional positions of the invalidator and protagonist would interact to influence judgments, were largely unsupported. One effect that did emerge was that protagonists were rated as less threatening when invalidated by a White man than by either a White woman or when not invalidated at all. This finding possibly indicates White men invalidators are more effective at neutralizing the perceived threatening nature of angry others than White women invalidators are. Alternatively, protagonists may be judged as less threatening due to participants evaluating invalidation from White men more negatively than invalidation from White women or no invalidation, and therefore rating targets of that invalidation more positively.

Perhaps, the overall lack of invalidation effects was due to the invalidation not being noticeable enough to participants. However, only those participants who correctly recalled the intersectional positions of both the protagonist and the invalidator were included in the analysis. Therefore, it seems likely that people did attend to the invalidator to a certain degree and that the invalidator's comment did not affect their ultimate judgments of the protagonist, on most dimensions.

Most surprisingly, effects of protagonist intersectional position emerged that were in direct contrast to predictions and the prevailing pattern of findings in the literature. White women protagonists were rated as experiencing emotion of a more appropriate type and of a more appropriate intensity than White men protagonists were. Although White women and men protagonists were not rated differently in rationality, participants rated invalidators as more rational if they invalidated a White man than if they invalidated a White woman. Relatedly, people perceived the White women protagonists as significantly less threatening, less fragile, and lower in dispositional emotionality than the White men protagonists. Counter to predictions and in contrast to findings of Brescoll and Uhlmann (2008), angry White women were not rated as lower in competence, conferred less status, or conferred a lower salary amount, than angry White men. In fact, White women were conferred even more status than White men. Overall, the angry White women protagonists were evaluated more favorably across dimensions than the angry White men protagonists were.

Given the unexpected nature of the protagonist findings, I conducted Study 1b to directly replicate Study 1a to rule out the possibility that this pattern of results was an artifact of this particular sample. In Study 1a the participants were undergraduates with very little work experience (less than two years, on average). Study 1b was thus instead conducted with Amazon Mechanical Turk workers, a population with typically more work experience than undergraduates (e.g., Levay, Freese, & Druckman, 2016). Authenticity of the protagonist's emotion was included in Study 1a to ensure that the protagonist's emotion was perceived as genuine across intersectional positions. Because the White woman's and White man's anger did not differ in perceived authenticity, the authenticity measure was omitted in Study 1b. The reliabilities of a few of the measures were also lower than expected in Study 1a (rationality of invalidator, Cronbach's  $\alpha$ =.67; rationality of protagonist, Cronbach's  $\alpha$ =.69; dispositional emotionality, Cronbach's  $\alpha$ =.65), and thus Study 1b allowed for an additional test of these measures as well.

Given that this pattern of findings was in stark contrast to past findings in the literature, the present findings could have been due to something out of the ordinary occurring in the broader context in which the study was conducted. In particular, the current findings may have been a byproduct of the widespread media focus on issues of gender discrimination and sexual assault and harassment in the workplace (e.g., Johnson & Hawbaker, 2018). To test this possibility, Study 1b examined news engagement as a moderator of these effects as well.

# **Chapter 3:**

## Study 1b

When I conceptualized this project in the summer of 2016, the gendered emotion narratives I saw unfolding in the presidential election initially inspired the idea. Only one year later, however, it felt as if the landscape of national engagement with gender issues, particularly surrounding sexual assault and harassment in the workplace, had shifted. The #MeToo moment, founded by activist Tarana Burke in 2006, became a cultural flashpoint in October of 2017. Indeed, in the aftermath of many accusations of sexual assault brought against Harvey Weinstein, people throughout the United States (and countries across the globe) posted on social media sharing in solidarity their experiences facing sexual assault and harassment. CBS News and The Associated Press (2017) reported that Facebook tallied 12 million online mentions of #MeToo within the first 24 hours of the online trend. Within two days of the trend, 45% of all Facebook users in the United States had friends who had posted about the movement. Since this moment in time, coverage of the #MeToo movement has continued across news outlets, members of Hollywood have created a legal defense fund to support people who have experienced sexual assault, many powerful men have faced consequences from firings to convictions to loss of sponsorships and business contracts, and many more such publicized and likely unanticipated events surrounding the topic of sexual assault and harassment across workplaces have occurred (e.g., Johnson & Hawbaker, 2018). Additionally, the #MeToo movement spurred much media discussion of connections between sexual harassment at work and other gender inequities in the workplace, such as the gender pay gap (e.g., Calfas, 2018) and a greater resistance reported by men to mentor women in the workplace in the aftermath of #MeToo (LeanIn.Org and SurveyMonkey, 2018).

In light of the unexpected results of Study 1a, I reflected as a gender researcher, that I had not predicted this shift in the discussion and treatment of gender discrimination, assault, and harassment in the workplace that occurred during the time of this data collection. I developed new predictions that, perhaps, this current historical moment could be affecting the pattern of results revealed thus far. Before introducing these predictions, I briefly review additional research on the changing of gender attitudes overtime below.

#### **Attitudes About Gender and Historical Context**

Some research in psychology has examined gender beliefs within historical context and their changes overtime. For instance, one psychological meta-analysis (Twenge, 1997a) examined the Attitudes Toward Women Scale (Spence & Helmreich, 1972) between 1970 and 1995. Women's scores were strongly associated with the year of attitude measurement, and both women's and men's scores became more liberal/feminist overtime. In another meta-analysis, Twenge (1997b), found women's self-endorsement of masculine traits increased between 1974 and 1997 and the difference between women and men on measures of sex role endorsement decreased. Twenge (1997b) concludes that social change at the cultural-level can thus affect individual-level gender-relevant attitudes. Indeed, in an analysis of feminist attitudes between 1974 and 1998, Bolzendahl and Myers (2004) similarly find that the majority of attitudes about issues related to gender equality became more liberal overtime for both women and men. Thus, these three analyses provide support for the idea that attitudes about gender are improving overtime. Comparing gender beliefs and stereotype endorsement in 1983 and 2014, however, Haines, Deaux, and Lofaro (2016) found evidence of overwhelming stability of gender stereotypes decades later despite labor participation changes of the later decade. Haines et al. (2017) suggested as a possibility that measuring gender beliefs at these two time points possibly

reflects stability in gender beliefs that emerged in the 1980s after the 1970s period of less stability, and beliefs from the 1980s to 2014 may have remained relatively stable.

Turning to research conducted on this topic in political science and sociology, however, reveals more of an ebb and flow for people's gender beliefs throughout the recent decades than the psychology findings on this topic reveal. Indeed, Lee, Tufis, and Alwin (2017) report increasing gender egalitarianism from 1974 to 1995, and then a shift backwards in beliefs between 1996 and 2000. Further examining this trend, Shu and Meagher (2017) found two correlates of historical shifts in gender attitudes: women's participation in the labor force and men's overwork. The authors found that increases in men overworking (i.e., working more additional hours per week than in the past) was associated with the backlash in gender attitudes that occurred in the period between the 1990s and mid-2000s. These findings additionally map onto a backlash toward working mothers that Donnelly et al. (2015) report emerged in the mid-1990s. Without examining this period in the 1990s to early/mid-2000s, the pattern of gains and backlash that emerge in the analyses that span decades is obscured. These more continuous historical findings reveal the changing-nature and power of the historical context on gender attitudes throughout recent history.

Additionally, research has found United States citizens' attitudes toward gender can change with political shifts. Indeed, Banaszak and Ondercin (2016) demonstrated that social movements in the United States do affect attitudes about gender. The authors found that as the women's movement in the United States becomes more active, people in the United States become more liberal in their attitudes about gender. At the same time, however, Kellstedt, Peterson, and Ramirez (2010) found too that people respond to national partisan public policy by shifting their attitudes in the opposite direction after that policy shift. Men's attitudes were found to change more quickly in response to policy change, thus contributing to a gender gap in partisan policy support. Of importance in the current historical moment of 2018, both women and men's attitudes become more liberal when public policy shifts to become more conservative. Additionally, when policy becomes more conservative, men's quicker shifting results in less of a gender gap between the attitudes of women and men. These findings support the possibility that perhaps a historical shift is underway during this particular moment that affected the expected patterns of perceptions of White women and White men.

### #MeToo and Anger

Just as historical shifts may affect attitudes about gender broadly, #MeToo news coverage often involves explicit mention of women's anger and the justified nature of such anger. Garber (2017) perfectly captures the connection between this cultural moment and women's anger in an article for *The Atlantic*, writing:

As more and more people are able to share their experiences of the world and its betrayals—#MeToo and also #BlackLivesMatter and also #TakeaKnee and so many, many more—anger, increasingly, is the emotional posture that best reflects the world as it is lived and navigated. Fury, now, is the thing. There is anger in the ether. And women, in particular, in this moment of post-Weinstein shakeup, are now embracing the emotion for which, in earlier eras, they were so efficiently punished (para. 10).

Due to the close connections between #MeToo and outright discussion of women's anger appropriateness, it was predicted while people broadly may be experiencing a shift in attitudes, people especially high in news engagement might be driving Study 1a's unexpected pattern of evaluating White women's anger more favorably than White men's. Additionally, it was possible that participants exposed to a large amount of gender-relevant news responded to measures about White women more positively than in the past due to a tendency to respond in a socially desirable manner when asked to evaluate a White woman in the workplace. Participant political orientation was also considered as a factor that might affect findings during this cultural moment. Indeed, a nationally-representative survey conducted in March from Bucknell's Public Policy Institute (2018) concluded about half of respondents perceived the #MeToo movement favorably (41% favorably; 21% unfavorably; 38% no opinion/not familiar), and although there were differences in support by gender and age, the largest differences in support were due to political orientation (favorable: 63% of Democrats; 37% of Independents; 20% of Republicans). Study 1b therefore also controlled for effects of social desirability and political orientation to examine the effects of news engagement over and above these other factors.

Study 1b thus examined two sets of competing hypotheses. I predicted the results of Study 1b would replicate the pattern of results in Study 1a and that participants high in news engagement and high in exposure to news about sexual harassment and gender discrimination in the workplace would drive this pattern. I predicted that this moderation would emerge controlling for the tendency toward social desirable responding and for participant political orientation. Alternatively, because the results of Study 1a were unexpected, the results could have been an artifact of the sample. Thus, Study 1b replicated the design, measures, and procedure of Study 1a, but with an Amazon Mechanical Turk sample rather than an undergraduate sample. If, on the other hand, the results of Study 1a were due to an artifact of sampling, hypotheses that had been predicted for Study 1a would be supported with the MTurk sample.

#### **Study 1b Hypotheses**

1.1) Perceivers will rate anger expressed by White women protagonists as less appropriate than anger expressed by White men protagonists.

1.2) Perceivers will rate anger as less appropriate if invalidated than if not invalidated (control).

1.3) Perceivers will rate anger as less appropriate if invalidated by a White man than a White woman.

1.4) When the invalidator is a White man, the anger of a White woman protagonist will be perceived as less appropriate than when the invalidator is a White woman.

1.5) The effect of invalidator intersectional position on appropriateness of protagonist's anger (Hypothesis 1.3) will be mediated by perceptions of the invalidator's rationality.

### Competing hypotheses to be tested are as follows:

1b.1) If intersectional position of the protagonist affects perceptions of appropriateness, then perceivers (i.e., participants) will rate anger expressed by White women protagonists as more appropriate than anger expressed by White men protagonists.

1b.2) If perceivers rate anger expressed by White women protagonists as more appropriate than anger expressed by White men protagonists, this effect will be moderated by news engagement such that the effect depends on being a high news engager, controlling for socially desirable responding and participant political orientation.

### **Study 1b Method**

### Design

The design of the study was as in Study 1a with the addition of news engagement as a measured between-subjects factor: 2 X (news engagement: high vs. low/moderate) X 2 (protagonist intersectional position: White woman vs. White man) X 3 (invalidator intersectional

position: White woman vs. White man vs. none/control) between-subjects design. Participants were randomly assigned to protagonist and invalidator condition.

### **Participants**

An a priori power analysis conducted in G\*Power revealed 222 people needed in the sample to detect a small to moderate effect size (f=.21) with power of 0.8. Workers from Amazon Mechanical Turk participated. The final sample had 245 people (124 women, 119 men, two prefer not to say; ages 18-76, M = 35.95, SD = 11.01) after exclusions. Participants (n = 107) were removed for the following reasons: 15 due to failing the comprehension check, 12 due to failing an attention check, 13 for completing the study on a phone, 43 for failing the manipulation checks of the gender and race of the protagonist and invalidator, and 23 for their response at the median of the moderator variable which was median split to represent high and low/moderate news engagement. The sample was predominantly White (76.3%; Black, 6.9%; Latina/o, 6.9%; Asian/Asian-American, 6.9%; multiracial, 2.9%) and had an average political affiliation between somewhat liberal and independent (scale of (1) Very Liberal to (7) Very Conservative, M = 3.41, SD = 1.61, Mdn = 4.00). The majority of the sample had several years work experience (range 0-50 years, M = 16.04, SD = 10.69, Mdn = 15.00) and reported experience working in an office environment (yes 82.9%; no, 16.7%; unsure, 0.04%).

#### Materials

Participants read one of the six emotion storyboards from Study 1a.

#### Measures

Participants responded to the following measures on 7-point Likert scales ranging from 1 (Strongly disagree) to 7 (Strongly agree) and responded to the Marlowe–Crowne Social Desirability Scale 13-Item Short Form by selecting if the described behavior was "true" or "false" of themselves (see Appendix C for all items). Measures that follow are the same as those used in Study 1a, with the exception of two additional scales.

### Dependent variables.

Appropriateness of the protagonist's emotion (Cronbach's  $\alpha$ =.84). Appropriateness of the protagonist's emotional intensity (Cronbach's  $\alpha$ =.93).

## Mediator variable.

*Rationality of invalidator* (Cronbach's  $\alpha$ =.88).

#### Moderator variable.

News Engagement Scale (created for this study). News engagement was measured with a four-item scale, two items that asked about news engagement broadly and two items that asked about gender-relevant news engagement (Cronbach's  $\alpha$ =.71; e.g., "How often have you come across news articles about gender discrimination in the workplace?"). Instead of using a validated scale measuring general news engagement, of most interest in Study 1b was examining the possible moderating effects of engagement with news coverage specific to #MeToo and to gender

discrimination in the workplace as a result of #MeToo. Thus, items that assessed these dimensions explicitly were included in the news engagement measure, in addition to two items that measured news engagement more generally. Ultimately, perhaps because #MeToo was so prevalent in the news during this time period, general news items and gender news specific items formed one reliable scale.

## Covariate variable.

*Marlowe–Crowne Social Desirability Scale 13-Item Short Form (Reynolds, 1982).* Social desirability was measured with a 13-item scale (Cronbach's  $\alpha$ =.77; e.g., "I am always courteous, even to people who are disagreeable").

# Exploratory variables.

Perceived rationality of protagonist (Cronbach's  $\alpha$ =.83). Dispositional emotionality of the protagonist (Cronbach's  $\alpha$ =.71). Threat of the protagonist (Cronbach's  $\alpha$ =.90). Fragility of the protagonist (Cronbach's  $\alpha$ =.90). Competence of the protagonist (Spearman's rho=.85, p<.001). Status conferral to the protagonist (Cronbach's  $\alpha$ =.92). Salary conferral to the protagonist.

#### Procedure

Workers from Amazon Mechanical Turk participated in the study online. The procedure was identical to that in Study 1a, with the addition of the instruction that participants would also answer questions about their own behaviors and personality traits.

#### **Study 1b Results**

For each of the measures, 2 X (news engagement: high vs. low/moderate) X 2 (protagonist intersectional position: White woman vs. White man) X 3 (invalidator intersectional position: White woman vs. White man vs. none/control) between-subjects ANCOVAs with social desirability score and participant political orientation as covariates, were conducted. A median split was used on the news engagement variable because those especially high in news engagement were of primary theoretical interest. In two simulation studies, Iacobucci, Posavac, Kardes, Schneider, & Popovich (2015a) examined the conditions acceptable for median split use. The authors found that when the independent variables were not correlated, the median split did not affect Type I error, nor did the creation of a median split affect the other factors or interactions between factors in the resulting ANOVA. Iacobucci et al. (2015a) recommend researchers with orthogonal independent variables because a non-significant correlation between independent variables because a non-significant correlation between independent variables because a non-significant correlations between each of the experimental factors and the median split in this case were non-significant (r = 0.06, p = .344; r = -0.06, p = .345).

There was homogeneity of variances for each of the measures for all combinations of news engagement, protagonist intersectional position and invalidator intersectional position, as assessed through no violations of Levene's Test for Equality of Error Variances. For the salary conferral measure, boxplots revealed five extreme values. These values were excluded from the analysis for salary conferral.

### Correlations

Because the primary pattern of effects were, as in Study 1a, main effect differences due to protagonist intersectional position with the addition of interactions with news engagement, correlations for all of the following measures were run split by protagonist intersectional position and news engagement (see Appendix D).

# Appropriateness of protagonist's emotion type

Appropriateness of the protagonist's emotion type differed based on protagonist, F(1, 231)=4.49, p=.035,  $\eta_p^2=.019$ , 90% CI [0.001 to 0.058], such that White women protagonists were evaluated as experiencing emotion of a more appropriate type than White men protagonists (see Table 2 for means and standard errors). The predicted interaction between protagonist and news engagement was not significant (p=.058,  $\eta_p^2=.016$ , 90% CI [0.000 to 0.052]). There were no main effects of invalidator (p=.200,  $\eta_p^2=.014$ , 90% CI [0.000 to 0.043]) or news engagement (p=.082,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.047]). There were no interactions between protagonist and invalidator (p=.430,  $\eta_p^2=.007$ , 90% CI [0.000 to 0.030], invalidator and news engagement (p=.350,  $\eta_p^2=.009$ , 90% CI [0.000 to 0.033], and no three-way interaction (p=.948,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.033], nor political orientation (p=.357,  $\eta_p^2=.004$ , 90% CI [0.000 to 0.028]) were significant covariates.

#### Appropriateness of protagonist's emotional intensity

Appropriateness of the protagonist's emotional intensity differed based on the interaction of protagonist and news engagement, F(1, 231)=4.83, p=.029,  $\eta_p^{2}=.021$ , 90% CI [0.001 to 0.060] (see Figure 2 for means and standard errors). Further examination of the interaction revealed that, as predicted, only for those high in news engagement was there an effect of protagonist, such that White women protagonists were evaluated as experiencing emotion of a more appropriate intensity than White men protagonists, F(1, 231)=8.60, p=.004,  $\eta_p^{2}=.036$ , 90% CI [0.007 to 0.083]. There were no main effects of protagonist (p=.068,  $\eta_p^{2}=.014$ , 90% CI [0.000 to 0.050]), invalidator (p=.368,  $\eta_p^{2}=.009$ , 90% CI [0.000 to 0.033]), or news engagement (p=.517,  $\eta_p^{2}=.002$ , 90% CI [0.000 to 0.022]). There were no interactions between protagonist and invalidator (p=.713,  $\eta_p^{2}=.003$ , 90% CI [0.000 to 0.017], invalidator and news engagement (p=.870,  $\eta_p^{2}=.001$ , 90% CI [0.000 to 0.009], and no three-way interaction (p=.509,  $\eta_p^{2}=.006$ , 90% CI [0.000 to 0.026]. Neither social desirability (p=.933,  $\eta_p^{2}=.000$ , 90% CI [0.000 to 0.002]) nor political orientation (p=.556,  $\eta_p^{2}=.002$ , 90% CI [0.000 to 0.021]) were significant covariates.

### **Rationality of the invalidator**

Rationality of the invalidator did not differ based on protagonist, (p=.073,  $\eta_p^2$ =.024, 90% CI [0.000 to 0.081]) or the interaction of protagonist and news engagement (p=.101,  $\eta_p^2$ =.020, 90% CI [0.000 to 0.075]). There were no main effects of invalidator (p=.193,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.061]) or news engagement (p=.373,  $\eta_p^2$ =.006, 90% CI [0.000 to 0.046]). There were no interactions between protagonist and invalidator (p=.858,  $\eta_p^2$ =.000, 90% CI [0.000 to 0.010]), invalidator and news engagement (p=.974,  $\eta_p^2$ =.000, 90% CI [0.000 to 0.000]), and no three-way interaction (p=.741,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.025]. As in Study 1a, due to no main effect of

invalidator, the hypothesized follow-up mediation analysis was not conducted. Neither social desirability (p=.507,  $\eta_p^2$ =.003, 90% CI [0.000 to 0.038]) nor political orientation (p=.542,  $\eta_p^2$ =.003, 90% CI [0.000 to 0.036]) were significant covariates.

# **Exploratory variables**

#### Rationality of the protagonist

Rationality of the protagonist did not differ based on protagonist, (p=.245,  $\eta_p^2=.006$ , 90% CI [0.000 to 0.033]) or based on the interaction of protagonist and news engagement (p=.737,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.014]. There were no main effects of invalidator (p=.105,  $\eta_p^2=.019$ , 90% CI [0.000 to 0.053]) or news engagement (p=.850,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.007]). There were no interactions between protagonist and invalidator (p=.975,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.006]), invalidator and news engagement (p=.908,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.006]), and no three-way interaction (p=.079,  $\eta_p^2=.022$ , 90% CI [0.000 to 0.056]). Neither social desirability (p=.061,  $\eta_p^2=.015$ , 90% CI [0.000 to 0.051]) nor political orientation (p=.302,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.030]) were significant covariates.

# Threat of the protagonist

Threat of the protagonist differed based on the interaction of protagonist and news engagement, F(1, 231)=4.98, p=.027,  $\eta_p^2=.021$ , 90% CI [0.001 to 0.061]. Further examination of the interaction revealed the expected pattern for those high in news engagement evaluating White women protagonists as less threatening than White men protagonists, however this simple effect was not significant, F(1, 231)=3.58, p=.060,  $\eta_p^2=.015$ , 90% CI [0.000 to 0.051]). There were no

main effects of protagonist (p=.760,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.030]), invalidator (p=.919,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.015]), or news engagement (p=.150,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.047]). There were no interactions between protagonist and invalidator (p=.257,  $\eta_p^2$ =.012, 90% CI [0.000 to 0.039]), invalidator and news engagement (p=.260,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.039]), invalidator and news engagement (p=.260,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.039]). Neither social desirability (p=.078,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.048]) nor political orientation (p=.133,  $\eta_p^2$ =.010, 90% CI [0.000 to 0.041]) were significant covariates.

# Fragility of the protagonist

Fragility of the protagonist did not differ based on protagonist, (p=.064,  $\eta_p^2$ =.015, 90% CI [0.000 to 0.050]) or the interaction of protagonist and news engagement (p=.181,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.037]). There were no main effects of invalidator (p=.422,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.030]) or news engagement (p=.647,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.018]). There were no interactions between protagonist and invalidator (p=.263,  $\eta_p^2$ =.012, 90% CI [0.000 to 0.039]), invalidator and news engagement (p=.342,  $\eta_p^2$ =.009, 90% CI [0.000 to 0.034]), and no three-way interaction (p=.414,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.030]). Neither social desirability (p=.330,  $\eta_p^2$ =.004, 90% CI [0.000 to 0.029]) nor political orientation (p=.538,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.021]) were significant covariates.

### Dispositional emotionality of the protagonist

Dispositional emotionality of the protagonist differed based on the interaction of protagonist and news engagement, F(1, 230)=5.87, p=.016,  $\eta_p^2=.025$ , 90% CI [0.003 to 0.067]. Further examination of the interaction revealed that only for those high in news engagement was

there an effect of protagonist, such that White women protagonists were evaluated as lower in dispositional emotionality than White men protagonists, F(1, 230)=9.40, p=.002,  $\eta_p^2=.039$ , 90% CI [0.008 to 0.088]. There were no main effects of protagonist (p=.074,  $\eta_p^2=.014$ , 90% CI [0.000 to 0.049]), invalidator (p=.354,  $\eta_p^2=.009$ , 90% CI [0.000 to 0.033]), or news engagement (p=.386,  $\eta_p^2=.003$ , 90% CI [0.000 to 0.026]). There were no interactions between protagonist and invalidator (p=.996,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.000]), invalidator and news engagement (p=.708,  $\eta_p^2=.003$ , 90% CI [0.000 to 0.018]), and no three-way interaction (p=.506,  $\eta_p^2=.006$ , 90% CI [0.000 to 0.026]). Neither social desirability (p=.303,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.030]) nor political orientation (p=.481,  $\eta_p^2=.002$ , 90% CI [0.000 to 0.023]) were significant covariates.

## **Protagonist competence**

Competence of the protagonist did not differ based on protagonist, (p=.207,  $\eta_p^2=.007$ , 90% CI [0.000 to 0.035]) or the interaction of protagonist and news engagement (p=.952,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.000]). There were no main effects of invalidator (p=.232,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.041]) or news engagement (p=.263,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.032]). There were no interactions between protagonist and invalidator (p=.554,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.020]), and no three-way interaction (p=.140,  $\eta_p^2=.017$ , 90% CI [0.000 to 0.049]). Social desirability (p=.025,  $\eta_p^2=.022$ , 90% CI [0.001 to 0.062]) was a significant covariate, but political orientation (p=.284,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.031]) was not.

#### Protagonist status conferral

Status conferred to the protagonist differed based on protagonist, F(1, 231)=6.92, p=.009,  $\eta_p^2=.029$ , 90% CI [0.004 to 0.073], such that White women protagonists were conferred greater status than White men protagonists. The predicted interaction between protagonist and news engagement did not emerge (p=.404,  $\eta_p^2=.003$ , 90% CI [0.000 to 0.026]). There were no main effects of invalidator (p=.985,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.004]) or news engagement (p=.341,  $\eta_p^2=.004$ , 90% CI [0.000 to 0.028]). There were no interactions between protagonist and invalidator (p=.948,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.007]), invalidator and news engagement (p=.323,  $\eta_p^2=.010$ , 90% CI [0.000 to 0.035]), and no three-way interaction (p=.158,  $\eta_p^2=.016$ , 90% CI [0.000 to 0.047]). Neither social desirability (p=.146,  $\eta_p^2=.009$ , 90% CI [0.000 to 0.040]) nor political orientation (p=.672,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.017]) were significant covariates.

# Protagonist salary conferral

Salary conferred to the protagonist did not differ based on protagonist, (p=.160,  $\eta_p^2$ =.009, 90% CI [0.000 to 0.039]) or the interaction of protagonist and news engagement (p=.098,  $\eta_p^2$ =.012, 90% CI [0.000 to 0.046]). There were no main effects of invalidator (p=.209,  $\eta_p^2$ =.014, 90% CI [0.000 to 0.043]) or news engagement (p=.166,  $\eta_p^2$ =.007, 90% CI [0.000 to 0.036]). There were no interactions between protagonist and invalidator (p=.653,  $\eta_p^2$ =.004, 90% CI [0.000 to 0.021]), invalidator and news engagement (p=.150,  $\eta_p^2$ =.017, 90% CI [0.000 to 0.048]), and no three-way interaction (p=.154,  $\eta_p^2$ =.017, 90% CI [0.000 to 0.048]). Neither social desirability (p=.539,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.022]) nor political orientation (p=.670,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.017]) were significant covariates.

# Table 2

	Protagonist Intersectional Position	
	WW	WM
Appro.Type	5.01 (0.12) <sup>a</sup>	4.64 (0.12) <sup>b</sup>
Appro.Inten.	$4.37 (0.16)^{a}$	3.97 (0.15) <sup>b</sup>
Inval. Rational	$3.98(0.18)^{a}$	4.43 (0.17) <sup>a</sup>
Pro. Rational	$3.57 (0.12)^{a}$	$3.37 (0.12)^{a}$
Threat	$3.09(0.14)^{a}$	3.16 (0.14) <sup>a</sup>
Fragility	$2.80(0.14)^{a}$	3.18 (0.14) <sup>a</sup>
Dispo. E.	$4.04(0.08)^{a}$	4.26 (0.08) <sup>b</sup>
Competence	4.68 (0.10) <sup>a</sup>	4.50 (0.10) <sup>a</sup>
Status	$4.20(0.11)^{a}$	3.79 (0.11) <sup>b</sup>
Salary	\$46,083.11 (\$1,264.68) <sup>a</sup>	\$43,548.08 (\$1,275.21) <sup>a</sup>

Study 1b Means (Standard Errors)

*Note*: Different subscripts indicate the two protagonist conditions significantly differed from one another on the variables of interest (by at least p < .05). WW indicates White woman protagonist, WM indicates White man protagonist, Appro. Type indicates appropriateness of protagonist's emotion type, Appro. Inten. indicates appropriateness of protagonist's emotional intensity, In. Rational indicates rationality of the invalidator, Pro. Rational indicates rationality of the protagonist, Threat indicates threat of the protagonist, Fragility indicates fragility of the protagonist, Dispo. E. indicates dispositional emotionality of the protagonist, Competence indicates protagonist competence, Status indicates protagonist status conferral, and Salary indicates protagonist salary conferral.



*Figure 2.* Study 1b simple effects means (error bars are standard errors). WW P indicates White woman protagonist, WM P indicates White man protagonist, Low/Mod indicates low to moderate level of news engagement, asterisk indicates the simple effect is significant at p < .05.

#### **Study 1b Discussion**

Overall, results of Study 1b were similar to those that emerged in Study 1a, thus demonstrating the pattern of results from Study 1a was not an artifact of the sample. In line with the alternative hypotheses that news engagement may be driving effects of the White women protagonists being viewed more favorably than the White men protagonists, moderation did emerge for appropriateness of the protagonist's emotional intensity, dispositional emotionality of the protagonist, and somewhat for threat of the protagonist. For appropriateness of emotional intensity and dispositional emotionality, White women's emotion was perceived more favorably than White men's only for those participants who were high in news engagement. Therefore, as predicted, news engagement, over and above the tendency to respond in a socially desirable manner and one's political orientation, did explain some of the unexpected effects. News engagement was correlated with participant political orientation (r= -0.23, p<.001) and participant gender (r= -0.14, p=.026), such that both higher liberalism and identifying as a woman were weakly associated with high news engagement.

News engagement, however, did not explain why White women protagonists were also perceived as experiencing emotion of a more appropriate type and as more deserving of status than White men protagonists. Perhaps, more so than news engagement, the pattern of White women being evaluated more favorably than White men when angry at work was driven by an actual shift in beliefs that may be reflective of the great deal of attention on gender discrimination and harassment in the workplace in current news media. Indeed, beyond engaging with and being exposed to news on this topic, perhaps this information is resulting in people endorsing as reality the idea that women experience gender bias more so than men do at work. In Study 2, I examined this possibility by examining beliefs in workplace opportunities as gendered as a moderator of the protagonist intersectional position main effects, in place of news engagement.

Further in line with Study 1a, protagonists were not perceived to differ on the dimensions of rationality or competence, nor were they conferred salary amounts that differed, based on intersectional position. This pattern of null findings for the latter two measures once more fails to conceptually replicate past findings of Brescoll and Uhlmann (2008). In contrast to Study 1a, protagonists were also not evaluated as differing in fragility depending on their intersectional positions, nor were invalidators judged as differing in rationality according to who they invalidated. For Study 2, measures of fragility and invalidator rationality were retained to clarify conclusions about these two measures. Rationality of the protagonists was also retained for Study 2, though competence was omitted, as rationality potentially more closely relates to emotion-relevant judgments than competence. Salary conferral was additionally retained given the somewhat surprising findings of no differences between women and men given the gender pay gap, and the potential consequences of such conferrals. Reliabilities of measures in Study 1a that were low improved in Study 1b (rationality of the invalidator, Cronbach's  $\alpha$ =.88; rationality of the protagonist, Cronbach's  $\alpha$ =.83; dispositional emotionality of the protagonist, Cronbach's  $\alpha$ =.71), and thus items for these measures were not changed for Study 2.

For Study 2, Black women and White men protagonists were compared, rather than White women and White men protagonists. Given contradictory evidence in the literature on the study of Black women's anger, I had initially predicted that Black women protagonists could be rated as either more or less appropriate than White women when angry, due to competing mechanisms as outlined in Chapter 1. I had predicted Black women would be perceived as less appropriate than White men as well. However, given the findings of Studies 1a and 1b, my predictions shifted for Study 2, such that Black women, just as White women, would be perceived as more appropriate than White men. I further predicted that this effect would be moderated by
beliefs in workplace opportunities as gendered. If this pattern of findings emerged and participants high in this moderator drove the pattern, I predicted evaluations of the Black women protagonists in Study 2 would be similar to those of the White women protagonists in Studies 1a and 1b, comparing results across studies.

In Study 1b, invalidators did not negatively influence judgments of protagonists. Because only those participants who could accurately recall the identity of the invalidator were included in the analyses, one possibility was that the invalidator and their comment are being noticed by participants, however, the invalidator's comment is not playing a role in the participants' ultimate judgments of the protagonist. Another possibility was that because the emotion storyboard included the text of an email from the protagonist's supervisor, the participants might be more influenced by the text than the primarily visual panels of the emotion storyboard. Thus, they may be considering the specifics of the email message in their evaluation of the protagonist more than the invalidator's comment. Therefore, in Study 2, the panel with the email was excluded in the emotion storyboard and replaced with text indicating that the protagonist read an email before becoming angry. Perhaps by making the specifics of the situation more ambiguous by omitting the message about reassignment, the invalidator's comment would become more salient in participants' evaluations of the protagonist.

Additionally, in Study 2, I predicted that if the invalidator did become more salient after the revision of the first panel of the emotion storyboard, that perhaps it would also matter who the invalidator was. Considering the pattern of findings revealed in Studies 1a and 1b, I predicted that if the invalidator did affect perceptions of protagonists, a protagonist would be evaluated more favorably when invalidated by a White man than when invalidated by a White woman, Black woman, or Black man. I chose to examine these four intersectional positions as invalidators to determine whether invalidator identity might affect judgments of protagonists differently. I predicted the invalidation would result in more favorable perceptions of protagonists when dismissal came from the invalidator of greater relative privilege (i.e., White man vs. all others), and that this pattern would only emerge for those high in beliefs about workplace opportunities as gendered (the moderator).

# **Chapter 4**

# Study 2

Study 2 used Black women and White men as protagonists. I predicted that: a) the pattern of interaction results from Study 1b would be replicated, and b) the main effects that emerged from Study 1b would be driven by a belief in workplace opportunities as gendered (BWOG) measure, used in place of the news engagement measure. I also predicted that invalidation may be more salient than in Studies 1a and 1b with the email message panel removed from the emotion storyboard, and if so, that invalidation by White men would result in more favorable ratings of protagonists than invalidation from White women, Black women, or Black men. Additionally, I predicted this main effect of invalidator would depend on high endorsement of BWOG.

#### **Study 2 Hypotheses**

2.1) If intersectional position of the protagonist affects appropriateness, dispositional emotionality, threat, and status perceptions, then perceivers will rate anger expressed by Black women protagonists more favorably on those dimensions than anger expressed by White men protagonists.

2.2) If perceivers rate anger expressed by Black women protagonists as more appropriate, lower in dispositional emotionality, lower in threat, and more deserving of status than anger expressed by White men protagonists, this effect will be moderated by belief in workplace opportunities as gendered such that the effect will emerge only for those high in this belief. 2.3) If the intersectional position of the invalidator affects perceived appropriateness of the protagonist, then perceivers will rate anger as more appropriate, dispositional emotionality as lower, threat as lower, and the protagonist as more deserving of status if invalidated by a White man than if invalidated by all others (White woman, Black woman, Black man).

2.4) If perceivers rate protagonist anger as more appropriate, dispositional emotionality as lower, threat as lower, and the protagonist as more deserving of status when invalidated by White men compared to others, this effect will be moderated by belief in workplace opportunities as gendered such that the effect will emerge only for those high in this belief.

#### **Study 2 Method**

### Design

The design of the study was a 2 X (belief in workplace opportunities as gendered (BWOG): high vs. low/moderate) X 2 (protagonist intersectional position: Black woman vs. White man) X 4 (invalidator intersectional position: Black woman vs. Black man vs. White woman vs. White man) between-subjects randomized design, with the added measured factor of BWOG.

## **Participants**

An a priori power analysis conducted in G\*Power revealed 252 people needed in the sample to detect a small to moderate effect size (f=.21) with power of 0.8. Workers from Amazon Mechanical Turk participated. The final sample had 255 people (133 women, 118 men, four prefer not to say; ages 19-80, M = 37.66, SD = 12.49) after exclusions. Participants (n = 169) were

removed for the following reasons: 18 due to failing or not answering the comprehension check, 4 due to failing the attention check, 13 for completing the study on a phone, 91 for failing the manipulation checks of the gender and race of the protagonist and invalidator, and 42 for their response at the median of the moderator variable which was median split to represent high and low/moderate BWOG. The sample was predominantly White (72.9%; Asian/Asian-American, 9.0%; Black, 8.6%; Latina/o, 4.7%; multiracial, 2.4%; other, 2.0%; Native American or Alaska Native, 0.40%) and had an average political affiliation between somewhat liberal and independent (scale of (1) Very Liberal to (7) Very Conservative, M = 3.58, SD = 1.62, Mdn = 4.00). The majority of the sample had several years work experience (range 1-55 years, M = 17.45, SD = 12.15, Mdn = 15.00) and reported experience working in an office environment (yes 87.8%; no, 11.4%; unsure, 0.08%).

### Materials

Participants read one of the eight emotion storyboards, identical except for the intersectional positions of the protagonist and invalidators. The emotion storyboards were the same as those in Studies 1a and 1b except the panel with the email text was adapted to omit the specific message text and read instead, "Before going home for the day, she/he reads one last email message..." (See Figure 3).



Figure 3. Revised first panel example for emotion storyboards used in Study 2.

### Measures

Participants responded to the following measures on 7-point Likert scales ranging from 1 (Strongly disagree) to 7 (Strongly agree; see Appendix C for all items).

#### **Dependent** variables

Appropriateness of the protagonist's emotion (Cronbach's  $\alpha$ =.85). Appropriateness of the protagonist's emotional intensity (Cronbach's  $\alpha$ =.91). Dispositional attributions of the protagonist's emotion (Cronbach's  $\alpha$ =.76). Threat of the protagonist (Cronbach's  $\alpha$ =.94). Status conferral to the protagonist (Cronbach's  $\alpha$ =.89).

### Moderator variable

Belief in Workplace Opportunities as Gendered (created for this study). Belief in Workplace Opportunities as Gendered (BWOG) was measured with a three-item scale (Cronbach's  $\alpha$ =.95; "Women are more likely to be passed over for assignments in the workplace than men are; Women experience more instances of bias in the workplace than men do; Men tend to get more opportunities than women do in the workplace"). A median split was created for the BWOG measure due to the primary theoretical interest in the BWOG construct being the examination of those especially high in BWOG. Instead of using a validated scale that would assess beliefs about gender more generally (e.g., Ambivalent Sexism Inventory, Neosexism Scale), this scale was created for the study to specifically assess beliefs that workplace opportunities are gendered, in such a way that disadvantages women relative to men. This specific construct was measured to capture a possible shift in beliefs after #MeToo that women experience bias and limited opportunity relative to men in the workplace, a belief shift possibly experienced across demographic lines and irrespective of people's other beliefs.

### Exploratory variables

Rationality of invalidator (Cronbach's  $\alpha$ =.85). Perceived rationality of protagonist (Cronbach's  $\alpha$ =.79). Fragility of the protagonist (Cronbach's  $\alpha$ =.89). Salary conferral to the protagonist.

# Procedure

Workers on Amazon Mechanical Turk participated, following the same procedure as in Study 1b.

### **Study 2 Results**

For each of the measures, 2 X (belief in workplace opportunities as gendered: high vs. low/moderate) X 2 (protagonist intersectional position: Black woman vs. White man) X 4 (invalidator intersectional position: Black woman vs. Black man vs. White woman vs. White man) between-subjects ANOVAs were conducted. The correlations between each of the experimental factors and the median split were non-significant (r= -0.04, p=.500; r= -0.01, p=.930). There was homogeneity of variances for each of the measures for all combinations of BWOG, protagonist intersectional position, and invalidator intersectional position, as assessed

through no violations of Levene's Test for Equality of Error Variances. For the salary conferral measure, boxplots revealed eight extreme values. These values, along with one participant who did not provide an amount, were excluded from the analysis for salary conferral.

### Correlations

Because the primary pattern of effects were once more main effect differences due to protagonist intersectional position and interactions of this effect with BWOG, correlations for all of the following measures were run split by protagonist intersectional position and BWOG (see Appendix D).

# Appropriateness of protagonist's emotion type

Appropriateness of the protagonist's emotion type differed based on protagonist, F(1, 239)=7.57, p=.006,  $\eta_p^2=.031$ , 90% CI [0.005 to 0.075], such that the Black woman protagonist's emotion type was rated as more appropriate than the White man protagonist's (see Table 3 for means and standard errors). The predicted interaction between protagonist and BWOG was not significant (p=.056,  $\eta_p^2=.015$ , 90% CI [0.000 to 0.050]). There was also a main effect of BWOG, F(1, 239)=7.75, p=.006,  $\eta_p^2=.032$ , 90% CI [0.005 to 0.076]; high BWOG M=5.19, SE=0.12; low/moderate BWOG: M=4.74, SE=0.11, such that high BWOG endorsers rated the protagonist's emotion as of a more appropriate type than low/moderate endorsers did. There was no main effect of invalidator (p=.307,  $\eta_p^2=.015$ , 90% CI [0.000 to 0.039]). There were no interactions between protagonist and invalidator (p=.362,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.036]), invalidator and BWOG (p=.746,  $\eta_p^2=.005$ , 90% CI [0.000 to 0.017]), and no three-way interaction (p=.885,  $\eta_p^2=.003$ , 90% CI [0.000 to 0.017]).

#### Appropriateness of protagonist's emotional intensity

Appropriateness of the protagonist's emotional intensity differed based on protagonist,  $F(1, 239)=8.42, p=.004, \eta_p^2=.034, 90\%$  CI [0.006 to 0.079], such that the Black woman protagonist's emotional intensity was rated as more appropriate than the White man protagonist's. An interaction also emerged between protagonist and BWOG,  $F(1, 239)=5.79, p=.017, \eta_p^2=.024,$ 90% CI [0.002 to 0.064], with this effect driven by high BWOG endorsers, F(1, 239)=27.94,  $p<.001, \eta_p^2=.105, 90\%$  CI [0.051 to 0.168] (see Figure 4 for means and standard errors). There were no main effects of invalidator ( $p=.183, \eta_p^2=.020, 90\%$  CI [0.000 to 0.048]) or BWOG ( $p=.064, \eta_p^2=.014, 90\%$  CI [0.000 to 0.049]). There were no interactions between protagonist and invalidator ( $p=.244, \eta_p^2=.017, 90\%$  CI [0.000 to 0.043]), invalidator and BWOG ( $p=.968, \eta_p^2=.001, 90\%$  CI [0.000 to 0.004]), and no three-way interaction ( $p=.938, \eta_p^2=.002, 90\%$  CI [0.000 to 0.002]).

### Dispositional emotionality of the protagonist

Dispositional emotionality of the protagonist differed based on protagonist, F(1, 239)=7.81, p=.006,  $\eta_p^2=.032$ , 90% CI [0.005 to 0.076], such that Black women protagonists were perceived as lower in dispositional emotionality than White men protagonists. An interaction between protagonist and BWOG, F(1, 239)=6.56, p=.011,  $\eta_p^2=.027$ , 90% CI [0.003 to 0.069], revealed this effect was driven by high BWOG endorsers, F(1, 239)=13.55, p<.001,  $\eta_p^2=.054$ , 90% CI [0.017 to 0.106]. There were no main effects of invalidator (p=.262,  $\eta_p^2=.02$ ,  $\eta_p^2=.017$ , 90% CI [0.000 to 0.042]) or BWOG (p=.886,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.017]). There were no interactions between protagonist and invalidator (p=.297,  $\eta_p^2=.015$ , 90% CI [0.000 to 0.040]),

invalidator and BWOG (p=.686,  $\eta_p^2$ =.006, 90% CI [0.000 to 0.020]), and no three-way interaction (p=.450,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.031]).

### Threat of the protagonist

Threat of the protagonist differed based on protagonist, F(1, 239)=4.36, p=.038,  $\eta_p^2=.018$ , 90% CI [0.001 to 0.055], such that Black women protagonists were perceived as less threatening than White men protagonists. An interaction between the protagonist and BWOG, F(1, 239)=5.72, p=.018,  $\eta_p^2=.023$ , 90% CI [0.002 to 0.064], revealed this effect was driven by high BWOG endorsers, F(1, 239)=9.47, p=.002,  $\eta_p^2=.038$ , 90% CI [0.008 to 0.085]. There were no main effects of invalidator (p=.471,  $\eta_p^2=.011$ , 90% CI [0.000 to 0.030]) or BWOG (p=.950,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.000]). There were no interactions between protagonist and invalidator (p=.264,  $\eta_p^2=.016$ , 90% CI [0.000 to 0.042]), invalidator and BWOG (p=.499,  $\eta_p^2=.010$ , 90% CI [0.000 to 0.029]), and no three-way interaction (p=.371,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.035]).

# Protagonist status conferral

Status conferred to the protagonist differed based on protagonist, F(1, 239)=11.45, p=.001,  $\eta_p^2=.046$ , 90% CI [0.012 to 0.096], such that Black women protagonists were conferred greater status than White men protagonists. An interaction between protagonist and BWOG, F(1, 239)=4.21, p=.041,  $\eta_p^2=.017$ , 90% CI [0.0004 to 0.054], revealed this effect was driven by high BWOG endorsers, F(1, 239)=13.95, p<.001,  $\eta_p^2=.055$ , 90% CI [0.017 to 0.108]. There were no main effects of invalidator (p=.839,  $\eta_p^2=.004$ , 90% CI [0.000 to 0.011]) or BWOG (p=.106,  $\eta_p^2=.011$ , 90% CI [0.000 to 0.043]). There were no interactions between protagonist and invalidator (p=.145,  $\eta_p^2$ =.022, 90% CI [0.000 to 0.052]), invalidator and BWOG (p=.631,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.024]), and no three-way interaction (p=.424,  $\eta_p^2$ =.005, 90% CI [0.000 to 0.017]).

# **Exploratory variables**

#### Rationality of the invalidator

Rationality of the invalidator differed based on protagonist, F(1, 239)=4.58, p=.033,  $\eta_p^2=.019$ , 90% CI [0.001 to 0.056], such that invalidators were perceived as more rational when they invalidated White men protagonists than when they invalidated Black women protagonists. An interaction between protagonist and BWOG, F(1, 239)=8.36, p=.004,  $\eta_p^2=.034$ , 90% CI [0.006 to 0.079], revealed this effect was driven by high BWOG endorsers, F(1, 239)=11.96, p=.001,  $\eta_p^2=.048$ , 90% CI [0.013 to 0.098]. There were no main effects of invalidator (p=.545,  $\eta_p^2=.009$ , 90% CI [0.000 to 0.026]) or BWOG (p=.694,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.016]). There were no interactions between protagonist and invalidator (p=.161,  $\eta_p^2=.021$ , 90% CI [0.000 to 0.050]), invalidator and BWOG (p=.244,  $\eta_p^2=.017$ , 90% CI [0.000 to 0.043]), and no three-way interaction (p=.564,  $\eta_p^2=.009$ , 90% CI [0.000 to 0.026]).

# Rationality of the protagonist

Rationality of the protagonist differed based on protagonist, F(1, 239)=5.36, p=.021,  $\eta_p^2=.022$ , 90% CI [0.002 to 0.061], such Black women protagonists were perceived as more rational than White men protagonists. An interaction between protagonist and BWOG, F(1, 239)=4.24, p=.041,  $\eta_p^2=.017$ , 90% CI [0.0004 to 0.054], revealed this effect was driven by high

BWOG endorsers, F(1, 239)=9.03, p=.003,  $\eta_p^2=.036$ , 90% CI [0.007 to 0.083]. An interaction between protagonist and invalidator, F(3, 239)=3.99, p=.009,  $\eta_p^2=.048$ , 90% CI [0.007 to 0.089], revealed this effect was also driven by White women invalidators, F(1, 239)=16.00, p<.001,  $\eta_p^2=.063$ , 90% CI [0.022 to 0.118]; White man protagonist M=2.88, SE=0.22; Black woman protagonist M=4.11, SE=0.22. There were no main effects of invalidator (p=.629,  $\eta_p^2=.007$ , 90% CI [0.000 to 0.023]) or BWOG (p=.980,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.000]). There was no interaction between invalidator and BWOG (p=.190,  $\eta_p^2=.020$ , 90% CI [0.000 to 0.047]), and no three-way interaction (p=.277,  $\eta_p^2=.016$ , 90% CI [0.000 to 0.041]).

### Fragility of the protagonist

Perceived fragility did not differ by protagonist (p=.099,  $\eta_p^2=.011$ , 90% CI [0.000 to 0.043]) or by the interaction between protagonist and BWOG (p=.483,  $\eta_p^2=.002$ , 90% CI [0.000 to 0.022]). Fragility of the protagonist did however differ by the interaction between protagonist and invalidator, F(3, 239)=3.41, p=.018,  $\eta_p^2=.041$ , 90% CI [0.004 to 0.080]. When invalidated by a White man, Black women protagonists were rated as less fragile than White men protagonists were, F(1, 239)=8.69, p=.004,  $\eta_p^2=.035$ , 90% CI [0.007 to 0.081]; Black woman protagonist M=2.22, SE=0.26; White man protagonist M=3.31, SE=0.27). There were no main effects of invalidator (p=.440,  $\eta_p^2=.011$ , 90% CI [0.000 to 0.032]) or BWOG (p=.917,  $\eta_p^2=.000$ , 90% CI [0.000 to 0.002]). There was no interaction between invalidator and BWOG (p=.452,  $\eta_p^2=.011$ , 90% CI [0.000 to 0.031]), and no three-way interaction (p=.228,  $\eta_p^2=.018$ , 90% CI [0.000 to 0.044]).

## Protagonist salary conferral

Salary conferred did not differ by protagonist, (p=.166,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.038]). There was no interaction between protagonist and BWOG (p=.479,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.023]). There were no main effects of invalidator (p=.088,  $\eta_p^2$ =.028, 90% CI [0.000 to 0.61]) or BWOG (p=.358,  $\eta_p^2$ =.004, 90% CI [0.000 to 0.028]). There were no interactions between protagonist and invalidator (p=.085,  $\eta_p^2$ =.028, 90% CI [0.000 to 0.062]), invalidator and BWOG (p=.572,  $\eta_p^2$ =.009, 90% CI [0.000 to 0.026]), and no three-way interaction (p=.590,  $\eta_p^2$ =.008, 90% CI [0.000 to 0.025]).

# Table 3

Study 2 Means (95	% Confidence Intervals)
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	Protagonist Intersectional Position	
	BW	WM
Appro.Type	5.19 (0.12) <sup>a</sup>	4.74 (0.11) <sup>b</sup>
Appro.Inten.	4.79 (0.14) <sup>a</sup>	4.24 (0.13) <sup>b</sup>
Inval. Rational	3.96 (0.13) <sup>a</sup>	4.33 (0.11) <sup>b</sup>
Pro. Rational	3.73 (0.12) <sup>a</sup>	3.36 (0.11) <sup>b</sup>
Threat	2.64 (0.16) <sup>a</sup>	3.08 (014) <sup>b</sup>
Fragility	2.84 (0.14) <sup>a</sup>	3.16 (0.13) <sup>a</sup>
Dispo. E.	3.85 (0.09) <sup>a</sup>	4.19 (0.08) <sup>b</sup>
Status	4.46 (0.10) <sup>a</sup>	3.99 (0.09) <sup>b</sup>
Salary	\$47,636.67 (\$1,437.75) <sup>a</sup>	\$44,983.41 (\$1,257.09) <sup>a</sup>

*Note*: Different subscripts indicate the two protagonist conditions significantly differed from one another on the variables of interest (by at least p < .05). BW indicates Black woman protagonist, WM indicates White man protagonist, Appro. Type indicates appropriateness of protagonist's emotion type, Appro. Inten. indicates appropriateness of protagonist's emotional intensity, In. Rational indicates rationality of the invalidator, Pro. Rational indicates rationality of the protagonist, Threat indicates threat of the protagonist, Fragility indicates fragility of the protagonist, Dispo. E. indicates dispositional emotionality of the protagonist, Status indicates protagonist status conferral, and Salary indicates protagonist salary conferral.



*Figure 4.* Study 2 simple effects means (error bars are standard errors). BW P indicates Black woman protagonist, WM P indicates White man protagonist, Level of BWOG indicates level of Belief in Workplace Opportunities as Gendered, Low/Mod indicates low to moderate level of belief, asterisk indicates the simple effect is significant at p < .05.

#### **Study 2 Discussion**

Overall, Study 2 found a pattern of effects similar to that of Studies 1a and 1b, revealing Black women were perceived more favorably than White men across most measures. Supporting predictions and similar to the pattern in Study 1b, appropriateness of the protagonist's emotional intensity, protagonist's dispositional emotionality, and threat of protagonist, effects were driven by ratings from participants high in BWOG. Further, the main effect of White women receiving higher status conferrals than White men from Study 1b that emerged in Study 2 for Black women relative to White men was also driven by high BWOG. Additionally, the moderated finding of people high in BWOG rating Black women protagonists more favorably than White men protagonists emerged on measures of rationality of the protagonist and rationality of the invalidator. The moderation did not reach significance on the appropriateness of the protagonist's emotion type, however. Overall, a comparison of the pattern of moderated results in Study 1b to those in Study 2 suggests that BWOG is a more precise measure than news engagement for what may drive these judgments that are inconsistent with those typically found in the literature about target people at these intersectional positions.

Looking at the patterns in the means for protagonists by intersectional position, across all measures, ratings of Black women protagonists in Study 2 were similar to ratings of White women protagonists in Studies 1a and 1b. This similarity suggests that it may be gender that is especially salient for participants when evaluating the angry protagonists in the workplace, and the moderation findings suggest attentiveness to gender may be due to increasing news coverage on gender inequity in the workplace, and more so, due to endorsement of beliefs about gender inequity as a reality in the workplace. In line with findings of Studies 1a and 1b, salary amount

conferred to the protagonists did not differ based on intersectional position of the protagonist, and similar to Study 1b, fragility of the protagonist did not differ according to intersectional position of the protagonist. Although participants endorse that Black and White women are more deserving of status than White men, these conferrals do not translate to increasing salary amounts which may indicate existing barriers to gender equality in people's judgments. Additionally, White men, although evaluated unfavorably across many dimensions (i.e., rationality, threat) do not appear to suffer as much from evaluations of them as fragile when angry.

Political orientation, which was included as a covariate in Study 1b yet did not reveal significance across measures, was not included as a covariate here in Study 2 as it was not hypothesized to effect results. A correlation between BWOG and political orientation was run, however, and revealed a significant, but weak negative correlation (r= -0.22; low conservatism associated with higher BWOG). This association is almost identical to that between news engagement and political orientation in Study 1b (r= -0.23), which was ultimately not a significant covariate across measures. Thus, it is likely political orientation had little if any effect on participants' BWOG. BWOG was similarly correlated with participant gender (r= -0.27, p<.001), such that identifying as a woman was weakly associated with high BWOG.

As in Studies 1a and 1b, for the most part, a comment from an invalidator did not affect judgments of the protagonist in Study 2. Two findings of invalidator intersectional position did emerge however. Somewhat in line with the predicted patterns, Black women protagonists were rated as less fragile than White men protagonists, when invalidated by a White man. Related to hypothesis 2.3, this finding supports the idea that invalidation from someone in a relatively privileged intersectional position (i.e., a White man) could result in the protagonist being evaluated more favorably. The three-way interaction of this finding was not significant, however, indicating those high in BWOG did not drive this pattern, and thus providing no support for hypothesis 2.4. There was also an interaction between invalidator intersectional position and protagonist intersectional position for protagonist rationality, driven by White women invalidators. One possibility this finding could suggest is that this difference may be driven by an unexpected racial in-group, gendered relationship whereby White women's invalidation of White men's emotion may negatively affect perceptions of White men's rationality.

With the exception of the above invalidator and protagonist interactions, invalidator intersectional position did not interact with most measures, even though the invalidator was made more salient in this study by omitting the email message panel. One possibility, therefore, is that the invalidator remains not particularly salient in the current design. However, there were some interactions with invalidator (as discussed above), and once more, only those participants who remembered the identity of the invalidator were included in the analyses. Another possibility is that an invalidator's comment has influence on participants' impressions of protagonists on only some dimensions.

Study 3 examined affirmation, the other side of the invalidation coin. The goal of Study 3 was to replicate and extend Study 2 findings to determine if Black women protagonists would be perceived more favorably than White men protagonists, and if this effect would be explained by high BWOG when angry protagonists were affirmed rather than invalidated. Additionally, Study 3 examined if, unlike in the case of invalidation, being affirmed, regardless of who did the affirming, would result in being judged more favorably than not being affirmed. Although invalidation and affirmation are similar social processes, it is possible that they operate differently, such that affirmation may affect participants' judgments of a protagonist in an ambiguous situation more so than invalidation. Given potential differences between the invalidation and affirmation process, I predicted that being affirmed would positively influence evaluations of protagonists relative to not being affirmed. Given the overall lack of an interaction between protagonist intersectional position and invalidator intersectional position present in

Studies 1a, 1b, and 2, I did not predict that intersectional position of the affirmer would interact with protagonist intersectional position.

# **Chapter 5**

# Study 3

Study 3 examined the process of emotion affirmation with Black women and White men protagonists. I predicted that the pattern of interaction results from Study 2 would replicate and be explained by those high in a belief in workplace opportunities as gendered (BWOG). With the final panel of the emotion storyboard revised to depict an affirming comment from an onlooker rather than an invalidating comment, I also predicted that affirmation would result in more favorable ratings of protagonists than no affirmation. Due to few two-way interactions between protagonist intersectional position and invalidator intersection position and no three-way interaction, no interaction between affirmer intersectional position and BWOG was predicted.

# **Study 3 Hypotheses**

3.1) If intersectional position of the protagonist affects appropriateness, dispositional emotionality, threat, and/or status perceptions, then perceivers will rate anger expressed by Black women protagonists more favorably on those dimensions than anger expressed by White men protagonists.

3.2) If perceivers rate anger expressed by Black women protagonists as more appropriate, lower in dispositional emotionality, lower in threat, and more deserving of status than anger expressed by White men protagonists, this effect will be moderated by BWOG, such that the effect will emerge only for those high in BWOG. 3.3) If being affirmed affects appropriateness perceptions, then perceivers will rate anger as more appropriate if affirmed by either a Black woman or White man than if not affirmed (control).

### **Study 3 Method**

# Design

The study was a 2 (BWOG: high vs. low/moderate) X 2 (protagonist intersectional position: Black woman vs. White man) X 3 (affirmer intersectional position: Black woman vs. White man vs. none/control) between-subjects randomized design with the measured factor of BWOG.

### **Participants**

An a priori power analysis conducted in G\*Power revealed 222 people needed in the sample to detect a small to moderate effect size (f=.21) with power of 0.8. Workers from Amazon Mechanical Turk participated. The final sample had 273 people (153 women, 117 men, two trans, 1 other; ages 19-77, M = 35.77, SD = 11.44) after exclusions. Participants (n=108) were removed for the following reasons: 15 due to failing the comprehension check, 10 due to failing the attention check, 21 for completing the study on a phone, 39 for failing the manipulation checks of the gender and race of the protagonist and invalidator, and 23 for their response at the median of the moderator variable which was median split to represent high and low/moderate BWOG. The sample was predominantly White (78.0%; Latina/o, 7.7%; Black, 6.2%; Asian/Asian-American, 4.8%; multiracial, 1.5%; Middle Eastern, 0.70%; Native American or Alaska Native, 0.70%

other, 0.40%), and had an average political affiliation between somewhat liberal and independent (scale of (1) Very Liberal to (7) Very Conservative, M = 3.42, SD = 1.75, Mdn = 3.00). The majority of the sample had several years work experience (range 0-50 years, M = 16.80, SD = 10.92, Mdn = 15.00) and reported experience working in an office environment (yes 86.1%; no, 13.6%; unsure, 0.04%).

# Materials

Participants read one of six emotion storyboards identical to those used previously with the exception of, for the conditions with an affirmer, the onlooker's comment was changed from an invalidation to an affirmation of the protagonist's emotion in the last panel (See Figure 5).



*Figure 5.* Example of last panel change for emotion storyboards used in Study 3.

### Measures

Participants responded to the following measures on 7-point Likert scales ranging from 1 (Strongly disagree) to 7 (Strongly agree; see Appendix C for all items).

### **Dependent** variables

Appropriateness of the protagonist's emotion (Cronbach's  $\alpha$ =.81). Appropriateness of the protagonist's emotional intensity (Cronbach's  $\alpha$ =.91).

Dispositional attributions of the protagonist's emotion (Cronbach's  $\alpha$ =.79).

*Threat of the protagonist* (Cronbach's  $\alpha$ =.95). In addition to the three items used in the previous studies, two additional items were added to clarify if judgments of the protagonist as threatening were related to judgments that the protagonist is "unstable" and "frightening." The reliability of the scale improved with these additional items.

Status conferral to the protagonist (Cronbach's  $\alpha$ =.90).

# Moderator variable

Belief in Workplace Opportunities as Gendered (BWOG; Cronbach's  $\alpha$ =.93).

# Exploratory variables

*Rationality of affirmer* (Cronbach's  $\alpha$ =.80). The same items that were used previously for rationality of the invalidator were used for this measure.

Perceived rationality of protagonist (Cronbach's  $\alpha$ =.86).

*Fragility of the protagonist* (Cronbach's  $\alpha$ =.87). Two additional items were added to the fragility measure to clarify if judgments of the protagonist as fragile were related to absence of being "tough" and "resilient." Both new items were reverse-coded. The reliability of the scale decreased with these additional items, and thus the original three-item scale was used in analysis.

Salary conferral to the protagonist.

# Procedure

The study was once more hosted on Amazon Mechanical Turk, and procedure was identical to Studies 1b and 2.

#### **Study 3 Results**

For each measure a 2 (belief in workplace opportunities as gendered (BWOG): high vs. low/moderate) X 2 (protagonist intersectional position: Black woman vs. White man) X 3 (affirmer intersectional position: Black woman vs. White man vs. none/control) between-subjects ANOVA was conducted. As in Study 2, a median split was used on the BWOG variable. The correlation between one of the experimental factors and the median split in this case was significant (r= 0.173, p=.004; r=-0.08, p=.217).

Iacobucci, Posavac, Kardes, Schneider, and Popovich (2015b), argue that some multicollinearity can be acceptable, even in the case of median splits. In their simulations (Iacobucci et al., 2015a), correlations as high as .30 ultimately had negligible effects on the results. Thus, the median split was used despite the significant correlation due to the weak strength of the association.

For appropriateness of emotional intensity, threat, fragility, and dispositional emotionality, Levene's Test for Equality of Error Variances was violated. For all but dispositional emotionality, equal variance was achieved for these measures when a transformation was applied. Comparing the transformed and untransformed results revealed a similar pattern of results, suggesting the factorial ANOVA test was robust despite unequal error variance. Thus, untransformed data were used in the analyses reported here for ease of interpretation (see Appendix E for results with transformations applied for comparison). For the salary conferral measure, boxplots revealed nine extreme values. These values, along with one participant who did not provide an amount, were excluded from the analysis for salary conferral.

# Correlations

Because the primary pattern of effects were once more main effect differences due to protagonist intersectional position and interactions of this effect with BWOG, correlations for all the following measures were run split by protagonist intersectional position and BWOG (see Appendix D).

## Appropriateness of protagonist's emotion type

Appropriateness of the protagonist's emotion type differed based on protagonist, F(1, 261)=10.46, p=.001,  $\eta_p^2=.039$ , 90% CI [0.009 to 0.083], such that the Black woman protagonist's emotion type was rated as more appropriate than the White man protagonist's (see Table 4 for means and standard errors). An interaction between protagonist and BWOG, F(1, 261)=9.35, p=.002,  $\eta_p^2=.035$ , 90% CI [0.007 to 0.078], revealed this effect was driven by high BWOG endorsers, F(1, 261)=21.10, p<.001,  $\eta_p^2=.075$ , 90% CI [0.031 to 0.130] (see Figure 6 for means

and standard errors). Appropriateness of the protagonist's emotion type also differed based on affirmer, F(2, 261)=3.82, p=.023,  $\eta_p^{-2}=.028$ , 90% CI [0.002 to 0.065]; no affirmer M=5.01, SE=0.12; White man affirmer M=5.47, SE=0.12; Black woman affirmer M=5.30, SE=0.13, such that protagonists were rated as experiencing emotion that was more appropriate when affirmed by a White man than when not affirmed, (p=.007) although rated no differently when affirmed by a Black woman than when not affirmed (p=.091) and no differently when affirmed by a Black woman or White man (p=.332). There was also a main effect of BWOG, F(1, 261)=4.65, p=.032,  $\eta_p^{-2}=.018$ , 90% CI [0.001 to 0.052], high BWOG M=5.41, SE=0.10; low/moderate BWOG: M=5.12, SE=0.10, such that high BWOG endorsers rated the protagonist's emotion as of a more appropriate type than low/moderate endorsers did. There were no interactions between protagonist and affirmer  $(p=.766, \eta_p^{-2}=.002, 90\%$  CI [0.000 to 0.013]), affirmer and BWOG  $(p=.398, \eta_p^{-2}=.007, 90\%$  CI [0.000 to 0.028]), and no three-way interaction  $(p=.260, \eta_p^{-2}=.010, 90\%$  CI [0.000 to 0.034]).

## Appropriateness of protagonist's emotional intensity

Perceived appropriateness of the protagonist's emotional intensity differed based on protagonist, F(1, 261)=21.93, p<.001,  $\eta_p^2=.078$ , 90% CI [0.033 to 0.133], such that the Black woman protagonist's emotional intensity was rated as more appropriate than the White man protagonist's. The significant interaction between protagonist and BWOG, F(1, 261)=6.01, p=.015,  $\eta_p^2=.023$ , 90% CI [0.002 to 0.060], was driven by high BWOG endorsers, F(1,261)=27.14, p<.001,  $\eta_p^2=.094$ , 90% CI [0.045 to 0.153]. Appropriateness of the protagonist's emotional intensity also differed based on affirmer, F(2, 261)=3.68, p=.027,  $\eta_p^2=.027$ , 90% CI [0.002 to 0.063]; no affirmer M=4.45, SE=0.15; White man affirmer M=4.96, SE=0.15; Black woman affirmer M=4.95, SE=0.16. Protagonists were rated as more appropriate in intensity when affirmed by either a White man than not affirmed (p=.017) or when affirmed by a Black woman than when not affirmed, (p=.024). There was no main effect of BWOG (p=.207,  $\eta_p^2$ =.006, 90% CI [0.000 to 0.031]). There were no interactions between protagonist and affirmer (p=.751,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.014]), affirmer and BWOG (p=.266,  $\eta_p^2$ =.010, 90% CI [0.000 to 0.034]), and no three-way interaction (p=.244,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.035]).

# Dispositional emotionality of the protagonist

Protagonist dispositional emotionality differed based on protagonist, F(1, 261)=40.14, p < .001,  $\eta_p^2 = .133$ , 90% CI [0.075 to 0.197], such that the Black woman protagonist was rated as lower in dispositional emotionality than the White man protagonist. An interaction between protagonist and BWOG, F(1, 261)=4.01, p=.046,  $\eta_p^2=.015$ , 90% CI [0.0001 to 0.048], showed that although both high and low/moderate BWOG endorsers rated Black women protagonists as lower in dispositional emotionality than White men protagonists, (high endorsers: F(1, 1)261)=37.05, p < .001,  $\eta_p^2 = .124$ , 90% CI [0.068 to 0.187], low/moderate endorsers: F(1, 261) = 8.84, p=.003,  $\eta_p^2=.033$ , 90% CI [0.007 to 0.075]), this difference was more extreme for high endorsers. An interaction between affirmer and BWOG, F(2, 261)=4.68, p=.010,  $\eta_p^2=.035$ , 90% CI [0.005 to 0.074]; Black woman affirmer M=3.47, SE=0.14; no affirmer M=4.00, SE=0.13; White man affirmer M=3.77, SE=0.15, revealed that, for high BWOG endorsers, protagonists were rated as lower in dispositional emotionality when affirmed by a Black woman than when not affirmed, (p=.005; no difference between Black woman and White man affirmer, p=.132; or between no affirmer and White man affirmer, p=.255). There were no main effects of affirmer (p=.814,  $\eta_p^2$ =.002, 90% CI [0.000 to 0.011]) or BWOG (p=.385,  $\eta_p^2$ =.003, 90% CI [0.000 to 0.024]). There was no interaction between protagonist and affirmer (p=.272,  $\eta_p^2=.010$ , 90% CI [0.000 to 0.034]) and no three-way interaction (p=.211,  $\eta_p^2=.012$ , 90% CI [0.000 to 0.038]).

#### Threat of the protagonist

Threat of the protagonist differed by protagonist, F(1, 261)=22.47, p<.001,  $\eta_p^{-2}=.079$ , 90% CI [0.034 to 0.135], such that the Black woman protagonist was rated as less threatening than the White man protagonist. There was no interaction between protagonist and BWOG  $(p=.169, \eta_p^{-2}=.007, 90\%$  CI [0.000 to 0.034]. There was a main effect of BWOG, F(1, 261)=4.12,  $p=.043, \eta_p^{-2}=.016, 90\%$  CI [0.0002 to 0.049]; high BWOG M=2.50, SE=0.12; low/moderate BWOG: M=2.86, SE=0.13, such that high BWOG endorsers rated protagonists as less threatening than low/moderate endorsers did. Threat of the protagonist did not differ based on affirmer  $(p=.622, \eta_p^{-2}=.004, 90\%$  CI [0.000 to 0.019]). There were no interactions of protagonist and affirmer  $(p=.616, \eta_p^{-2}=.004, 90\%$  CI [0.000 to 0.019]), affirmer and BWOG  $(p=.061, \eta_p^{-2}=.021, 90\%$  CI [0.000 to 0.053], and no three-way interaction  $(p=.219, \eta_p^{-2}=.012, 90\%$  CI [0.000 to 0.037]).

### Protagonist status conferral

A three-way interaction emerged for status conferred to the protagonist, F(2, 260)=4.06, p=.018,  $\eta_p^2=.030$ , 90% CI [0.003 to 0.068]. Further testing of this interaction revealed a simple two-way interaction between BWOG and affirmer for Black women protagonists, F(2, 260)=4.65, p=.010,  $\eta_p^2=.018$ , 90% CI [0.001 to 0.052], and a simple simple main effect of affirmer for high BWOG endorsers who read about Black women protagonists, F(2, 260)=5.77, p=.004,  $\eta_p^2=.043$ , 90% CI [0.009 to 0.085]; no affirmer M=4.49, SE=0.18; Black woman affirmer M=5.42, SE=0.23; White man affirmer M=5.16, SE=0.21. Bonferroni-adjusted comparison tests revealed that high BWOG endorsers conferred Black women protagonists more status when affirmed by either a Black woman than when not affirmed (p=.005) or by a White man than when not affirmed (p=.049).

Status conferred to the protagonist differed based on protagonist, F(1, 260)=26.02, p<.001,  $\eta_p^2=.091$ , 90% CI [0.043 to 0.149], such that the Black woman protagonist was conferred higher status than the White man protagonist. An interaction between protagonist and BWOG, F(1, 260)=5.79, p=.017,  $\eta_p^2=.022$ , 90% CI [0.002 to 0.059], revealed this effect was driven by high BWOG endorsers, F(1, 260)=30.14, p<.001,  $\eta_p^2=.104$ , 90% CI [0.052 to 0.164]. Status conferred to the protagonist also differed by BWOG, F(1, 260)=9.30, p=.003,  $\eta_p^2=.035$ , 90% CI [0.007 to 0.078]; high BWOG M=4.53, SE=0.09; low/moderate BWOG: M=4.12, SE=0.10, such that high BWOG endorsers conferred more status to protagonists than low/moderate endorsers did. There was no main effect of affirmer (p=.076,  $\eta_p^2=.020$ , 90% CI [0.000 to 0.051]). There were no interactions between protagonist and affirmer (p=.671,  $\eta_p^2=.003$ , 90% CI [0.000 to 0.017]) or affirmer and BWOG (p=.189,  $\eta_p^2=.013$ , 90% CI [0.000 to 0.039]).

## **Exploratory variables**

## Rationality of the affirmer

Rationality of the affirmer did not differ based on protagonist,  $(p=.745, \eta_p^2=.001, 90\%$  CI [0.000 to 0.020]) or the interaction of protagonist and BWOG ( $p=.436, \eta_p^2=.004, 90\%$  CI [0.000 to 0.033]). There were no main effects of affirmer ( $p=.315, \eta_p^2=.006, 90\%$  CI [0.000 to 0.039]) or BWOG ( $p=.273, \eta_p^2=.007, 90\%$  CI [0.000 to 0.042]). There were no interactions between protagonist and affirmer ( $p=.434, \eta_p^2=.004, 90\%$  CI [0.000 to 0.033]), affirmer and BWOG

 $(p=.785, \eta_p^2=.001, 90\%$  CI [0.000 to 0.018]), and no three-way interaction  $(p=.687, \eta_p^2=.001, 90\%$  CI [0.000 to 0.022]).

# Rationality of the protagonist

Rationality of the protagonist differed based on protagonist, F(1, 261)=14.15, p<.001,  $\eta_p^2=.051$ , 90% CI [0.016 to 0.101], such that the Black woman protagonist was rated as more rational than the White man protagonist. The interaction of protagonist and BWOG (p=.215,  $\eta_p^2=.006$ , 90% CI [0.000 to 0.031]) was not significant. Rationality of the protagonist also differed based on affirmer, F(2, 261)=3.52, p=.031,  $\eta_p^2=.026$ , 90% CI [0.001 to 0.061]; no affirmer M=3.44, SE=0.14; White man affirmer M=3.94, SE=0.14; Black woman affirmer M=3.86, SE=0.15, such that protagonists were rated as more rational when affirmed by either a White man than when not affirmed (p=.014), or when affirmed by a Black woman than when not affirmed, (p=.692). There was no main effect of BWOG (p=.635,  $\eta_p^2=.001$ , 90% CI [0.000 to 0.013]), and no three-way interaction (p=.280,  $\eta_p^2=.010$ , 90% CI [0.000 to 0.033]).

### Fragility of the protagonist

Fragility of the protagonist differed based on protagonist, F(1, 261)=16.13, p<.001,  $\eta_p^2=.058$ , 90% CI [0.020 to 0.109], such that the Black woman protagonist was rated as less fragile than the White man protagonist. There was no interaction between protagonist and BWOG  $(p=.114, \eta_p^2=.010, 90\%$  CI [0.000 to 0.038]. There were no main effects of affirmer (p=.911,  $\eta_p^2$ =.001, 90% CI [0.000 to 0.004]) or BWOG (*p*=.060,  $\eta_p^2$ =.014, 90% CI [0.000 to 0.045]). There were no interactions of protagonist and affirmer (*p*=.492,  $\eta_p^2$ =.005, 90% CI [0.000 to 0.024], affirmer and BWOG (*p*=.238,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.036], and no three-way interaction (*p*=.158,  $\eta_p^2$ =.014, 90% CI [0.000 to 0.042].

# Protagonist salary conferral

Salary conferred to the protagonist differed based on protagonist, F(1, 251)=8.45, p=.004,  $\eta_p^2$ =.033, 90% CI [0.006 to 0.076], such that the Black woman protagonist was conferred a higher salary than the White man protagonist. An interaction between protagonist and BWOG, F(1, 1)251)=4.14, p=.043,  $\eta_p^2$ =.016, 90% CI [0.0003 to 0.051], revealed this effect was driven by high BWOG endorsers, F(1, 251)=12.80, p<.001,  $\eta_p^2=.049$ , 90% CI [0.014 to 0.098]. An interaction between affirmer and BWOG also emerged, F(2, 251)=3.78, p=.024,  $\eta_p^2=.029$ , 90% CI [0.002 to 0.067], revealing the effect was driven by high BWOG endorsers, F(2, 251)=3.78, p=.024,  $\eta_p^2$ =.029, 90% CI [0.002 to 0.67]; Black woman affirmer *M*=\$52,646.92, *SE*=\$2,164.92; no affirmer M=\$44,619.70, SE=\$1,991.85, White man affirmer M=\$47,376.67, SE=\$2,317.62. For high BWOG endorsers, protagonists were conferred a higher salary when affirmed by a Black woman than when not affirmed (p=.007). No differences emerged for protagonists affirmed by Black women and White men (p=.098), or affirmed by White men and not affirmed (p=.368). There were no main effects of affirmer (p=.466,  $\eta_p^2=.006$ , 90% CI [0.000 to 0.026]) or BWOG (p=.077,  $\eta_p^2=.012$ , 90% CI [0.000 to 0.044]). There was no interaction of protagonist and affirmer  $(p=.404, \eta_p^2=.007, 90\%$  CI [0.000 to 0.028]), and no three-way interaction  $(p=.817, \eta_p^2=.002, \eta_p^2=.002)$ 90% CI [0.000 to 0.011]).

# Table 4

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	Protagonist Intersectional Position	
	BW	WM
Appro.Type	5.48 (0.10) <sup>a</sup>	5.03 (0.10) <sup>b</sup>
Appro.Inten.	5.20 (0.13) <sup>a</sup>	4.37 (0.12) <sup>b</sup>
Aff. Rational	$5.25(0.13)^{a}$	5.19 (0.13) <sup>a</sup>
Pro. Rational	$4.06 (0.12)^{a}$	3.43 (0.12) <sup>b</sup>
Threat	$2.26 (0.13)^{a}$	3.10 (0.12) <sup>b</sup>
Fragility	$2.34(0.12)^{a}$	3.03 (0.12) <sup>b</sup>
Dispo. E.	$3.43 (0.09)^{a}$	4.17 (0.08) <sup>b</sup>
Status	4.66 (0.10) <sup>a</sup>	3.98 (0.09) <sup>b</sup>
Salary	\$49,238.08 (\$1,308.17) <sup>a</sup>	\$43,983.52 (\$1,247.67) <sup>b</sup>

Study 3 Means (95% Confidence Intervals)

*Note*: Different subscripts indicate the two protagonist conditions significantly differed from one another on the variables of interest (by at least p < .05). BW indicates Black woman protagonist, WM indicates White man protagonist, Appro. Type indicates appropriateness of protagonist's emotion type, Appro. Inten. indicates appropriateness of protagonist's emotional intensity, Aff. Ration. indicates rationality of the affirmer, Pro. Ration. indicates rationality of the protagonist, Threat indicates threat of the protagonist, Fragility indicates fragility of the protagonist, Dispo. E. indicates dispositional emotionality of the protagonist, Status indicates protagonist status conferral, and Salary indicates protagonist salary conferral.



*Figure 6.* Study 3 simple effects means (error bars are standard errors). BW P indicates Black woman protagonist, WM P indicates White man protagonist, Level of BWOG indicates level of Belief in Workplace Opportunities as Gendered, Low/Mod indicates low to moderate level of belief, asterisk indicates the simple effect is significant at p < .05.

#### **Study 3 Discussion**

Overall, Study 3 replicated Study 2 such that only participants high in BWOG evaluated Black women protagonists more positively than White men protagonists. Supporting predictions and replicating the interaction pattern of Studies 1b and 2, Black women were perceived as experiencing emotion of a more appropriate emotional intensity and evaluated as lower in dispositional emotionality than White men were, findings driven by ratings of those high in BWOG. Replicating Study 2, this interactive effect again emerged for status conferral, however, a three-way interaction also emerged in Study 3 revealing participants high in BWOG conferred higher status to Black women who were affirmed than to Black women protagonists who were not affirmed. In Study 3, unlike in the previous studies, participants high in BWOG also rated Black women protagonists as experiencing emotion of a more appropriate type than White men protagonists, and conferred higher salary amounts to Black women protagonists than to White men protagonists.

Results of Study 2 were not replicated: threat of the protagonist, rationality of the protagonist, or rationality of the affirmer, in that the interaction between BWOG and protagonist intersectional position was not significant. Regardless of BWOG, however, participants rated the Black women protagonists as more rational, less threatening, and less fragile (same pattern for fragility as in Study 2) than the White men protagonists. Additionally, participants high in BWOG rated protagonists overall as less threatening than other participants did. Across intersectional positions of affirmers and protagonists and across BWOG endorsement level, affirmers were rated no differently in their perceived rationality. Thus, comparing the pattern of
moderated results in Study 2 (invalidation) with Study 3 (affirmation), three of the interactive effects fell away, three remained, and two additional effects following this pattern emerged.<sup>1</sup>

Unlike the pattern of results in Studies 1a, 1b, and 2, in Study 3 the onlooker's comment, did affect participants' judgments of protagonists on a number of dimensions. Across protagonist intersectional positions, affirmer intersectional positions, and endorsement level of BWOG, participants rated protagonists who were affirmed as experiencing emotion of a more appropriate intensity and as more rational than protagonists who were not affirmed. For judgments of the appropriateness of the emotion type of the protagonist, a selective effect emerged such that protagonists' emotion type was rated as more appropriate if affirmed by a White man than if not affirmed (effects of the Black woman affirmer did not differ from not being affirmed or from being affirmed by the White man). Overall, unlike in the previous studies examining invalidation, in the case of affirmation it seems that an affirming comment from another does positively influence perceivers' judgments of an angry protagonist.

In addition to the three-way interaction that emerged for status, an interaction between affirmer intersectional position and BWOG emerged for both dispositional emotionality and salary conferral. For dispositional emotionality, protagonists were rated as lower in dispositional emotionality if affirmed by a Black woman than if not affirmed (effects of the White man affirmer did not differ from effects of not being affirmed, however, the effects of being affirmed by the White man also did not differ from being affirmed by the Black woman). Similarly, for salary conferral, protagonists were conferred higher salary amounts when affirmed by a Black woman than when not affirmed (again, effects of being affirmed by the White man did not differ from not being affirmed or from being affirmed by the Black woman). Overall, findings for

<sup>&</sup>lt;sup>1</sup> The correlation between BWOG and political orientation revealed a slightly higher than Study 2, (weak to moderate) significant, negative correlation (r= -0.37; low conservatism associated with higher BWOG). BWOG was once more correlated with participant gender (r= -0.27, p<.001), such that identifying as a woman was weakly associated with being high in BWOG.

dispositional emotionality and salary conferral suggest that the interactive effect for those high in BWOG reflects an effect whereby being affirmed by a Black woman, relative to not being affirmed, resulted in more favorable ratings of protagonists.

In sum, Study 3 replicated and extended a number of the key interactive findings of Study 2 in the context of affirmation. Study 3 also demonstrated that being affirmed influenced perceivers' judgments of a protagonist, regardless of who did the affirming for some measures, and depending on the intersectional position of the affirmer and/or BWOG for other measures. Overall, Study 3 provided further support for the interactive effect such that participants high in BWOG rated Black women more favorably than White men, and illustrated a differential influence of the commenter on the protagonist that depends on the nature of the onlooker's comment.

# **Chapter 6**

## **General Discussion**

In my dissertation I sought to examine perceived emotion appropriateness of protagonists across intersectional positions as influenced by third-party comments. Specifically, I was interested in both the potential detrimental effects of invalidation and buffering effects of affirmation. At the outset, I was motivated to examine anger appropriateness in particular, because as feminist scholars have suggested (e.g., Campbell, 1994; Frye, 1983; Lorde, 1984), people's beliefs about whose anger is appropriate might reveal people's beliefs about who is entitled to feel that their rights have been violated, and who can seek justice for that violation. The findings of the present studies did not support my prediction that Black and White women protagonists would have their anger cast as inappropriate relative to White men, due to social group stereotypes and structural power realties. However, anger appropriateness judgments in these studies did reveal people's beliefs about who is entitled to feel that their rights have been violated and to seek justice: for those high in beliefs that workplace opportunities are gendered (Studies 2 and 3), and to a lesser extent for those high in news engagement (Study 1b), Black women (Studies 2 and 3) and White women (Study 1b) were judged as more appropriate and thus more entitled to anger than White men. Just as appropriateness judgments are political in that they are affected by stereotypes and power structures (Shields, 2005), from the present research it appears that appropriateness judgments can similarly be affected by beliefs to serve as a site to remediate justice. Indeed, Black and White women's ambiguous workplace anger was judged as more appropriate than White men's by people high in beliefs that workplace opportunities are gendered and high in news engagement (during a time of much media coverage on gender

discrimination in the workplace). Therefore, this group's evaluations of anger appropriateness reflect an acknowledgment of the inequitable gendered reality women at work often face.

## **Judgments About Protagonists**

In my dissertation, I sought to replicate findings on perceptions of White women and White men's anger and to clarify some of the conflicting findings on perceptions of Black women's anger. Rather than conceptually replicate and clarify, my findings further complicate our understanding of Black women, White women, and White men's anger at work in the current historical moment. Indeed across the literature on gender and anger, and examining papers which have a particularly similar focus (i.e., Brescoll & Uhlmann, 2008; Livingston, Rosette, & Washington, 2012; Salerno & Peter-Hagene, 2015; Salerno, Peter-Hagene, & Jay, 2017), no evidence has been found outside of the present project, to my knowledge, of White men's anger being evaluated as less appropriate than White women's or Black women's in this type of everyday situation. The strongest pattern that emerged was for appropriateness of emotional intensity and dispositional emotionality. Across the three studies that tested moderators, Black women (Studies 2 and 3) and White women (Study 1b) were rated as more appropriate in intensity and lower in dispositional emotionality than White men, and this pattern was driven by high beliefs in workplace opportunities as gendered (Studies 2 and 3) and high news engagement (Study 1b). These findings are in direct opposition to those ten years earlier by Brescoll and Uhlmann (2008) that found White women's anger resulted in lower status conferral due to perceptions of White women's anger as out of control and more internally derived than externally caused. Perhaps judgments of the intensity dimension and general attributions of a person's emotionality are especially contested and thus are the primary place in which stereotypes and beliefs can influence evaluations.

Across all studies, Black and White women were perceived as experiencing emotion of a more appropriate type and as more deserving of status than White men were. These two findings were not explained by being high in news engagement. Instead, only high endorsement of beliefs in workplace opportunities as gendered (BWOG) explained status conferral findings across Studies 2 and 3 and appropriateness of emotion type findings in Study 3. Additionally, in Study 3, Black women were also conferred a higher salary amount than White men were by those high in BWOG. Thus, high personal endorsement of BWOG, rather than high news engagement alone, seems to be a more precise factor that may drive these unexpected effects of Black and White women being viewed more favorably than White men when expressing anger at work.

Judgments about protagonist rationality interacted less consistently (if at all) with BWOG. People high in BWOG evaluated Black women protagonists as more rational than White men protagonists, but this effect only emerged in Study 2. Given this single finding in contrast to the stable patterns of appropriateness of intensity and dispositional emotionality, it seems perceptions of rationality could represent a somewhat separate dimension of person perception than judgments of emotional intensity appropriateness. Perhaps, rationality operates similar to a competence-like judgment that everyone is ascribed to a certain degree (no differences in competence ratings in Studies 1a and 1b).

Findings for threat of the protagonist were somewhat mixed. In Study 2, high BWOG drove the perception of White men as more threatening than Black women. In Study 1b an overall interaction with protagonist intersectional position and news engagement emerged, however the predicted simple effect was not significant. Similarly, in Study 3, the interaction did not emerge, instead only a main effect of threat emerged, which emerged in Studies 1a and 1b such that White men were perceived as more threatening than Black women and White women. In Study 3, the threat items did reliably combine with additional items, "unstable" and "frightening." These additional items could be more emotion-relevant than other personality-level judgments such as

fragility and rationality. Alternatively, the lack of interaction with BWOG on threat for Study 3 and lack of simple effect significance in Study 1b might be due to the possible additional explanation that regardless of emotion display, men are often physically larger than women and may engage in more aggressive displays of masculinity than women do (e.g., Vandello et al., 2008). Lastly, fragility of the protagonist did not interact with either news engagement or beliefs, and main effects of White men as more fragile than White women and Black women only emerged in two out of the four studies. In Study 3, the fragility items lost reliability when reversecoded items "tough" and "resilient" were added to the measure. Perhaps the fragility judgments, rather than indicating someone lacking emotional toughness, reflect beliefs about becoming angry over something trivial, and perhaps this dimension of judgment about one's overall fragility does not relate closely with other emotion judgments (e.g., intensity appropriateness), given disparate patterns among fragility and other measures. An additional possibly is than an overall societal shift has occurred in beliefs toward women in the workplace, such that, women are perceived as less fragile given the amount of harassment women are reporting at work.

## Black Women And White Women: A Similar Pattern

Although at the outset of this project, Black women and White women's anger was predicted to be evaluated in line with different stereotypes that might be specific to intersectional position (i.e., threat, fragility), results revealed, though in different studies, a similar pattern of means for ratings of angry Black women protagonists and angry White women protagonists, both relative to angry White men protagonists. These findings are in opposition to predictions about anger one might derive from Livingston, Rosette, and Washington (2012) which found Black women leaders did not face backlash for agentic behavior, yet White women leaders did. In contrast Salerno, Peter-Hagene, and Jay (2017) found that when gender and race were made explicit, both White women and White men were perceived favorably relative to Black women when angry due to the unambiguous nature of the White women's race highlighting White women's membership in the dominant racial category. The emotion storyboard method used in this set of studies potentially circumvents the obstacle Salerno et al. (2017) encountered by presenting people's intersectional position in a more ecologically valid, and visual manner. The visual presentation is thus likely to also promote less reactance toward participants' labeling of race that Salerno et al. (2017) reported. Overall, however, the present studies did not correspond to possible extensions of the findings of Livingston et al. (2012). Indeed, Black women's anger was not perceived more positively than White women's and both Black and White women's anger was perceived more positively than White men's. The moderation pattern of these main effects supports that this similarity is likely due to the cultural moment's focus on the experiences of women of various racial groups being discussed in the media. Thus, it is likely that the treatment of gender inequality as primarily a gender issue in the news coverage of the moment may be reflected in people's ratings of the women protagonists across the two intersectional positions.

# Breaking Down The Moderators: Beliefs In Workplace Opportunities As Gendered And News Engagement

Overall, the finding that Black and White women's anger was consistently rated as more appropriate than White men's stands in stark contrast to the gender stereotyping and emotion literature. Indeed, this shift in perception of women's anger was emphasized in news coverage of the #MeToo movement as well. Garber (2017), for instance, who described Uma Thurman's labeling of herself as angry and as waiting to be less angry to speak about Harvey Weinstein, wrote, "A celebrity, expressing anger that did not bother to hide itself beneath a gauze of easy pleasantry. That anger, going viral. It was a weekend that witnessed that rarest of events: the American public, applauding a furious woman." Common themes in media pieces such as this one, in conjunction with research that beliefs about gender can and do change across time (e.g., Lee et al., 2017), and can do so in response to the activity of social movements (e.g., Banaszak & Ondercin, 2016), led me to consider news engagement and later, beliefs in workplace opportunities as gendered, as moderators that might explain these puzzling findings. As discussed in the section above, high news engagement drove findings of appropriateness of emotional intensity and dispositional emotionality, and high endorsement in the belief that workplace opportunities are gendered drove findings for almost every measure.

## What Do These Moderated Findings Mean?

In terms of those high in beliefs about workplace opportunities as gendered and high in news engagement evaluating Black and White women as more emotionally appropriate than White men, this finding may suggest that appropriateness judgments are indeed political. This moderated difference reveals that research participants moved beyond considering the particular incident and cues in the emotion storyboard to include sociostructural information, namely intersectional position as situated within the current political historical context. Perhaps, this moderated finding reveals that those high in BWOG (and to a lesser extent in news engagement) perceived Black and White women as more justified when angry than White men due to the broader context of #MeToo and gender discrimination in the workplace.

Participants low to moderate in news engagement and BWOG rated White women and Black women no differently from White men, across studies. Does this lack of difference mean people high in BWOG and news engagement have different biases relative to people low to moderate in BWOG and news engagement? Examining the simple effects bar charts for Studies 1b, 2, and 3 (see Figures 2, 4, and 6), people high in BWOG and news engagement's evaluations of White men, for the most part, were similar to people low to moderate in BWOG and news engagement's evaluations of White men, White women, and Black women. Thus, it seems plausible that people's attitudes may have shifted overall to be more liberal and/or feminist in the current moment in time. Indeed, both women's movement activity and conservative public policy shifts would predict such an attitude shift (Banaszak & Ondercin, 2016; Kellstedt et al, 2010). If people's beliefs about gender have societally shifted during the time of these studies, this may explain the difference between the current findings and past findings from several years ago that this project sought to extend (e.g., Brescoll & Uhlmann, 2008). A follow-up attempt to replicate the present studies' findings at a later time point in which gender attitudes may societally shift backward could test this proposition.

Indeed, findings could also be driven by the condemnation of sexual assault in the time of the #MeToo era resulting in a shift toward more egalitarian gender beliefs. A recent study comparing sexual assault beliefs in India and Britain provides possible support for this relationship. In the study, Hill and Marshall (2018) found hostile sexism beliefs and endorsement of more traditional gender roles explained greater rape myth acceptance in the Indian sample, relative to those in Britain. Perhaps too, this pathway could be reverse-engineered, and the dispelling of rape myths and denunciation of sexual assault will result in a shift to more egalitarian gender beliefs. Future research could demonstrate this pathway directly. Alternatively, this movement itself could be a backlash occurring in response to conservative policy and the current U.S. president who has been implicated in sexual assault allegations himself. If so, any shift in egalitarian gender beliefs could shift to levels of the previous decade. Of course, only time will tell. Thus, the potential boost from those especially high in news engagement and BWOG in their evaluations of Black and White women relative to White men likely does not indicate that gender equality has been achieved or that such attitudes will necessarily remain stable. Rather, it is likely the findings point to a moment in time where large numbers of people are thinking about and discussing gender inequality in the workplace. People high in news engagement and high in beliefs in workplace opportunities as gendered potentially viewed the White and Black women's anger as more appropriate due to their focus on the reality of the inequality women are facing in the workplace relative to White men.

## **Invalidation and Affirmation**

An additional primary objective of this dissertation was to examine if invalidation and affirmation had potentially damaging and buffering effects, respectively, on perceivers' judgments of a protagonist's appropriateness. Results revealed that being invalidated did not damage perceivers' judgments, relative to judgments of angry protagonists who were not invalidated. Study 3 revealed, however, that being affirmed compared to not being affirmed did result in perceivers rating protagonist's anger as more appropriate in type and intensity and as higher in rationality (though selectively when affirmed by Black women for emotion type). Participants high in BWOG additionally evaluated Black women protagonists as more deserving of status when affirmed than when not affirmed. Thus, findings overall demonstrate that, in the work context described in these studies, affirmation effectively buffers perceivers' appropriateness evaluations of protagonists, but invalidation is not considered by perceivers in the evaluation process.

#### Why Might Affirmation Be More Effective Than Invalidation?

One possible reason that invalidation may be disregarded yet that affirmation may be attended to is that anger affirmation may be more unusual and therefore more salient to perceivers. Perhaps invalidation is more common because people think of workplace anger as problematic (e.g., Callister, Geddes, & Gibson, 2017) and thus, attempt to socially regulate it by commenting on others'. People might invalidate to act as safeguards in their workplace to encourage an affiliation-focused social environment. In turn, to encourage affiliation-focused behavior, people might also be unlikely to spontaneously affirm others' workplace anger as appropriate. If invalidation happens more frequently in general, it may also be disregarded relative to affirmation due to the potential novelty of anger affirmation. A question that remains to be examined is exactly what the boundary conditions of invalidation and affirmation are. Perhaps invalidation can be anything from mislabeling someone's emotion, dismissing the intensity of their emotion or the emotion type as inappropriate, or something as subtle as "Jeez" muttered under one's breath or an eye-roll telegraphed to a friend. Additionally, it is possible emotion invalidation and affirmation could operate differently depending on which dimension of appropriateness (Warner & Shields, 2009a) is invalidated or affirmed (i.e., emotion type present, emotion type absent, emotional intensity). Future studies should examine what constitutes emotion invalidation and affirmation and how different forms could affect perceivers' judgments.

### When the intersectional position of the invalidator or affirmer matters

Across studies, results revealed only a few instances in which the specific intersectional position of the invalidator or affirmer influenced judgments of the protagonist's emotion. Taken together, these findings suggested a similar pattern to that revealed by evaluations of protagonists

based on their intersectional positions: being invalidated by a White man resulted in more favorable judgments of the Black women protagonists. Thus, rather than the White man invalidator exacting greater social influence over third party perceivers' judgments due to greater social influence ascribed by his intersectional position of relatively greater privilege, perceivers instead evaluated Black women more favorably in this situation. Additionally, for some measures, Black women affirmers selectively had a positive effect on high BWOG perceivers' judgments of protagonists. Therefore, invalidators and affirmers' intersectional positions influenced perceivers in patterns opposed to the entrenching of the status quo.

The effects of intersectional position on perceptions of invalidators and affirmers themselves were mixed. In Studies 1b and 3, invalidator and affirmer rationality, respectively, did not differ based on intersectional position. In Study 1a, however, invalidators were evaluated as more rational when they invalidated White men than when they invalidated White women. In Study 2, rationality of the invalidator did interact such that those high in BWOG rated Black women invalidators as more rational. In light of patterns of effects across other measures, the rationality of the invalidator effects that did emerge are possibly driven by a resistance from people high in BWOG toward witnessing White men invalidate and thus possibly perpetuate a difficult work environment for others.

## **Limitations and Future Directions**

One limitation across studies was that a large number of participants had to be excluded due to failing the manipulation check of identifying the gender and race of both the protagonist and the invalidator. This manipulation check proved somewhat difficult to implement as it was asked at end of the study so as not to make intersectional position too salient and bias responses. However, it is also possible that some people who were excluded for failing the manipulation check used intersectional positions as cues but misremembered intersectional positions when they reached the end of the study. For this initial investigation into this topic, I took a conservative approach and excluded those who provided an incorrect answer for one or more of the social identities. Given key elements under investigation included the intersectional positions of protagonists and invalidators/affirmers this seemed a necessary course of action given wrong answers confounded the conditions. Although the exclusion number based on failed manipulation checks may appear relatively high, recent reports have found that 19% exclusion rate of participants due to failed manipulation checks is normative for MTurk samples (e.g., Goodman Cryder, & Cheema, 2013; Salerno et al., 2017). Exclusion rates across the MTurk studies were below that number, with the exception of for Study 2, albeit a minuet difference (1b=12.2%; 2 =21.5%; 3= 10.2%). Possible alternatives to replace the open-ended text boxes used in the current manipulation checks, which inherently relied on recall processes, could include approaches that use more of a recognition-based approach (e.g., showing multiple image choices) or a two-alternative forced-choice approach.

Another potential limitation of the sample found across all three MTurk samples was the average political orientation, which ultimately fell between "Somewhat Liberal" and "Independent." Although not a significant covariate of the effects in Study 1b, future studies could investigate if findings would be different if conducted with a primarily or entirely conservative sample given some evidence of partisan reactions to the #MeToo movement (Bucknell's Public Policy Institute, 2018).

An additional limitation of the findings is that the emotion storyboard was used exclusively as a method across studies. In an examination of emotion storyboards compared to written vignettes, we found that although emotional intensity of target characters was rated equivalently across methods, emotion was rated as more controlled and more appropriate in emotion storyboard than vignette format (McCormick-Huhn & Shields, under review). Thus, it is possible there may be something about the emotion storyboard depiction (e.g., graphic, depersonalized characters) that could have resulted in characters being rated as more appropriate when experiencing emotion in emotion storyboards than they may have been rated in vignettes. However, this possibility does not explain the pattern of results found across studies that Black women and White women characters were judged as more appropriate in intensity than White men. Future studies could seek to replicate the current findings using a method other than the emotion storyboard, such as video.

Future studies could also investigate additional ways to invalidate and affirm protagonists to examine if different paradigms have differential effects on the pattern of study findings. Perhaps a design where participants spend equal time reading about the protagonist and the invalidator/affirmer, or if it was more ambiguous how the protagonist was feeling, invalidators and affirmers would have more influence on perceivers' judgments. Further, an emotion storyboard could be designed for which participants read two different sides of the story or learn the story primarily second-hand and make judgments. Perhaps, too, it matters for perceivers who the invalidator is in terms of relative status. For instance, if the invalidator was the boss of the company rather than a fellow coworker, perceivers may have been more affected by the invalidator. A related question to be explored in future work is also how perceiving invalidation and affirmation differs from being invalidated or affirmed by someone else directly. Additionally, what might be the downstream consequences for others of invalidation and affirmation in the workplace? For instance, evidence supports the idea that an affirmer's recognition of the protagonist's right to be angry, if shared directly with the protagonist in the form of a compassionate response, may result in gratitude on the part of the protagonist and may ultimately result in positive exchanges within an organization (Zenteno-Hidalgo & Geddes, 2012).

Future studies could also examine the extent to which the protagonist main effects and interactions with news engagement and BWOG might apply to marginalized men or queer people

in the workplace. For instance, would we see a similar pattern if we followed up with people in other intersectional positions marginalized in the workplace but not by gender (e.g., Black men) due to related structural changes and attitude changes that might be occurring? Or, perhaps this phenomenon is about women during this particular political and cultural moment of the #MeToo era. Furthermore, an important avenue for future study will be to examine if these results are in fact a product of a shift in gender beliefs due to the historical context. Going forward, additional studies during this time period and after could examine how long this phenomenon will last and assess if periods of backlash are occurring by more directly considering the role of the broader historical context in this line of work and other research on gender beliefs. Given these moderation findings, future study could also examine if it is possible to shift people's beliefs toward endorsing the belief that workplace opportunities are gendered. If providing information on gendered bias and discrimination in the workplace can shift beliefs, beliefs such as who is deserving of status in the workplace, this would suggest a possible way to mitigate bias and inequity.

## Implications

Three primary implications arose from this dissertation. First, findings suggest affirmation and invalidation are distinct social processes that may operate differently from one another. The results of Study 3 examining affirmation suggest that people can effectively affirm others' emotion. Indeed, regardless of the intersectional position of the person emoting and of the affirmer, an affirming comment in the presence of another could affect emotional intensity appropriateness judgments and rationality judgments of someone. Depending on the beliefs of the person overhearing the affirmation, one could affect status conferral of the person expressing emotion in a positive manner. Further, depending on one's own intersectional position, one could affect additional emotion-relevant judgments and even affect the person's salary conferral from another. On the other hand, invalidation (except under few circumstances), does not appear to influence onlookers' judgments of a protagonist. In a hopeful vein, this finding suggests third party perceivers may not be especially swayed by comments others make in the social environment which invalidate a person experiencing emotion.

Second, methodologically, the emotion storyboard method used throughout the project was effective for manipulating intersectional positions in social context. The use of this method allowed for clear and intentional manipulation of intersectional positions through visual depictions. Additionally, the method made it possible to hold constant several other identity dimensions that could plausibly affect perceived appropriateness such as ability status, occupational status, socioeconomic status, and age, across conditions in the illustrated stories (i.e., able-bodied, business workplace, middle-class, young). Although other dimensions still remained unmarked, such as sexual orientation, and thus participants likely assumed characters were dominant group members (e.g., heterosexual), the intention in the creation of the emotion storyboards for the project allows the researcher more confidence in knowing the bounds of who our findings could generalize to. Broadly, this method has implications for the improving of common emotion manipulations through: a) greater control over depiction of emotion displays than in vignettes, b) more realistic depiction of emotion expressions over time than in photographs, and c) greater control over individual differences of protagonists (e.g., attractiveness) than in videos. The method also has implications for the improving of common race and gender manipulations through: a) more clear depictions of race and gender than through voices and names, and b) greater control of racial prototypically and gendered facial features, that are confounded with emotion expression, than in photographs and videos. Emotion, social interaction, and complex social stories could all be conveyed effectively through the use of this

method. Thus, the emotion storyboard could provide useful avenue forward for the study of other social emotion and prejudice-based phenomena.

Third, and perhaps most importantly, findings suggest urgency for social psychology to consider historical context. Research suggests attitudes about gender can shift with women's movement activity, with national partisan policy change (e.g., Banaszak & Ondercin, 2016; Kellstedt et al, 2010), and during particular decades in history (e.g., Donnelly et al., 2015; Lee et al., 2017; Shu & Meagher, 2017). Without an acknowledgement of the historical context and the role large-scale cultural moments may play in affecting stereotyping research and social psychology more broadly, we could misinterpret our findings as a fluke and overlook an important phenomenon. Women's, Gender, and Sexuality Studies, and other related disciplines, encourage researchers to conduct interdisciplinary research and to consider findings and phenomena that occur outside of disciplinary bounds in multiple ways. By doing so, we may be able to more fully understand phenomena such as beliefs about people's emotional appropriateness in a changing attitude landscape.

## Conclusion

Across studies, findings did not reveal that Black and White women protagonists were perceived as inappropriate when experiencing workplace anger relative to White men. Ultimately, however, anger appropriateness judgments in this dissertation did reveal people's beliefs about who is entitled to feel that their rights have been violated and to seek justice: for those high in beliefs that workplace opportunities are gendered and high in news engagement, Black women and White women were judged as more appropriate and thus more entitled to anger than White men. Across studies, invalidation did not affect perceivers' judgments of protagonists' appropriateness however, affirmation did positively influence perceivers' judgments of appropriateness. Across studies, protagonist and invalidator/affirmer intersectional positions did not interact to affect participants' ratings of protagonist appropriateness. Together, findings suggest affirmation and invalidation are distinct social processes, support effectiveness of the emotion storyboard method for manipulating intersectional positions in social context, and, perhaps most importantly, suggest urgency for social psychology to consider historical context in the study of stereotypes and attitudes.

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### **Appendix A**

#### **Materials Pilot Studies**

After completing a separate study, participants were asked to provide two open-ended responses to identify the gender and race of one of the characters used in the present studies. The characters used in the present studies were all identified by participants with over 80% consensus. For participants who saw: the Black woman protagonist, (N=45) 100% classified her as woman/female, 100% described her race as Black/African-American; the White woman protagonist, (N=49) 100% classified her as woman/female, 98% described her race as White/Caucasian/European; the White man protagonist, (N=49) 100% classified him as man/male, 98% described his race as White/Caucasian/European; the Black man invalidator/affirmer, (N=51) 96% classified him as man/male, 98% described his race as Black/African-American.

In a subsequent pilot study, participants additionally identified one of the remaining invalidators/affirmers. For the invalidator/affirmer identifications, participants asked about: the White man invalidator/affirmer, (N=22) 100% classified him as man/male, 86% described his race as White/Caucasian; the Black woman invalidator/affirmer, (N=22) 100% classified her as woman/female, 100% described her race as Black/African-American; the White woman protagonist, (N=19) 100% classified her as woman/female, 100% described her as White/Caucasian/European.

These same participants from the subsequent pilot study also rated the emotion of one of the protagonists, depicted expressing anger outside of the emotion storyboard to ensure their facial expressions of emotion were rated as angry more so than other emotions. All three of the protagonists were rated as experiencing more anger than a number of other emotions on a scale of Not angry at all (1) to Very angry (7) (Black woman protagonist, (N=20): angry M=6.00, SD=1.26; afraid M=2.60, SD=1.67; surprised M=2.80, SD=1.61; disgusted M=5.15, SD=1.42; happy M=1.55, SD=1.23; sad M=2.75, SD=1.65; White woman protagonist, (N=20): angry M=6.79, SD=0.54; afraid M=2.26, SD=1.59; surprised M=2.53, SD=1.68; disgusted M=5.11, SD=2.03; happy M=1.05, SD=0.23; sad M=1.89, SD=1.29; White man protagonist, (N=19): angry M=6.58, SD=0.84; afraid M=1.74, SD=1.15; surprised M=3.00, SD=2.08; disgusted M=5.42, SD=1.84; happy M=1.11, SD=0.32; sad M=2.32, SD=1.64).

# Appendix B

# **Not Pictured Character Illustrations**



Example of White man protagonist



# Example of Black man



I think he's right to feel angry about the situation.

Example of White man

affirmer

# Appendix C

# **Complete List of Measures For All Studies**

# Appropriateness of the protagonist's emotion (emotion type present subscale of the Perceived Emotional Appropriateness Scale; Warner & Shields, 2009)

1. The emotions displayed by the main character were wrong. (R)

2. I would not have shown the types of emotions that the main character displayed. (R)

3. The main character's emotions were exactly the kinds that were called for.

4. I think the types of emotions that the main character felt were normal.

# Appropriateness of the protagonist's emotional intensity (emotional intensity subscale of the Perceived Emotional Appropriateness Scale; Warner & Shields, 2009)

1. The main character was too emotional. (R)

2. Most people would not have been so emotional at certain points as the main character was. (R)

3. I think that the main character had too much emotion for clear thinking. (R)

4. The emotions shown by the main character were too extreme. (R)

5. I think the main character was emotionally out of control. (R)

**Rationality of invalidator/affirmer (Adapted from Heilman, Block, & Martell, 1995)** 1. How logical was the character who commented on what the main character was saying by the elevator?

2. How able to separate ideas from feelings was the character who commented on what the main character was saying by the elevator?

3. How objective was the character who commented on what the main character was saying by the elevator?

# Perceived rationality of protagonist

1. How logical was the main character?

2. How able to separate ideas from feelings was the main character?

3. How objective was the main character?

# Dispositional emotionality of the protagonist (adapted from Brescoll & Uhlmann, 2008 and McCormick-Huhn, Zawadzki, & Shields, in prep.)

1. In general, how emotional is the main character?

2. In general, how defensive is the main character?

3. In general, how likely is the main character to overreact?

4. The main character became angry because of his or her personality.

5. The main character became angry because he or she is an angry person.

6. The main character became angry because of the situation with his or her boss. (R)

### Threat of the protagonist (adapted from Sinaceur & Tiedens, 2006)

1. How much does the adjective "threatening" describe the main character?

2. How much does the adjective "dangerous" describe the main character?

3. How much does the adjective "intimidating" describe the main character?

4. How much does the adjective "unstable" describe the main character?\*

5. How much does the adjective "frightening" describe the main character?\*

\*Only included in Study 3

#### Fragility of the protagonist (adapted from Sinaceur & Tiedens, 2006)

1. How much does the adjective "weak" describe the main character?

2. How much does the adjective "fragile" describe the main character?

3. How much does the adjective "delicate" describe the main character?

4. How much does the adjective "tough" describe the main character? (R)\*

#### 5. How much does the adjective "resilient" describe the main character? (R)\*

\*Only measured in Study 3, not included in ultimate measure.

# Status conferral to the protagonist (adapted from Tiedens, 2001)

- 1. How much status does the main character deserve?
- 2. How much power does the main character deserve?
- 3. How much independence does the main character deserve?
- 4. How likely would you be to hire the main character?

# Salary conferral to the protagonist (adapted from Brescoll & Uhlmann, 2008; openended)

In the text box below please type the yearly salary amount you would pay the main character.

# \*Competence of the protagonist (adapted from Brescoll & Uhlmann, 2008)

- 1. How competent is the main character?
- 2. How skilled is the main character?
- \*Only measured in Studies 1a and 1b.

# \*Perceived authenticity of the protagonist's emotion (adapted from Zawadzki, Warner, & Shields, 2013)

- 1. How authentic was the main character's emotion?
- 2. How genuine was the main character's emotion?
- 3. How much did the main character experience deep feelings?
- 4. How fake was the main character's emotion? (R)
- \*Only measured in Study 1a.

# \*News Engagement Scale (created for this study).

- 1. To what extent are you familiar with the #MeToo movement?
- 2. How frequently do you read news articles?

3. How frequently do you use social media sites?

4. How often have you come across news articles about gender discrimination in the workplace?

\*Only measured in Study 1a.

### \*Marlowe–Crowne Social Desirability Scale 13-Item Short Form (Reynolds, 1982).

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

1. It is sometimes hard for me to go on with my work if I am not encouraged. (R)

2. I sometimes feel resentful when I don't get my own way. (R)

3. On a few occasions, I have given up doing something because I thought too little of my ability. (R)

4. There have been times when I felt like rebelling against people in authority even though I knew they were right. (R)

5. No matter who I'm talking to, I'm always a good listener.

6. There have been occasions when I took advantage of someone. (R)

7. I'm always willing to admit it when I make a mistake.

8. I sometimes try to get even, rather than forgive and forget. (R)

9. I am always courteous, even to people who are disagreeable.

10. I have never been irked when people expressed ideas very different from my own.

11. There have been times when I was quite jealous of the good fortune of others. (R)

12. I am sometimes irritated by people who ask favors of me. (R)

13. I have never deliberately said something that hurt someone's feelings.

\*Only measured in Study 1a.

#### \*Belief in Workplace Opportunities as Gendered (created for this study)

1. Men tend to get more opportunities than women do in the workplace.

2. Women experience more instances of bias in the workplace than men do.

3. Women are more likely to be passed over for assignments in the workplace than men are.

\*Only measured in Studies 2 and 3.

# **Comprehension check**

1. Why was the main character angry?

- a. A rumor was spread about the main character
- b. The company is shortening employee lunch breaks
- c. Someone stole the main character's lunch
- d. The main character's project was reassigned to another coworker

# Manipulation checks (open-ended)

1. What was the gender of the main character who was reading their email at the beginning of the story?

2. What was the race of the main character who was reading their email at the beginning of the story?

3. What was the gender of the character who made a comment about what the main character was saying by the elevator?

4. What was the race of the character who made a comment about what the main character was saying by the elevator?

# Appendix D

# **Correlations Between Measures For All Studies**

Study 1a Correlations Between Measures

Protag. Condition	Туре	Intensity	I Ration.	P Ration.	Threat	Fragile	Dispo. E.	Authen.	Compet.	Status	Salary
WM											
Туре		0.59**	-0.2	0.23*	-0.24**	-0.11	-0.30**	0.17	0.08	0.26**	0.30**
Intensity			-0.45**	0.36**	-0.53**	-0.31**	-0.47**	0.09	0.09	0.32**	0.21*
I Ration.				-0.06	0.30**	0.31**	0.53**	-0.1	-0.14	-0.30**	-0.13
P Ration.					-0.24**	-0.12	-0.30**	-0.19*	0.11	0.38**	0.04
Threat						0.36**	0.47**	-0.21*	-0.19*	-0.25**	-0.16
Fragile							0.46**	0	-0.11	-0.18	-0.04
Dispo. E.								-0.15	-0.29**	-0.44**	-0.19*
Authen.									0.29**	0.22*	0.23*
Compet.										0.60**	0.17
Status											0.27**
Salary											
WW											
Туре		0.56**	-0.06	0.30**	-0.17	-0.33**	-0.50**	0.24*	0.06	0.28**	0.05
Intensity			-0.30*	0.38**	-0.24*	-0.48**	-0.62**	0.06	0.04	0.31**	0.21*
I Ration.				-0.12	0.16	0.31*	0.47**	0.19	-0.14	-0.44**	-0.23
P Ration.					-0.04	-0.20*	-0.34**	-0.17	0.12	0.19	0.12
Threat						0.23*	0.42**	-0.06	-0.05	-0.19*	-0.11
Fragile							0.47**	-0.19	-0.09	-0.37**	-0.22*
Dispo. E.								-0.13	-0.20*	-0.51**	-0.29**
Authen.									0.18	0.14	0.07
Compet.										0.57**	0.1
Status											0.21*
Salary											

Study 1b Correl	ations Between	Measures
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News and	Туре	Intensity	I Ration.	P Ration.	Threat	Fragile	Dispo. E.	Compet.	Status	Salary
Low/Mod News and WM										
Туре		0.66**	-0.32*	0.41**	-0.29*	-0.44**	-0.44**	0.56**	0.60**	0.07
Intensity			-0.63**	0.64**	-0.36**	-0.42**	-0.74**	0.36**	0.66**	0
I Ration.				-0.49**	0.39*	0.39*	0.51**	0.21	-0.40**	-0.02
P Ration.					-0.28*	-0.13	-0.61**	0.40**	0.56**	-0.04
Threat						0.1	0.39**	-0.29*	-0.25	0
Fragile							0.18	-0.08	-0.09	0.15
Dispo. E.								-0.23	-0.66**	0.26
Compet.									0.49**	-0.05
Status										0.21
Salary										
Low/Mod	News a	nd WW								
Туре		0.79**	-0.37*	0.48**	-0.30*	-0.38**	-0.58**	0.36**	0.46**	0.25
Intensity			-0.32	0.53**	-0.41**	-0.41**	-0.70**	0.29*	0.46**	0.31*
I Ration.				-0.27	0.06	0.11	0.32	-0.23	-0.3	-0.32
P Ration.					-0.06	-0.11	-0.39**	0.32*	0.44**	0.34*
Threat						0.13	0.26	0.06	-0.06	0.02
Fragile							0.43**	-0.27*	-0.38**	-0.23
Dispo. E.								-0.51**	-0.68**	-0.38**
Compet.									0.68**	0.33*
Status										0.32*
Salary										
High News	s and W	M								
Туре		0.71**	-0.34	0.29*	-0.24	-0.38**	-0.48**	0.21	0.41**	0.40**
Intensity			-0.51**	0.34*	-0.50**	-0.50**	-0.67**	0.41**	0.53**	0.29*
I Ration.				-0.43*	0.25	0.11	0.53**	-0.07	-0.36*	-0.37*
P Ration.					-0.08	0.02	-0.39**	0.30*	0.49**	0.18
Threat						0.39**	0.54**	-0.19	-0.25	-0.18
Fragile							0.40**	-0.25	-0.21	-0.24
Dispo. E.								-0.21	-0.38**	-0.33*
Compet.									0.76**	0.12
Status										0.31*
Salary										
High News	s and W	W								
Туре		0.76**	-0.46**	0.45**	-0.46**	-0.22	-0.62**	0.34**	0.31**	0.21
Intensity			-0.65**	0.58**	-0.61**	-0.32**	-0.73**	0.38**	0.50**	0.33**
I Ration.				-0.35*	0.42**	0.42**	0.53**	-0.36*	-0.51**	-0.27
P Ration.					-0.27*	-0.31**	-0.71**	0.44**	0.61**	0.50**
Threat						0.22	0.53**	-0.13	-0.25	-0.23
Fragile							0.42**	-0.25*	-0.31*	-0.21
Dispo. E.								-0.46**	-0.57**	-0.53**
Compet.									0.73**	0.39**
Status										0.52**
Salary										

Study 2 Correlations Between Measures

BWOG and Protag. Condition	Туре	Intensity	I Ration.	P Ration.	Threat	Fragile	Dispo. E.	Status	Salary
Low/Mod BWOG and WM									
Туре		0.78**	-0.38**	0.31*	-0.36**	-0.38**	-0.62**	0.49**	0.25*
Intensity			-0.56**	0.31*	-0.42**	-0.34**	-0.62**	0.53**	0.26*
I Ration.				-0.07	0.27*	0.04	0.46**	-0.24	-0.31*
P Ration.					-0.18	-0.26*	-0.37**	0.42**	0.12
Threat						0.25*	0.52**	-0.11	-0.02
Fragile							0.45**	-0.08	-0.11
Dispo. E.								-0.39**	-0.14
Status									0.43**
Salary									
Low/Mod BWOG and BW									
Туре		0.73**	-0.49**	0.39**	-0.46**	-0.09	-0.47**	0.06	0.31*
Intensity			-0.63**	0.37**	-0.74**	-0.27*	-0.80**	0.12	0.34**
I Ration.				-0.13	0.48**	0.05	0.52**	0.26*	-0.09
P Ration.					-0.08	-0.06	-0.40**	0.52**	0.27*
Threat						0.09	0.67**	-0.04	-0.22
Fragile							0.29*	-0.09	0.06
Dispo. E.								-0.19	-0.30*
Status									0.14
Salary									
High BWOG and WM									
Туре		0.68**	-0.37**	0.39**	-0.43**	-0.21	-0.43**	0.36**	0.08
Intensity			-0.35**	0.51**	-0.50**	-0.38**	-0.65**	$0.40^{**}$	0.17
I Ration.				-0.11	0.19	0.12	0.30**	-0.12	-0.24*
P Ration.					-0.42**	-0.08	-0.49**	0.37**	0.04
Threat						0.17	0.54**	-0.40**	-0.22
Fragile							0.49**	-0.22	-0.06
Dispo. E.								-0.35**	-0.07
Status									0.44**
Salary									
High BWOG and BW									
Туре		0.60**	-0.11	0.24	-0.15	-0.33*	-0.35**	0.30*	0
Intensity			-0.19	0.18	-0.34*	-0.23	-0.54**	0.19	-0.05
I Ration.				-0.05	0.47**	0.1	0.47**	-0.25	-0.22
P Ration.					-0.17	-0.23	-0.34*	0.19	0.02
Threat						0.29*	0.63**	-0.24	-0.27*
Fragile							0.43**	-0.42**	-0.2
Dispo. E.								-0.31*	-0.34*
Status									0.14
Salary									

BWOG and Protag. Condition	Туре	Intensity	A Ration.	P Ration.	Threat	Fragile	Dispo. E.	Status	Salary
Low BWOG and WM									
Аррго.Туре		0.77**	0.39**	0.51**	-0.52**	-0.48**	-0.57**	0.46**	0.21
Appro.Inten.			0.27	0.53**	-0.69**	-0.49**	-0.71**	0.51**	0.31**
Aff. Ration.				0.23	-0.06	-0.19	-0.12	0.29*	0.30*
Pro. Ration.					-0.35**	-0.31**	-0.42**	0.46**	0.16
Threat						0.59**	0.69**	-0.40**	-0.23*
Fragility							0.59**	-0.32**	-0.08
Dispo. E.								-0.48**	-0.21
Status									0.33**
Salary									
Low BWOG and BW									
Аррго.Туре		0.66**	0.49**	0.51**	-0.54**	-0.65**	-0.62**	0.57**	0.37**
Appro.Inten.			0.2	0.53**	-0.75**	-0.78**	-0.71**	0.45**	0.01
Aff. Ration.				0.51**	-0.06	-0.16	-0.1	0.46*	0.41*
Pro. Ration.					-0.41**	-0.43**	-0.40**	0.60**	0.05
Threat						0.65**	0.65**	-0.33*	-0.06
Fragility							0.77**	-0.48**	-0.17
Dispo. E.								-0.46**	-0.03
Status									0.32**
Salary									
High BWOG and WM									
Appro.Type		0.82**	0.50**	0.48**	-0.46**	-0.53**	-0.65**	0.57**	0.32*
Appro.Inten.			0.3	0.50**	-0.59**	-0.54**	-0.76**	0.57**	0.29*
Aff. Ration.				0.46**	-0.13	-0.17	-0.13	0.39*	-0.09
Pro. Ration.					-0.21	-0.40**	-0.60**	0.66**	0.1
Threat						0.44**	0.54**	-0.32*	-0.34*
Fragility							0.60**	-0.31*	-0.23
Dispo. E.								-0.58**	-0.29*
Status									0.14
Salary									
High BWOG and BW									
Appro.Type		0.82**	0.50**	0.41**	-0.60**	-0.46**	-0.52**	0.52**	0.23*
Appro.Inten.			0.39**	0.60**	-0.64**	-0.56**	-0.62**	0.61**	0.32**
Aff. Ration.				0.37*	-0.44**	-0.27	-0.16	0.36*	0.17
Pro. Ration.					-0.38**	-0.32**	-0.32**	0.67**	0.27*
Threat						0.52**	0.51**	-0.45**	-0.16
Fragility							0.50**	-0.34**	-0.21
Dispo. E.								-0.47**	-0.23*
Status									0.26*
Salary									

Study 3 Correlations Between Measures

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### **Appendix E**

#### **Study 3 Transformations**

#### Appropriateness of protagonist's emotional intensity

The data was moderately, negatively skewed, and thus a reflected square root transformation was applied the appropriateness of intensity measure. Appropriateness of the protagonist's emotional intensity differed based on protagonist intersectional position, F(1, 1)261)=22.91, p < .001,  $\eta_p^2 = .081$ , 90% CI [0.035 to 0.137], such that the Black woman protagonist's emotion type was rated as more appropriate than the White man protagonist's. An interaction that also emerged between the intersectional position of the protagonist and BWOG, F(1, 261)=5.76, p=.017,  $\eta_p^2=.022$ , 90% CI [0.002 to 0.059], further revealed this effect is driven only by high BWOG endorsers, F(1, 261)=27.53, p<.001,  $\eta_p^2=.095$ , 90% CI [0.046 to 0.154]. Appropriateness of the protagonist's emotional intensity also differed based on affirmer intersectional position,  $F(2, 261)=3.97, p=.020, \eta_p^2=.030, 90\%$  CI [0.003 to 0.066], such that protagonists were rated as experiencing emotion that was more appropriate intensity when affirmed by either a White man than not affirmed (p=.015), or when affirmed by a Black woman than when not affirmed, (p=.017). There was no main effect of BWOG  $(p=.185, \eta_p^2=.007, 90\% \text{ CI} [0.000 \text{ to } 0.033])$ , and no interactions between protagonist intersectional position and affirmer intersectional position  $(p=.821, \eta_p^2=.002, 90\% \text{ CI } [0.000 \text{ to } 0.011])$ , affirmer intersectional position and BWOG  $(p=.322, \eta_p^2=.002, 90\% \text{ CI } [0.000 \text{ to } 0.011])$  $\eta_p^2$ =.009, 90% CI [0.000 to 0.031]), or three-way interaction (*p*=.207,  $\eta_p^2$ =.012, 90% CI [0.000 to 0.038]).

#### Threat of the protagonist

The data was strongly, positively skewed, and thus a log transformation was applied the threat measure. Threat of the protagonist differed based on protagonist intersectional position,  $F(1, 261)=24.22, p<.001, \eta_p^2=.085, 90\%$  CI [0.038 to 0.142], such that the Black woman protagonist was rated as less threatening than the White man protagonist. There was also a main effect of BWOG,  $F(1, 261)=5.87, p=.016, \eta_p^2=.022, 90\%$  CI [0.002 to 0.059], such that high BWOG endorsers rated the protagonist as less threatening than low/moderate endorsers did (untransformed means: high BWOG M=2.86, SE=0.13; low/moderate BWOG: M=2.50, SE=0.12). Threat of the protagonist did not differ based on affirmer intersectional position  $(p=.416, \eta_p^2=.007, 90\%$  CI [0.000 to 0.027]), or by interactions of protagonist intersectional position and affirmer intersectional position  $(p=.192, \eta_p^2=.007, 90\%$  CI [0.000 to 0.032], affirmer intersectional position and BWOG  $(p=.162, \eta_p^2=.014, 90\%$  CI [0.000 to 0.041], or threeway interaction  $(p=.353, \eta_p^2=.008, 90\%$  CI [0.000 to 0.030].

#### Fragility of the protagonist

The data was moderately, positively skewed, and thus a square root transformation was applied the fragility measure. Fragility of the protagonist differed based on protagonist intersectional position, F(1, 261)=16.39, p<.001,  $\eta_p^2=.059$ , 90% CI [0.021 to 0.111], such that the Black woman protagonist was rated as less fragile than the White man protagonist. An main effect also emerged of BWOG, F(1, 261)=3.93, p=.049,  $\eta_p^2=.015$ , 90% CI [0.0001 to 0.048], such that high BWOG endorsers rated protagonists as less fragile than low/moderate endorsers. Fragility of the protagonist did not differ based on affirmer intersectional position (p=.892,

 $\eta_p^2$ =.001, 90% CI [0.000 to 0.007]), or by interactions of protagonist intersectional position and affirmer intersectional position (*p*=.482,  $\eta_p^2$ =.006, 90% CI [0.000 to 0.024], protagonist intersectional position and BWOG (*p*=.127,  $\eta_p^2$ =.009, 90% CI [0.000 to 0.037], affirmer intersectional position and BWOG (*p*=.252,  $\eta_p^2$ =.011, 90% CI [0.000 to 0.035], or three-way interaction (*p*=.174,  $\eta_p^2$ =.013, 90% CI [0.000 to 0.040]).

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#### **PUBLICATIONS**

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