

**Contributions Of Evaluative Feedback And Stereotype Threat For Black Americans'
Causal Attributions**

By

Tiani Perkins

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Psychology)
in The University of Michigan
2024

Doctoral Committee:

Assistant Professor Myles I. Durkee, Co-Chair
Professor L. Monique Ward, Co-Chair
Professor Denise Sekaquaptewa
Professor Isis Settles

Tiani Perkins

tianip@umich.edu

ORCID ID: [0000-0001-9824-8693](https://orcid.org/0000-0001-9824-8693)

TABLE OF CONTENTS

LIST OF TABLES.....	iv
LIST OF FIGURES	v
LIST OF APPENDICES.....	vi
ABSTRACT.....	vii
CHAPTER 1 The Dissertation.....	1
Literature Review/Theoretical Framework.....	4
Attribution Theories of Cognition	6
Implications for Improvement and Self-Efficacy	9
Individual and Contextual Factors for Causal Attributions	11
Perceptions of Evaluator Prejudice.....	16
Summary of the Problem and Dissertation Overview	20
CHAPTER 2 Study 1	23
Participants.....	24
Procedure	25
Measures	25
Results.....	27
Discussion.....	29
CHAPTER 3 Study 2.....	31
Participants.....	33
Procedure	34
Measures	34
Data analysis.....	35

Results.....	36
Discussion.....	41
CHAPTER 4 Study 3.....	43
Participants & Procedures.....	45
Measures.....	45
Data Analysis.....	46
Results.....	47
Discussion.....	51
CHAPTER 5 Overall Discussion.....	54
Stigmatized groups' Causal Attributions.....	54
Limitations and Future Directions.....	57
Theoretical and practical implications.....	60
APPENDICES.....	63
BIBLIOGRAPHY.....	73

LIST OF TABLES

Table 2.1. Means, standard deviations, and bivariate correlations	27
Table 2.2. Means of internal attributions by condition.....	28
Table 2.3. One-way ANOVA table predicting internal attributions.....	29
Table 3.1. Means, standard deviations, and bivariate correlations	36
Table 3.2. Means of internal attributions, improvement motivations, and general self-efficacy by experimental condition.....	37
Table 3.3. One-way ANOVA table predicting internal attributions, improvement motivations, and general self-efficacy	38
Table 3.4. Mediation results for experimental conditions and internal attributions predicting improvement attitudes and general self-efficacy	40
Table 4.1. Means and standard deviations of internal attributions and perceptions of evaluator prejudice by experimental condition.....	47
Table 4.2. Means, standard deviations, and bivariate correlations	47
Table 4.3. One-way ANOVA table predicting internal attributions and perceptions of evaluator prejudice.....	49
Table 4.4. Study 3 hypothesis indirect effects	51

LIST OF FIGURES

Figure 1.1. Conceptual model of stigmatized groups' internalizing attributions	4
Figure 2.1. Study 1 Hypothetical model	23
Figure 3.1. Analytical model for study 2 hypotheses 2a, 2b, 3a, and 3b	31
Figure 3.2. Analytical model for study 2 hypotheses 4 and 5.....	33
Figure 4.1. Analytical model for study 3 hypotheses 2a and 2b.....	44
Figure 4.2. Analytical model for hypothesis 5.....	45
Figure 4.3. One-way ANOVA predicting perceptions of evaluator prejudice	49
Appendix Figure A. 1. Email Manipulation White Male.....	64
Appendix Figure A. 2. Image Manipulation White Female.....	64
Appendix Figure A. 3. Image Manipulation Black Male.....	64
Appendix Figure A. 4. Image Manipulation Black Female.....	64

LIST OF APPENDICES

Appendix A: Evaluator Manipulation Images & Email	64
Appendix B: Negative Job Performance Feedback	65
Appendix C: Neutral Job Performance Feedback.....	66
Appendix D: Positive Job Performance Feedback.....	67
Appendix E: Causal Dimensions Scale - II.....	68
Appendix F: Negative Essay Evaluation (Black woman).....	69
Appendix G: Positive Essay Feedback (Black woman)	70
Appendix H: Improvement Motivations Scale	71
Appendix I: General Self-Efficacy Scale.....	72
Appendix J: Perceptions of Evaluator Prejudice	73

ABSTRACT

Black and African American individuals' causal attributions of performance feedback inform how they approach future tasks, with profound implications for future well-being, self-efficacy, and future success. However, negative lifetime experiences (e.g., anti-Black discrimination) may lead to the internalization of harmful stereotypes of racial inferiority and unconsciously predispose some to make harmful causal attributions by misinterpreting events as instances of negative racial feedback. This internalization may also increase the likelihood that African Americans will internalize both positive and negative events as a reflection of racial bias (e.g., affirmative action for positive outcomes, racism for negative outcomes), particularly when experiencing stereotype threat (e.g., a White evaluator). The processes and consequences of these theoretically "harmful" patterns of attribution in African Americans are unknown; however, preliminary evidence challenges existing theory that has been tested among predominantly White populations and suggests unique consequences for African Americans' confidence and persistence attitudes. In a series of three online experimental studies among African American adults, this dissertation tests existing theory to examine the contextual (i.e., evaluator demographics) and interpersonal (i.e., perceptions of evaluator bias) contributions for causal attributions of evaluative feedback. The guiding research question for this dissertation is: How does evaluator feedback and evaluator race contribute to African Americans' internal attributions, improvement motivations, general self-efficacy, and perceptions of evaluator

prejudice? Study 1 found that African American adults made more internal attributions to negative feedback, though these attributions did not vary by evaluator race. Study 2 found that these internal attributions were not associated with improvement motivations nor self-efficacy beliefs. Finally, study 3 found that perceptions of evaluator prejudice partially explained participants' internal attributions of feedback. This research has novel implications for policies and practices to improve marginalized individuals' motivation and success outcomes in a variety of contexts by highlighting the often-unconscious contributions of internal attributions and evaluator perceptions

CHAPTER 1 The Dissertation

Although the late 20th century brought about a historic narrowing of achievement gaps in education attainment among historically oppressed populations, such as racial, gender, and sexual minorities, these groups continue to trail their majority counterparts (i.e., White, male, and straight) in advanced degree attainment (Budig et al., 2021). These discrepancies span across disciplines and occupations, including the sciences, technology, engineering, and mathematics (STEM) fields. For example, in 2016, 42% of White but only 36% of Black 18-24 year-olds were enrolled in 4-year universities (U.S. Department of Education, 2021). When they do graduate and reach high paying occupations, historically oppressed workers may experience a “glass ceiling” where they face steady exclusion from leadership roles and stagnant job growth (Maume, 1999; Wilson, 2020). This pattern has resulted in the relative lack of marginalized groups in top positions, where ethnic minority workers comprise only 16% of board seats in Fortune 500 companies (Adamovic & Leibbrandt, 2023), and women make up only 24% of similar roles across the country (Hood, 2023).

A major reason for these historic discrepancies is systemic and institutional structures that proliferate discrimination against stigmatized groups (Nadal et al., 2021). Systems of oppression shape the ways that historically oppressed populations interpret new stimuli, with direct consequences for psychological well-being, academic and occupational achievement, motivation attitudes, and interpersonal relationships (see David et al., 2019 for review). One key

cognitive process is *causal attributions*, defined as one's beliefs in the causes of failure and success experiences (Weiner, 2010). Dominant attribution theories suggest that people are predisposed to make beneficial, self-serving attributions, in which they give external reasons for negative feedback and internal reasons for positive feedback. These beneficial attributional patterns reflect one's belief in their ability to be successful in new and difficult situations by adapting their behaviors in the instance of failure and repeating their behaviors in the instance of success (Weiner, 2010). On the other hand, maladaptive patterns of attribution, where one makes internal attributions to negative feedback and external attributions to positive feedback, predisposes individuals to anticipate failure in the future and ignore their success. However, research suggests that the attributions of stigmatized groups are also shaped by systemic, institutional, and interpersonal oppressive structures and experiences that complicate our existing understandings of prototypically beneficial and maladaptive patterns of causal attributions (Crocker et al., 1991; Hoyt et al., 2007). For instance, stigmatized groups may experience stereotype threat, where the salience of existing negative stereotypes of social and intellectual inferiority may lead to increased anxiety and psychological dysfunction, with detrimental consequences for success (Steel, 1997). Stigmatized groups under stereotype threat may interpret negative feedback as a reflection of their inferior social status, while positive feedback may similarly be misconstrued as an insincere product of pro-diversity bias and policies (Axt, 2017; Nadal et al., 2021). Although early attributional studies sought to compare the experiences of majority and minority groups, recent findings suggest that contextual differences, such as stereotype threat and evaluative feedback, may shape the attributions of these populations in ways that require unique study (Crocker et al., 1991; Van Laar, 2000).

Specific Aims

Drawing on early theories of the psychological harm of systemic oppression (Fanon, 1965; 2008), theories of causal attributions (Weiner, 1985; 2010), and Nadal and colleagues' (2021) theoretical model for underrepresented minorities' attributional processes, the current dissertation seeks to address three gaps in the existing research on the cognitive processes of stigmatized groups. First, I seek to provide empirical support for existing theories (Nadal et al., 2021), cross-sectional studies (e.g., Major et al., 2013; Jones et al., 2023), and longitudinal studies (e.g., Swinton et al., 2011; Vuletich et al., 2019) which suggest that stigmatized groups are prone to make internal attributions to negative feedback, a maladaptive attributional pattern. Additionally, as most of this work has focused on adolescent and college aged populations, I extend these findings to address the experiences of Black adults, a highly stigmatized group, with implications for occupational *and* academic settings. Second, this dissertation aims to understand the contribution of contextual differences for these attributions, specifically stereotype threat and evaluative feedback. I seek to understand whether stereotype threat as conceptualized by the presence of a White or Black evaluator will influence Black adults' tendency to follow theoretically harmful attributions to evaluative feedback.

Third, I address existing research regarding the uncertain implications of these attributions, as some studies have found that maladaptive attributional patterns are detrimental for marginalized populations' future well-being and interpersonal interactions by impeding improvement motivations (e.g., Shapiro et al., 2010), while others have suggested self-protective effects by maintaining individuals' self-esteem (Drexler, 2021; Remedios et al., 2020). Finally, I examine the implications of these attributions for individuals' interpersonal experiences, namely their perceptions of evaluator prejudice. Existing research suggests that the level of trust one feels towards an evaluator has critical contributions for causal attributions of feedback (e.g., Axt,

2017; Martinko et al., 2002), thus I aim to understand how evaluative feedback from a White or Black evaluator may shape Black adults’ perceptions of anti-Black and pro-Black evaluator bias (see figure 1.1 for conceptual model).

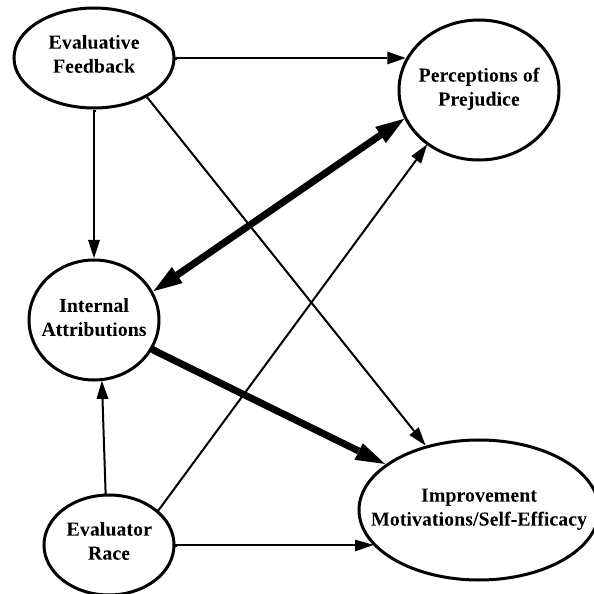


Figure 1.1. Conceptual model of stigmatized groups’ internalizing attributions

Literature Review/Theoretical Framework

Oppression shapes stigmatized groups’ cognitions

“[...] I start suffering from not being a white man insofar as the white man discriminates against me; turns me into a colonized subject; robs me of any value or originality; tells me I am a parasite in the world, that I should toe the line of the white world as quickly as possible, and [...] that I have no place in the world.”

Pg. 117 of Black Skin White Masks, Frantz Fanon (1952)

Histories of White supremacy and colonization in the Western world have direct consequences for the psychological functioning of systemically oppressed and marginalized groups (Harper, 2006; hooks, 2004). As a result, social and personality researchers must examine the cognitive processes of oppressed groups through this lens. Marginalization occurs when there is a clear power imbalance between the majority and minority social groups in a society (David & Derthick, 2014). This imbalance of power and privilege has created a social hierarchy in

which some groups have more advantages over others, such as greater access to monetary and social resources. Although an individual can be in a minority group on a variety of demographic characteristics, such as gender and sexual identity, class status, and education background, among the most salient in modern U.S. society is systemic and interpersonal discrimination based on racial group membership (Sue, 2001).

To maintain colonized populations, the majority group must create laws and social norms that promote the assimilation and derogation of racial minority group members (Mulder, 2016). For example, to maintain the image of White superiority, Black, Hispanic, and Asian Americans may be the targets of harmful stereotypes of intellectual and physical inferiority due to their racial and ethnic identity (Nadal et al., 2021). Research on the psychological and physical toll of discrimination is extensive, with early theorists such as Frantz Fanon's (1965) *Black Skin White Masks* detailing how society's overt hatred of Black people had caused a chronic inferiority complex, resulting in self-hatred and neuroticism (Fanon, 1965). More recently, frameworks of marginalized populations' cognitive processes argue that after hearing repeated negative messages of inferiority over the lifespan, members of oppressed groups may subconsciously believe and endorse these messages (David et al., 2019; Nadal et al., 2021). In result, histories of oppression play a key role in the internal cognitions and motivations of marginalized populations that are navigating inequality of power and privilege in society. The consequences of these inequalities range from systemic, such as discrepancies in pay, job placement, and educational attainment, to interpersonal, such as unconscious bias and internalized stigma (Brady et al., 2020; McGee & Bently, 2017; Sue et al., 2007).

Nadal and colleagues (2021) created a guiding framework for understanding historically marginalized populations' cognitive processes. Their integrated theoretical model details the

individual and contextual processes that predispose underrepresented minorities to internalize stigmatizing messages about their marginalized ingroup. This framework suggests that from early childhood, oppressed groups experience the developmental process of socialization, where their everyday interactions guide their understanding of what it means to be a member of a stigmatized group (Brown, 2008; Fanon, 1965). Early socialization interactions may include a parent's warning a racialized boy about talking to the police or a young girl's learning about best dieting practices, and signal how to conform and cope with societal discrimination (Bañales et al., 2019; Boie et al., 2013; Cross, 1995). Throughout the lifespan, these socialization messages are internalized and reinforced via negative identity-based experiences, such as microaggressions and overt or vicarious discrimination. This internalization shapes stigmatized groups' cognitions to reflect the dominant society's inferior view of one's racial ingroup, resulting in feelings of intellectual inferiority, depression, and other internalizing mental health disorders (Gutierrez-Serrano et al., 2020; Nadal et al., 2021). Therefore, there is a growing body of research integrating theories of underrepresented minorities' experiences of oppression with theories of motivation and cognition. To understand the attributional patterns of historically stigmatized groups, this dissertation integrates Nadal's interactional model of historically marginalized groups (Nadal et al., 2021) with theories of cognitive attributions (Weiner, 2010) among a sample of Black adults.

Attribution Theories of Cognition

Prominent theories of causal reasoning explain that people use two factors to determine their behavior in new evaluation situations: the causal attribution of the situation and the perceived fairness of the evaluation (Martinko et al., 2002; Weiner, 1985; 2010). Causal attributions represent one's perceived cause of the outcome, such as whether the outcome is

attributable to one's own behavior or an outside actor. The causes of one's success or failure are based on perceptions of the locus, stability, and control of the event. Locus refers to external (e.g., task difficulty) or internal (e.g., innate ability) attributions; stability refers to whether the cause of the event is stable and lasting (e.g., innate ability), or unstable and variable (e.g., luck); and control refers to whether the event was controllable to the individual (e.g., the amount of effort to complete a task).

Causal attribution styles are a personality trait that describe whether individuals are predisposed to follow certain patterns of internalization (Martinko et al., 2011). Harmful attribution styles are characterized by attributing failure to internal, stable characteristics (i.e., low ability), and success to external, unstable causes (i.e., luck). After failure (e.g., low score on a test), a student prone to making harmful attributions may not attempt to change his behavior (e.g., study habits), as failure may be attributed to an uncontrollable, external cause (e.g., test difficulty) and/or internal cause (e.g., low innate ability). Someone making harmful attributions to failure feedback may therefore be less likely to engage in behaviors that would improve their performance (e.g., studying harder), as workers may feel hopeless and unable to improve when they believe failure is inevitable and cannot be prevented (Graham, 1994; Perry et al., 2008; Weiner, 2010). Beneficial attributions are characterized by attributing success to internal, stable factors (e.g., ability), and failure to external, unstable factors (e.g., study habits). After failing a test, a student with a beneficial attribution style might spend more time studying to achieve a better test grade, as failure is attributed to a cause they can directly control (e.g., not enough time to prepare). Beneficial attributions are related to academic success, higher self-esteem, and greater hope for the future, as they reflect an individuals' belief in their ability to control their future success (Ciarrochi et al., 2007; Houston, 2016; Ngunu et al., 2019; Weiner, 2010).

Another aspect of causal reasoning theory is the way individuals evaluate the quality of their experiences, such as their positive or negative valence and perceived fairness (Martinko et al., 2002). Because evaluative feedback indicates the success and failure of individual learning methods or workplace behaviors and signifies whether behavior should be changed to achieve task mastery, accurate evaluation of the quality of this feedback is crucial for future performance (Chang et al., 2011; Martinko et al., 2002; Simpson & Maltese, 2017). However, to make accurate judgements about the fairness of evaluative feedback, one must trust the evaluator. An evaluator may be deemed trustworthy because they hold the right credentials or are a member of a powerful social group (i.e., class, race, gender; McNatt, 2022). When one trusts an evaluator's feedback, it is more likely that one will make prototypically adaptive attributions to evaluative feedback (Martinko et al., 2002; McClain & Cokley, 2017). However, when this evaluator is deemed untrustworthy, the feedback may be discounted and ignored. Specifically, one may interpret evaluative feedback as the product of an evaluator's own agenda instead of as a consequence of one's own behaviors. When individuals deem that an evaluator is trustworthy, they are able to base their causal attributions on factors more closely associated with their own performance and behaviors, such as study habits or innate ability.

Vispoel and Austin (1995) detail three types of ways to measure attributions in psychological research: dispositional, critical incident, and situational studies. Dispositional studies are experimental studies in which participants provide their causal attributions to feedback that they believe is real. In critical incident studies, participants are prompted to recall previous lived experiences that hold emotional or psychological weight and are asked to provide their perceived attributions for those experiences. Finally, in situational studies, participants provide their causal attributions to hypothetical scenarios. There are various pros and cons to

each approach. For instance, while the critical incident approach allows researchers to analyze experiences that are the most salient to the participant, it also relies on self-report and memory, potentially introducing error in measures of causal attributions. As participants are prompted to recall only the most salient, and often negative, life events, their causal attributions may be colored by their preexisting value judgments about the situation (Guinea, 2016). Similarly, while dispositional studies allow participants to provide their real attributions to experimenter-controlled stimuli, these studies are difficult to generalize to real-world experiences and also introduce potential bias as participants question the veracity of the feedback (Weiner, 1984). Finally, although participants may give reports of behaviors that they may not actually do in the real-world, situational studies are helpful because they reduce the potential for extraneous variables and biases and provide a controlled environment that may still apply to real-world scenarios (Cook & Campbell, 1979).

Implications for Improvement and Self-Efficacy

Internal, stable attributions to negative events and external, unstable attributions to positive events are indicative of harmful attributions. Such attributions signal that an individual may not engage in behaviors that will improve future performance as they believe failure is an inevitable, internal process that cannot be prevented (Graham, 1994; Perry et al., 2008; Weiner 1985; 2010). When one attributes positive events to internal, stable processes and negative events to external, unstable processes, research suggests these attributions are beneficial as they reflect an individual's belief in their ability to control their future success (Ciarrochi et al., 2007; Houston, 2016; Ngunu et al., 2019; Weiner, 2010).

For instance, Ciarrochi and colleagues' (2007) longitudinal study among a diverse sample of adolescents found that participants who made more internal attributions to positive events

achieved higher grades and reported lower hostility and fear. In an additional study, hierarchical regression analyses found that attributing positive events to internal and stable attributions was associated with better academic performance outcomes among adolescents in the United Kingdom (Houston, 2016). Research also hints at the bidirectional nature of these attributional styles, with longitudinal studies among adolescents finding that attributing success to ability and effort are associated with improved academic performance, which in turn is associated with the greater endorsement that success is attributable to effort (Kurtz-Costes et al., 2005; Swinton, 2011). Research among adult populations shows similar patterns, with Xing and colleagues' (2023) findings among American and Chinese workers showing that internal attributions of negative feedback was associated with low learning motivations and performance outcomes.

Beneficial attributional styles also have important implications for individual's sense of self and self-efficacy. Self-efficacy is described as one's belief in their ability to address novel and difficult problems in the future and is crucial for motivation and positive behavioral outcomes (Bandura, 1977). Self-efficacy after performance feedback helps to inform the ways individuals attribute the outcome of situations, with a recent longitudinal survey study finding that external attributions to negative feedback (i.e., a beneficial attributional pattern) were associated with reporting more positive core self-evaluations (Xing et al., 2023). However, other theories posit that self-efficacy is associated with the internalization of both positive and negative outcomes, where people are less likely to discount either feedback experience when they feel they are the cause of it (Bandura, 1977; Rotter, 1966). These theories are supported by Dimotakis and colleagues' (2017) field study in managerial assessment centers, where employees who received negative feedback demonstrated greater improvement self-efficacy beliefs when they also believed that excellence could be cultivated through effort. Overall, not

only is existing research unclear about how attributional patterns influence future motivations and self-efficacy in general populations, but it is also likely that individual and contextual differences such as stigmatized identity status and experiences of stereotype threat may play a role in the efficacy of these “beneficial” and “harmful” attributions.

Individual and Contextual Factors for Causal Attributions

Though originally conceptualized as a trait-like pattern of cognition that changes little across time and context (Martinko et al., 2002; Rotter, 1966; Voelz et al., 2003), causal attributions are indeed impacted by contextual and individual factors. For instance, contextual factors that signal an evaluator’s performance expectations help to determine whether a students’ internalization of positive and negative academic feedback are truly beneficial or harmful. Houston (2016) sought to understand how contexts may influence the efficacy of attributions by examining students from high achieving and low achieving schools in the United Kingdom. Students who demonstrated theoretically “harmful” attributional styles by making internal attributions to negative events reported better academic performance outcomes, but only if they attended high-achieving schools. In the low-performing school sample, theoretically “beneficial” attributional styles were found to be positively associated with academic performance. These findings indicate that high performance expectations may influence the causes and consequences of causal attributions outside of the prototypical attributional frameworks, implying that existing theories of attributions that focus solely on internalizing negative feedback or externalizing positive feedback is insufficient to fully understand the implications of internalizing attributions. These contextual implications may be particularly relevant among members of stigmatized groups, for whom there are distinct consequences for the implications of individual and

contextual factors for causal reasoning when compared to non-stigmatized groups (van Laar, 2000).

Individual differences, such as stigmatized group membership, also play a key role in causal attributions because they shape both the contexts in which the feedback is given and the interpretation of that feedback. As mentioned earlier, both value judgements about the evaluator and the causal attributions one makes to feedback are crucial for processing and responding to evaluative feedback (Martinko et al., 2002). Relatedly, because stigmatized groups make causal attributions for their success and failure within the context of societal stereotypes of inferiority, their attributions may be further shaped by the endorsement of both individualistic effort-based attributions *and* histories of systemic oppression (Nadal et al., 2021; Vuletich et al., 2019). This dynamic is perhaps best demonstrated in theories of stereotype threat.

Stereotype threat refers to the psychological and performance harm that accompanies increased salience of stereotypes of inferiority among stigmatized groups, prompting an individual to underperform (Steele, 1997). Contextual markers, such as classroom posters, employee and student diversity, providing one's race on a demographic questionnaire, and receiving feedback from an outgroup member are enough to activate prominent underachieving stereotypes (Mendoza-Denton & Mischel, 2007; Mendoza-Denton et al., 2010; Mischel & Shoda, 1995). The presence of high-status institutional others and/or outgroup members, such as a man or White person may also induce stereotype threat, particularly when these high-status others are providing social or performance feedback (Mendoza-Denton et al., 2010; Shapiro et al., 2010). However notably, many stereotype threat studies focus on the impact of stereotype threat on physiological and psychological well-being or performance, and little research has examined the implications for stigmatized groups' causal attributions.

For example, research finds that stereotype threat prompts stigmatized groups to experience attributional ambiguity whereby they are unsure whether to attribute evaluative feedback to their own ability or the evaluator's bias, particularly when evaluator bias is an explicit or implicit potential explanation (Crocker & Major, 1989; Mendoza-Denton, 2014). This resulting attributional ambiguity may impede both causal attributions and the value judgements individuals make about evaluative feedback. Such behavior is likely after failure feedback, whereby marginalized individuals may attribute incivility and disrespect to discrimination to protect their self-esteem and self-worth. For example, in their seminal study examining perceptions of gender bias, Crocker and colleagues (1991) found that when women received negative performance feedback from a male evaluator who had previously expressed biased gender beliefs, they were more likely to attribute this feedback to gendered prejudice. These findings have been replicated by recent studies, where women were more likely to attribute negative feedback from a male (vs. female) evaluator to gender bias (Ni & Huo, 2018) and reported poorer psychological outcomes when believing their negative feedback was based on their gender identity (Biernat & Danaher, 2012). Additional studies have found similar results across stigmatized identity statuses, in which individuals from stigmatized groups (e.g., overweight, LGBTQ, or poor/working class) tended to utilize self-protective strategies when making causal attributions to negative evaluative feedback they perceived was influenced by their stigmatized identity (Crocker et al., 1991; Hoyt et al., 2007; Lopez et al., 2023; Remedios et al., 2020).

Racial minorities under stereotype threat may similarly protect their self-esteem by attributing negative feedback to prejudiced evaluators (Crocker et al., 1991). In Crocker and colleagues (1991) study, after engaging in interpersonal conversations with a White confederate

that could either see them (visible condition) or could not (non-visible condition), Black and White participants received positive or negative interpersonal feedback. Consistent with attributional ambiguity theory, Black participants in this study whose phenotype was visible to a White confederate were more likely than invisible White participants to attribute negative interpersonal feedback to prejudice. Similar to women's experiencing the threat of gender bias, attributing negative feedback to racial prejudice provided a self-protective strategy as visible Black participants had higher positive affect and self-esteem after negative feedback than White participants (Crocker et al., 1991).

Recent experiments support this seminal work, whereby members of stigmatized racial groups tend to attribute negative social interactions to racial discrimination, with ambivalent consequences for psychological and physiological well-being. For example, in Hoyt and colleagues' (2007) virtual reality experiments among White and Latino undergraduates, participants who attributed negative leadership performance feedback to racial discrimination reported higher well-being. Meanwhile, Goodwin and colleagues' (2010) study found that, after experiencing social rejection, both Black and White participants made attributions to racial discrimination. Mendes and colleagues (2008) similarly found that Black and White participants had deleterious cardiovascular reactivity and poorer performance after social rejection from a racial out-group member. Cross-sectional and longitudinal critical incident research support these findings, whereby racialized participants who attributed incivility and negative experiences to racial discrimination tended to report more substance abuse, poorer psychological functioning, and detriments in academic achievement than those who did not make attributions to racial discrimination (Jones et al., 2023; Swinton et al., 2011).

Although attributional ambiguity seems to function equally for gender and racial minorities after negative feedback, stark differences emerge after positive feedback. There were no statistically significant differences in gender bias attributions when receiving positive feedback from a male or female confederate (Ni & Huo, 2018). Additionally, women showed no differences in depressive mood or self-esteem after receiving positive feedback from a gender biased versus non-biased male evaluator (Crocker et al., 1991). In fact, an additional study found that women receiving positive feedback from a male (vs. female) evaluator reported better outcomes than male participants, including greater confidence, belonging, self-efficacy, and more interest in STEM fields (Park et al., 2018). These findings imply that women in attributionally ambiguous situations are more likely to accept and internalize positive feedback from outgroup members.

However, similar to responses to negative feedback, racial minorities may attribute positive feedback to evaluator prejudice, citing low expectations or attempts to avoid appearing prejudiced (Crocker et al., 1991; Hoyt et al., 2007; Mendes et al., 2010; Wood & Graham, 2010). This pattern is best demonstrated in Crocker and colleagues' (1991) experiment in which Black participants were just as likely to attribute positive and negative feedback to prejudice when they were visible to the White evaluator. While visibility seemed to buffer the effects of negative feedback on self-esteem, visibility remained detrimental to self-esteem even after positive feedback. Black participants appeared to discount the positive interpersonal feedback from White evaluators, indicating an awareness that White evaluators may respond more positively solely because they were Black. After receiving positive feedback, Black participants experienced an increase in positive affect and self-esteem only when they believed the White evaluator did not know their race (Crocker et al., 1991). Recent research demonstrates similar patterns. In Mendes

and colleagues' 2008 study, only White (versus Black) participants reported positive psychological and physiological well-being outcomes when experiencing social acceptance. Similarly, Major and colleagues (2016) found that Latina women who were highly suspicious of a White evaluator's motives interpreted positive evaluative feedback as a threat response. These studies demonstrate that historically marginalized populations in attributionally ambiguous situations may be more likely to perceive both positive and negative feedback as a reflection of racial discrimination. These findings also demonstrate that Black workers may be more likely to benefit from positive feedback when they are unable to make causal attributions to evaluator's special consideration, lower standards, or fear of appearing prejudiced.

Age is also a critical individual factor for stigmatized groups' internal attributions. Existing research on adults' attributional processes is largely cross-sectional and focuses on previous experiences of perceived discrimination (i.e., Assari et al., 2015; Chae et al., 2011), with recent qualitative interviews suggesting that additional attention be paid to older stigmatized groups due to their increased exposure to oppression (Remedios et al., 2020). Considering Nadal and colleagues' (2021) theory that over the lifespan, experiences of discrimination exacerbate the chronic internalization of negative feedback messages, it is necessary to clarify whether the causal mechanisms that shape adolescent populations are reflected in adult populations. Because adulthood is marked by key lifestyle changes such as securing a career, starting a family, and solidifying independence (Benson & Furstenberg, 2007), the cognitive processes typical among this population may have direct implications for achieving and maintaining success.

Perceptions of Evaluator Prejudice

As mentioned earlier, another aspect of causal attributions is the perceived fairness and justness of the feedback (Martinko et al., 2002). When determining whether to trust evaluative

feedback, stigmatized groups must determine the extent to which they trust that the evaluator has their best interests at heart and are not following a pro-diversity institutional agenda (Axt, 2017; Croft & Schmader, 2012; McNatt, 2022). There are many factors that contribute to whether one trusts an institution or not. One is group-value ambiguity, a subset of attributional ambiguity theory. Mendoza-Denton and colleagues (2010) conceived group-value ambiguity by adapting the group-value model from the procedural justice literature, which states that people perceive a group's legitimacy only when they feel valued by that group (Tyler & Lind, 1992). Group-value ambiguity occurs when an individual has doubts about whether an institution and its representatives (i.e., predominantly White occupations, university faculty) value members of their marginalized identity group (Mendoza-Denton et al., 2010). Group-value ambiguity leaves marginalized minorities unsure of whether White evaluators truly value their place within predominantly White institutions, and thus may shape how they understand and attribute evaluative performance feedback.

Among student populations, research suggests that experiences of group-value ambiguity may lead oppressed minorities to distrust their teachers and teacher evaluations, with this lack of trust being associated with the discounting, or ignoring, of academic outcomes (Crocker et al., 1991; Yeager et al., 2017). One study found that, among a sample of 319 Black students, lack of trust in faculty partially explained the positive association between academic self-concept and academic achievement (McClain & Cokley, 2017). Despite holding similar positive perceptions of their academic abilities (i.e., academic self-concept), Black students who did not trust their teacher had lower GPAs than those with stronger teacher trust. Students with greater teacher trust seemed to similarly trust the veracity of teachers' evaluations, leading to more beneficial attributions and performance outcomes. In terms of the workplace, African Americans under

stereotype threat may avoid seeking quality feedback due to distrust in the environment and company agents, believing that negative stereotypes may influence others' evaluations (Roberson et al., 2003). In line with group-value ambiguity theory, stigmatized groups under stereotype threat may make attributions to feedback that are detrimental to future performance outcomes (e.g., attribute a failing grade to teacher bias) because of their negative perceptions of the evaluator's motives.

Indeed, research finds that White evaluators may provide insincere positive feedback to racially marginalized (e.g., Black) participants (Harber et al., 2012). White educators and undergraduate participants have demonstrated an unintentional, unconscious pro-black bias when making admissions decisions where they indicated lower standards for Black college applicants (Axt, 2017; Croft & Schmader, 2012; Norton et al., 2008). When probed for the reasons behind these differences, participants indicated that they did not want to appear biased in their evaluations, or they believed that they were unbiased. Additionally, researchers have found that White participants give more positive feedback and less criticism when evaluating work they believe originated from Black authors (Axt, 2017; Harber, 1998; Harber et al., 2012). For example, a recent study found that when White undergraduate participants were given poor quality essays written by a White or Black student, participants provided more lenient and positive feedback to the Black student and encouraged this student to pursue a career in journalism, despite the poor essay quality (Harber et al., 2019). However, White students received more substantive critical feedback with less encouragement to pursue a career in journalism due to the poor essay quality. Research has also found that Black students discount the positive feedback they receive from evaluators with a known pro-black bias (Britt & Crandall, 2000). It is therefore possible that Black students are aware of pro-Black bias in White

evaluators, and this awareness contributes to the group-value ambiguity that impairs an accurate internalization of positive feedback.

While they may discount and externalize positive feedback from White evaluators (i.e., a harmful attributional pattern), stigmatized groups tend to follow patterns of beneficial attributions when they receive positive feedback from an ingroup member (Crocker et al., 1991; Mendoza-Denton et al., 2010). Qualitative research suggests that Black college students do not experience group-value ambiguity with Black professors as they assume Black professors hold Black students to high standards (Guiffrida, 2005; Tuitt, 2012). Black students tend to perceive Black evaluators as more objective and more accurate than White evaluators due to a lack of prejudice or self-serving motives of appearing non-prejudiced (Banks et al., 1977; Coleman et al., 1991; Major et al., 2016). In previous research, Black students rated Black evaluators as more objective and less biased, independent of feedback type, (Banks et al., 1977; Coleman et al., 1991). Banks and colleagues (1997) also found that Black students were more likely to engage in positive behavioral change for a Black versus White evaluator after receiving negative feedback. Black evaluators may represent cultural familiarity and ingroup trust, and such representations may provide individuals the opportunity to make more accurate attributions of feedback (Kelley, 1973; Museus, 2014). This pattern indicates that marginalized populations may make attributions that are beneficial for future success when receiving feedback from a Black evaluator due to inherent assumptions that these evaluators value ingroup members. Additionally, as Black representatives of predominantly White institutions, Black evaluators may signal that Black people are valued and belong in spaces that they typically would not expect to be welcome.

Summary of the Problem and Dissertation Overview

Historically oppressed groups must synthesize new experiences through the lens of systemic and interpersonal stigma, with strong implications for their cognitive processes (Nadal et al., 2021). Predominant theories of cognitive reasoning suggest that people make causal attributions to new feedback experiences by referencing their previous experiences to predict expectations for future events (Weiner, 2010); however, the psychological research has yet to understand the attributions of marginalized people whose cognitive processes are shaped by these histories of oppression (e.g., stereotype threat; David et al., 2018; Fanon, 1965; Steele, 1997). Research examining these attributional processes in historically marginalized individuals is relatively new, with experimental studies demonstrating a clear gap in existing understandings of marginalized groups' internalizing processes. Considering causal attributions are associated with a slew of psychological, behavioral, and success markers, it is important to examine these processes in historically oppressed groups that have experienced deficits in these areas. In a series of three studies of Black/African American identifying adults, this dissertation uses a situational approach (Vispoel & Austin, 1995) to test three key assumptions of existing attributional theories of cognition and internalization among marginalized groups.

Study 1: How does stereotype threat influence internal attributions of hypothetical evaluative feedback?

Using a sample of 260 Black adults, study 1 tests lay theories that a) marginalized groups internalize negative feedback at greater rates than positive feedback, and b) these attributions are shaped by stereotype threat activated by the presence of a White (versus Black) evaluator. I expect that participants will follow existing theories of marginalized populations' attributions by

internalizing negative feedback, with greater internalization under stereotype threat as a reflection of perceived negative racial messages (i.e., White evaluator).

Study 2: How do internal attributions influence motivations to improve and feelings of general self-efficacy?

Among a sample of 261 Black adults, study 2 replicates and extends study 1 findings to understand associations between internal attributions of hypothetical feedback under stereotype threat and participants' hypothetical intentions to improve in the future and feelings of confidence in future success (i.e., general self-efficacy). I predict that a) participants will follow similar patterns to study 1 and internalize negative feedback at greater rates under stereotype threat. Due to existing research suggesting that internalizing negative feedback is predictive of poorer psychological well-being through demotivating attitudes (Hsieh & Schallert, 2008; Phares, 1957), I also predict that b) this internalization will be associated with lower motivations to improve and general self-efficacy.

Study 3: How do internal perceptions influence participants' internal attributions?

Finally, among a sample of 235 Black adults, study 3 examines whether individual beliefs contribute to internal attributions of feedback. Study 3 will a) replicate findings from studies 1 and 2, where participants are expected to internalize negative feedback at greater rates under stereotype threat. Study 3 will also examine b) whether feedback shapes participants' perceptions of evaluator bias. Existing research suggests that stigmatized groups may struggle to determine whether an evaluator is motivated by their own personal biases, particularly if the evaluator is from a majority group (Crocker & Major, 1989; Mendoza-Denton, 2014). Thus, I expect an interaction whereby participants will report the greatest perceptions of evaluator prejudice after negative feedback from a White evaluator. Finally, I will c) determine whether

these perceptions of evaluator prejudice are associated with internal attributions. Existing research suggests that perceptions of prejudice are both an internal and external process due to attributions to both one's own stigmatized identity and the evaluator's perceptions of that identity. Thus, I expect attributions to evaluator prejudice will be associated with internal attributions.

In summary, this dissertation uses experimental designs to test the causal mechanisms of stereotype threat and evaluative feedback for Black adults' internal attributions. Stereotype threat is induced by the evaluator's racial background (i.e., Black vs. White evaluators) and evaluative feedback is manipulated by the type of feedback that participants receive from evaluators (i.e., positive, negative, or neutral feedback). I address existing calls to expand the body of research for marginalized peoples' attributions through the use of hypothetical experiments that vary by context so as to understand causal attributions' trait-like implications for individual experiences (Graham, 2020). Additionally, I also address calls to focus on the experiences of individual stigmatized groups without comparison to majority (i.e., White) participants (Graham, 1994).

CHAPTER 2 Study 1

Based on existing theoretical models of underrepresented minorities' attributions (e.g., Fanon, 2008; Nadal et al., 2021; Weiner, 1997), I examine how contextual factors (i.e., evaluative feedback and stereotype threat) predict Black individuals' attributions of evaluative feedback. I propose the following hypotheses:

Hypothesis 1a and 1b) There will be significant main effects and interactions of evaluator race and feedback predicting internal attributions, whereby participants will make the greatest internal attributions to negative feedback from a White evaluator.

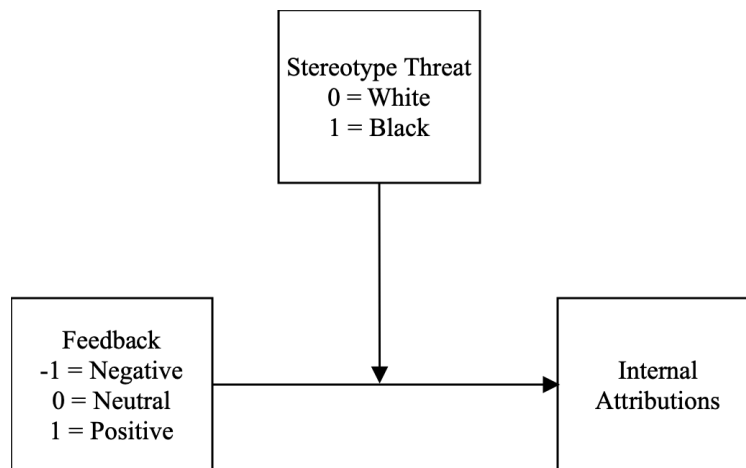


Figure 2.1. Study 1 Hypothetical model

Prominent theories of attribution state that individuals with adaptive attributional styles tend to engage in self-serving bias in which they internalize positive feedback at greater rates than negative feedback (Weiner, 2010). However, the attributional processes of historically marginalized peoples are shaped by histories of colonialism and White supremacy that have led

to the chronic internalization of harmful racial messages and maladaptive attributional styles (Amemiya & Wang, 2018; Collins et al., 2019; Nadal et al., 2021). Indeed, research suggests that historic minorities tend to attribute failures to internal reasons even when failure may be better explained by external reasons (e.g., innate ability versus systemic and institutional discrimination; Godfrey & Wolf, 2016). Well-established in correlational and longitudinal critical incident work (i.e., Jones et al., 2023; Swinton et al., 2011), this pattern may also lead Black adults to internalize negative feedback at greater rates than positive feedback across contexts (i.e., a hypothetical workplace situation). Furthermore, Black evaluators may be seen as more inherently trustworthy due to their ingroup status compared to White evaluators, who might activate stereotype threat. I therefore hypothesize that this trust may lead participants to demonstrate more beneficial patterns of attribution with a Black evaluator, where they will make more internal attributions to positive feedback than negative feedback at greater rates than those with a White evaluator.

Participants

A-priori power analysis using G*power was conducted to determine study sample size (Faul et al., 2009). In G*power, I calculated the sample size for an analysis of covariance (ANCOVA) to examine fixed, main, and interaction effects with power $(1 - \beta)$ set at .95 and $\alpha = .05$ to detect a small to medium effect ($f^2 = .06$; Cohen, 1988). G*power analysis indicated that at least 246 participants were required to test the interaction with 3 covariates. Thus, I recruited 260 Black/African American identifying adults ($M_{age} = 32$, 54% male) via Prolific survey software. Participants self-reported their age ($M = 32$, $SD = 9.06$) which ranged from 18 to 63, and gender. Out of the total sample, 140 (53.6%) identified as male and 121 (46.4%) identified as female. Participants were mostly well-educated, with 3 (1%) reported completing some high

school, 21 (12%) reported earning a high school diploma, 5 (1.9%) having technical/trade/vocational training, 9 (3.4%) earned an associate's degree, 33 (12.6%) having completed some college, 99 (37.9%) having earned a bachelor's degree, 72 (27.6%) having earned a master's degree, 3 (1.1%) having earned a professional degree, and 6 (2.3%) having earned a doctorate degree.

Procedure

Participants were invited to complete the "Evaluator Feedback Study," a 10-minute survey about how individuals react to workplace feedback. Using a 2 (White or Black evaluator) x 3 (positive, neutral, or negative feedback) online experimental design, participants first completed a brief survey where they reported demographics and completed a measure of the imposter phenomenon. Next, participants were prompted to imagine they have been at a job for 6 months and it is time for a performance review. Participants were then randomly assigned to read a brief email and hypothetical evaluation from a Black or White evaluator depicting positive, negative, or neutral feedback. Finally, participants completed the revised causal dimensions scale to measure internal and external attributions.

Measures

Evaluator's Race Manipulation (Stereotype Threat)

The gender-matched race of the evaluator was manipulated by an icon next to an email message. Male participants received an email from "Patrick Felds" while females received an email from "Pat Felds," with a professional profile picture of either a White or Black man/woman (see appendix A).

Feedback Manipulation

Participants were randomly assigned to receive positive, negative, or neutral hypothetical performance feedback. An evaluation sheet rated the interpersonal skills, teamwork, analytical skills, technical competence, professionalism, and reliability of the employee's performance, along with a matching written response. For each skill, the evaluator checked off that the employee's performance is either below expectations, meets expectations, or exceeds expectations. In the negative feedback condition, all skills were marked off as below expectations with one skill marked as meets expectations, with a comment at the bottom stating that the employee's performance was unsatisfactory and did not meet the company's needs. For the neutral feedback condition, the evaluator checked off every skill as meets expectations, with one skill at exceeds expectation and another at below expectations, with a comment at the bottom stating that the employee's performance was adequate, competent, and satisfactory. Finally, in the positive feedback condition, all skills were marked as exceeds expectations with one skill being marked as meets expectations, with a comment at the bottom stating that the employee's performance was beyond satisfactory, unparalleled professionalism and knowledge, and was a great asset to the company. See appendices B, C, and D for feedback manipulation materials.

Internal Attributions

McAuley et al.'s (1992) Causal Dimensions Scale II (CDS-II) was used to measure the extent of participants' attributions on a scale ranging from internal, controllable attributions at the high end to external and uncontrollable attributions at the low end (see appendix E). Participants were first asked "without thinking too hard about it, briefly state what you believe is the most likely cause of this performance evaluation." After answering this open response question, participants were asked, "on a scale from 9-1, is the cause something..." before completing the 12 item CDS-II scale. The CDS-II consists of 4 subscales: *locus of causality*

(reflects an aspect of yourself... reflects an aspect of the situation), *external control* (over which others have control... over which others have no control), *stability* (permanent... temporary), and *personal control* (manageable by you... not manageable by you). Scores were then averaged together for a mean measure of internal attributions, with larger values indicating internal, stable attributions and smaller values indicating external, unstable attributions. Participant scores ranged from 1 to 9. This scale showed adequate reliability among this sample ($\alpha = .82$) and reflects reliability coefficients found in previous research among Black/African American identifying samples (Naidoo et al., 1998).

Data Analysis

Data were analyzed using SPSS v. 29. First, descriptive statistics and bivariate correlations were conducted. Next, a 2 x 3 ANOVA model was used to understand the main effects of evaluator race (White vs. Black) and feedback (Positive, Neutral, Negative) predicting internal attributions. Upon significant omnibus results, Tukey’s honestly significant difference (HSD) test was used to determine significant pairwise differences (Abdi & Williams, 2010).

Covariates (i.e., age and education) were not significantly associated with outcome variables and there were no significant gender differences in internal attributions ($F(1, 260) = .33, p = .56$).

Results

Table 2.1. Means, standard deviations, and bivariate correlations

Variable	Mean	SD	1	2	3	4	5
1. Age	31.7	9.1	-				
2. Gender	1.5	0.5	-0.01	-			
3. Education	5.6	1.7	0.26***	0.07	-		
4. Feedback	0.0	0.8	0.00	-0.03	0.03	-	
5. Evaluator Race	0.5	0.5	-0.04	0.00	0.01	-0.01	-
6. Internal Attributions	4.6	1.4	-0.03	0.04	-0.02	-0.39***	-0.04

*** $p < 0.001$ level (2-tailed); * $p < .05$; $N = 261$
 Feedback: -1 = Neutral, 0 = Neutral, 1 = Positive; Evaluator Race 0 = White, 1 = Black
 Gender: 2 = Female, 1 = Male

Hypothesis 1a: There will be significant main effects of evaluator race and feedback predicting internal attributions, where participants will make more internal attributions to negative feedback and to feedback from a Black evaluator compared to positive feedback and feedback from a White evaluator.

Findings partially supported my hypothesis, and there was a main effect of feedback type predicting participants' internal attributions ($F(2, 260) = 23.69, p < .001$). Tukey's HSD test revealed significant group differences. Specifically, participants in the negative feedback condition made greater internal attributions compared to those in the positive and neutral feedback conditions. The main effect of evaluator race predicting internal attributions was not significant ($F(1, 260) = 0.47, p = .43$).

Table 2.2. Means of internal attributions by condition

	N	M	SD
Black Negative ^{c, e, f}	44	5.23	1.34
Black Neutral ^d	41	4.47	1.15
Black Positive ^{a, d}	44	4.00	1.11
White Negative ^{b, c, e, f}	44	5.45	1.34
White Neutral ^{a, d}	43	4.43	1.16
White Positive ^{a, d}	44	4.16	1.40

a (different from Black Negative)

b (different from Black Neutral)

c (different from Black Positive)

d (different from White Negative)

e (different from White Neutral)

f (different from White Positive)

Hypothesis 1b: There will be a significant interaction between evaluator race and feedback predicting internal attributions, with participants internalizing feedback from a White evaluator

at greater rates, with stronger associations when this negative feedback is from a White evaluator.

Hypothesis 1b was not supported and there was no significant interaction between evaluator race and feedback type predicting internal attributions ($F(2, 260) = 0.25, p = .78$)

Table 2.3. One-way ANOVA table predicting internal attributions

Variable	df	F	Sig.
Feedback	2	23.69	<.001
Black	1	0.47	0.43
Feedback * Black	2	0.25	0.78

a. R Squared = .159 (Adjusted R Squared = .143)
 $df_{between} = 5, df_{within} = 255, df_{total} = 260$

Discussion

Study 1 findings provided support for existing attribution theory for stigmatized groups and add to our understanding of situational causal attributions of feedback under stereotype threat as conceptualized by the presence of a White versus Black evaluator. First, findings supported my hypothesis that historically oppressed populations, in this case Black/African American adults, tend to make internal, stable attributions to negative evaluative feedback. In support of existing research (e.g., Jones et al., 2023; Swinton et al., 2011), historically marginalized populations tended to follow maladaptive attributional patterns by internalizing negative feedback at greater rates than positive feedback. By examining attributions to both positive and negative feedback in an experimental setting, this study supports research regarding stigmatized group’s chronic internalizing attributions (David et al., 2019; Nadal et al., 2021).

However contrary to existing research, I found that these attributions did not vary by the presence of a White or Black evaluator. A slew of research finds that environmental and contextual cues, such as institutional diversity or evaluator race, may activate stereotype threat

by reminding stigmatized groups of stereotypes of intellectual inferiority, prompting poor performance, institutional distrust, and maladaptive attributions (Crocker & Major, 1989; Mendoza-Denton, 2014; Steele, 1997). However, the present findings do not align with previous research. Because participants' internal attributions were not associated with the evaluator's race, it is possible that participants truly do not account for the evaluator's race when considering how to attribute the causes of events. However, it is also possible that this lack of difference reflects nascent theories that racial experiences are both an internal and external process for underrepresented groups (Major & Eliezer, 2011; Remedios et al., 2020). Participants may have internalized feedback the same regardless of stereotype threat, although the content of these attributions may have varied. It is possible that negative feedback from a Black evaluator may be internalized as a reflection of low ability *and* trusted as a reflection of the evaluator's desire to improve one's own performance. Meanwhile, the internalization of negative feedback from a White evaluator may reflect perceptions of low ability and the belief that the feedback is the result of one's stigmatized status. It remains unclear whether this internalization is associated with maladaptive outcomes as suggested by prominent attributional theories (Weiner, 2010).

CHAPTER 3 Study 2

Study 2 expands upon Study 1 findings to include implications for improvement motivations and general self-efficacy. In study 1, feedback from a White or Black evaluator was internalized to similar degrees; however, it is unclear whether these theoretically maladaptive attributions have similar implications for improvement and general self-efficacy.

Hypotheses 1a and 1b. First, I expect to replicate findings from Study 1. There will be a main effect of evaluator feedback predicting internal attributions but not evaluator race, and there will not be an interaction between study variables. Study 1 findings established that Black adults were more likely to make internal attributions to negative feedback regardless of evaluator race. This finding will support Nadal and colleagues' (2021) theory of internalization among stigmatized groups, suggesting that Black people may be predisposed to theoretically harmful attribution styles by internalizing negative, but not positive experiences.

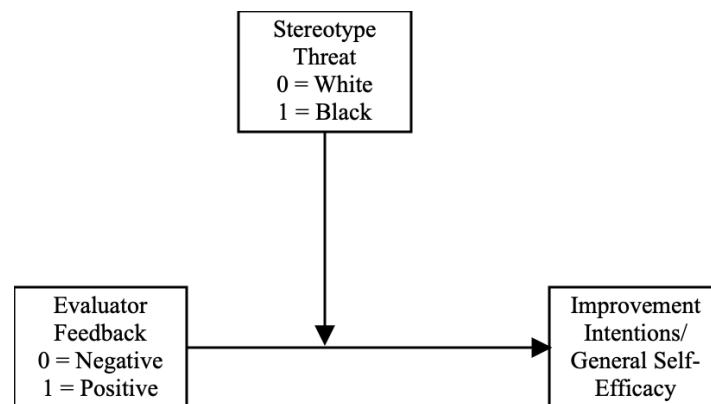


Figure 3.1. Analytical model for study 2 hypotheses 2a, 2b, 3a, and 3b

Hypotheses 2a and 2b. There will be main effects and a 2-way interaction between evaluator race and feedback predicting improvement motivations. Specifically, I expect that negative feedback will be associated with greater improvement motivations, particularly when this feedback is from a Black evaluator. Confirmation of these hypotheses would support existing findings that feedback from an ingroup evaluator is perceived as more trustworthy than from an out-group evaluator (i.e., Crocker et al., 1991; Mendoza-Denton, 2014).

Hypotheses 3a and 3b. There will be main effects and a 2-way interaction predicting general self-efficacy, whereby positive feedback from a Black evaluator will be associated with the greatest general self-efficacy. I anticipate that participants will feel more confident in the veracity of the hypothetical feedback, particularly from a Black evaluator, resulting in a higher general self-efficacy after positive feedback when compared to feedback from a White evaluator.

Hypothesis 4. Internal attributions will mediate the association between condition and improvement intentions, whereby participants who received negative feedback from a Black evaluator will report greater internal attributions, which will be associated with greater improvement motivations. While participants may internalize feedback from a Black and White evaluator at similar rates, the downstream implications of this internalization may vary, considering research that contextual differences influence the efficacy of causal attributions. For instance, in Houston's (2016) study, institutional differences provided contextual cues that made prototypically "maladaptive" attributional patterns beneficial for students in high achieving, but not low achieving schools. In line with research that stigmatized groups tend to inherently trust evaluations from ingroup members at greater rates than outgroup members (e.g., McClain & Cokley, 2017), I expect that participants will report greater improvement motivations and general self-efficacy when feedback is from a Black (versus White) evaluator. Specifically, internal

attributions of a Black evaluator’s feedback may prove beneficial, while internal attributions of a White evaluator’s feedback may be harmful (see figure 3.2).

Hypothesis 5. Internal attributions will mediate the association between condition and general self-efficacy, where participants who received positive feedback from a Black evaluator will report greater internal attributions, which will be associated with greater general self-efficacy. Confirmation of this hypothesis would support previous research which suggests that positive feedback from a same-raced evaluator may be deemed more trustworthy and a greater reflection of individual ability compared to an outgroup evaluator (i.e., Crocker et al., 1991; see figure 3.2).

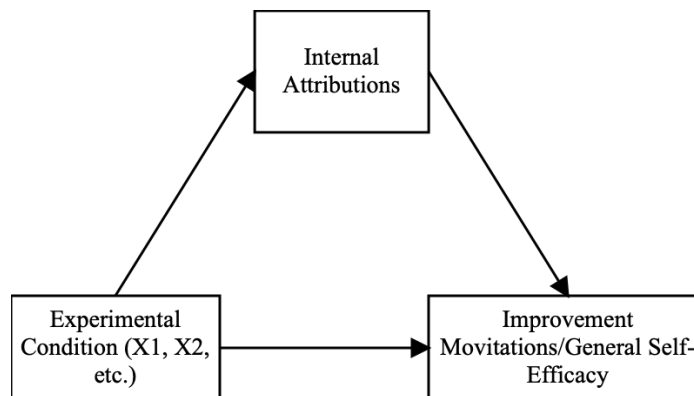


Figure 3.2. Analytical model for study 2 hypotheses 4 and 5.

X1. 0 = Black/Negative, 1 = Black/Positive. X2. 0 = Black/Negative, 1 = White/Negative. X3. 0 = Black/Negative, 1 = White/Positive X4. 0 = White/Negative, 1 = Black Positive. X5. 0 = White/Negative, 1 = White/Positive. X6. 0 = White/Positive, 1 = Black/Positive

Participants

Similar methods to study 1 were used for participant recruitment. A-priori power analysis using G*power was once again conducted to determine study sample size (Faul et al., 2009). In G*power, I calculated the sample size for an analysis of covariance (ANCOVA) to examine fixed, main, and interaction effects with power $(1 - \beta)$ set at .95 and $\alpha = .05$ to detect a small to medium effect ($n^2 = .06$; Cohen, 1988). G*power analysis indicated that at least 220 participants were required to test the two-way interaction with 3 covariates. The current sample consists of

261 (68% Female; $M_{\text{age}} = 31.56$) Black/African American identifying adults secured via Prolific survey software. Participants were mostly well-educated, with 18% having some or completed high school, 13% holding a trade or associate's degree, 26% having some college experience, 32% completing a bachelor's degree, and 11% having a master's degree or higher.

Procedure

The present study slightly deviates from study 1 in that, instead of completing the evaluator feedback study, participants were invited to complete the “Essay Feedback study.” Upon consenting to take the 10-minute survey, participants reported demographic questions for their gender, ethnicity, primary racial group identification, and education status. Participants then were instructed to pretend to be a Black undergraduate student who has just received feedback from a professor. Participants were also informed that most essays received ratings of “meets expectations.” Participants were randomly assigned to an experimental condition using a 2 (White or Black evaluator) x 2 (positive or negative feedback) online experimental design. First participants read an email from a gender matched professor who was either White or Black (see Appendix E). An evaluation sheet rated the focus, organization, word choice, ideas, and grammar/spelling of the hypothetical essay and included a comment from the professor. Similar to study 1, marks for the negative feedback conditions were all below expectations while marks for the positive feedback conditions were all exceeds expectations except for a single meets expectations for grammar/spelling in each condition (see Appendix for manipulation materials). Participants then completed the post-test, where they reported their causal attributions, improvement motivations, and general self-efficacy.

Measures

Internal Attributions

Like study 1, McAuley et al.'s (1992) Causal Dimensions Scale II (CDS-II) was used to measure the extent of participants' internal attributions by computing the mean score of 12 items. Average participant scores ranged from 1 to 8.17 and again, scale reliability was decent at $\alpha = .73$.

Improvement Motivations

Participants also completed a measure of their motivations to improve. This 5-item scale was adapted from existing studies of improvement motivations (i.e., Ni & Huo, 2018) and measured participants' desires to improve on a scale of 1 (*Extremely Unlikely*) to 5 (*Extremely Likely*). Participants were asked "Based on your essay feedback, how likely are you to... Change your study habits for the next essay" and "...Follow up with your professor about this essay?" Mean scores were computed such that higher values indicated greater improvement motivations. Reliability was good at .88, participant scores ranged from 1 to 5 ($M = 3.36, SD = 1.27$).

General self-efficacy

Self-efficacy was measured using Schwarzer and Jerusalem's (1995) 10-item Generalized self-efficacy scale. Participants were asked to indicate the extent to which they believe each of the following statements is true as if they had received the professor's feedback on a scale from 1 (*Not at all true*) to 4 (*Exactly True*). Sample items include "I could always manage to solve difficult problems if I try hard enough," and "If someone opposed me, I could find the means and ways to get what I want." Mean scores were computed such that higher values indicated greater general self-efficacy. Reliability was good at .92 and participant scores ranged from 1.10 to 4 ($M = 3.10, SD = 0.55$).

Data analysis

Hypothesis testing was conducted using SPSS v.29. Descriptive statistics and bivariate correlations were conducted. Next, similar to study 1, I conducted an ANOVA to test the mean

differences between groups to determine whether results from study 1 replicate. I also conducted an ANOVA to test the interaction between feedback type and evaluator’s race for each outcome variable (i.e., improvement and self-efficacy). To test hypotheses 4 and 5 regarding the mediating role of internal attributions for improvement attitudes and general self-efficacy, I used model 4 of Process macro was used in SPSS v.29.

In the mediation models, the variable for the experimental conditions was entered as multiple multicategorical indicator variables to compare each condition to each other. In total, six dummy coded comparisons were performed to compare each experimental condition to each other in the analytical model (e.g., X1, X2, X3). X1 compared the Black evaluator providing negative feedback condition (0) to the Black evaluator providing positive feedback condition (1). X2 compared the Black evaluator providing negative feedback condition (0) to the White evaluator providing negative feedback condition (1). X3 compared the Black evaluator providing negative feedback condition (0) to the White evaluator providing positive feedback (1) condition. X4 compared the White evaluator providing negative feedback condition (0) to the Black evaluator providing positive feedback condition (1). X5 compared the White evaluator providing negative feedback condition (0) to the White evaluator providing positive feedback condition (1). And finally, X6 compared the White evaluator providing positive feedback condition (0) to the Black evaluator providing positive feedback condition (1).

Results

Table 3.1. Means, standard deviations, and bivariate correlations

Variable	M	SD	1	2	3	4	5	6	7
1. Age	31.56	12.20							
2. Gender	1.32	0.47	-0.01						
3. Education	4.83	1.66	.18**	-0.01					
4. Feedback	0.51	0.50	-0.11	-0.11	0.05				
5. Evaluator Race	0.50	0.50	-0.10	-0.06	0.03	0.00			

6. Internal Attributions	4.58	1.14	-0.05	0.05	-0.01	-.33**	-0.09		
7. Improvement	4.49	1.83	.176**	0.12	0.03	-.763**	0.06	.296**	
8. General Self-Efficacy	3.10	0.55	0.08	-0.03	.131*	-0.09	0.02	-0.08	.22**

**p < 0.01 level (2-tailed); *p < .05; N = 261. Gender: Male = 1, Female = 2. Feedback. 0 = Negative, 1 = Positive
Evaluator Race. 0 = White, 1 = Black

Hypothesis 1a: There will be main effects of evaluator feedback and race predicting internal attributions. Like study 1, negative feedback will be associated with more internal attributions.

Findings confirm hypothesis 1a, in that there was a significant main effect of evaluator feedback predicting internal attributions, similar to study 1 ($F(1, 261) = 31.68, p < .001$). Once again, the main effect of evaluator race was not significant ($F(1, 261) = 2.50, p = .115$).

Participants made greater internal attributions to negative feedback compared to positive feedback, regardless of the evaluator’s race.

Table 3.2. Means of internal attributions, improvement motivations, and general self-efficacy by experimental condition

	N	Internal Attributions		Improvement		Self-Efficacy	
		M	SD	M	SD	M	SD
Black Negative	65	4.84 ^{b, d}	0.97	5.95 ^{b, d}	1.02	3.20	0.50
Black Positive	64	4.11 ^{a, c}	1.22	3.22 ^{a, c}	1.50	3.02	0.59
White Negative	65	5.07 ^{b, d}	1.03	5.84 ^{b, d}	0.98	3.10	0.61
White Positive	67	4.30 ^{a, c}	1.09	2.99 ^{a, c}	1.19	3.08	0.49

a (different from Black Negative)
b (different from Black Positive)
c (different from White Negative)
d (different from White Positive)

Hypothesis 1b: There will not be a significant interaction between evaluator race and feedback predicting internal attributions.

Similar to study 1, there was no significant interaction of evaluator race and feedback predicting internal attributions ($F(1, 261) = 0.03, p = .87$).

Hypothesis 2a: There will be main effects of evaluator race and feedback condition predicting participants' improvement intentions, with greater improvement motivations among those who receive negative feedback from a Black evaluator.

Findings partially supported my hypothesis. There was no significant main effect for evaluator race predicting improvement motivations ($F(1, 261) = 1.30, p = .26$); however, the main effect of feedback was significant ($F(1, 261) = 360.22, p < .001$). Participants reported greater motivations to improve after negative feedback compared to positive feedback, regardless of evaluator race.

Hypothesis 2b: There will be a significant interaction of evaluator race and feedback type predicting participants' improvement intentions.

Findings did not support my hypotheses, and the interaction was not significant ($F(1, 261) = 0.13, p = .72$).

Hypothesis 3a: There will be significant main effects of evaluator race and feedback predicting participants' general self-efficacy

Findings did not support my hypothesis, and neither evaluator race ($F(1, 261) = 0.07, p = .80$) nor feedback ($F(1, 261) = 2.17, p = .14$) predicted participants' academic self-efficacy.

Hypothesis 3b: There will be significant interaction of evaluator race and feedback predicting academic self-efficacy.

Findings did not support my hypothesis, and the interaction was not significant ($F(1, 261) = 1.16, p = .28$).

Table 3.3. One-way ANOVA table predicting internal attributions, improvement motivations, and general self-efficacy

Independent Variables	Dependent Variable	F	Sig.
Feedback	Internal Attributions	31.68	<.001

	Improvement	360.22	<.001
	General Self-Efficacy	2.17	0.14
Evaluator Race	Internal Attributions	2.50	0.12
	Improvement	1.30	0.26
	General Self-Efficacy	0.07	0.80
Feedback * Evaluator Race	Internal Attributions	0.03	0.87
	Improvement	0.13	0.72
	General Self-Efficacy	1.16	0.28

a. R Squared = .117 (Adjusted R Squared = .107)

b. R Squared = .585 (Adjusted R Squared = .580)

c. R Squared = .013 (Adjusted R Squared = .001)

$df_{\text{b/w}} = 3$, $df_{\text{within}} = 257$, $df_{\text{total}} = 260$

Hypothesis 4: The association between condition and improvement motivations will be explained by participants' internal attributions, where participants who received negative feedback will report greater internal attributions, which will be associated with lower improvement motivations.

Findings from a mediation analysis did not support my hypothesis. Reflecting results from the one-way ANOVA, participants reported greater internal attributions when the reference group was a Black evaluator providing negative feedback compared to the those in the positive feedback groups (X1, Black evaluator, $b = -0.73$, $SE = .19$, $p < .001$; X3, White evaluator, $b = -0.54$, $SE = .19$, $p = .004$). Participants also reported greater internal attributions when the reference group was a White evaluator providing negative feedback compared to those in the positive feedback groups (X4 Black evaluator, $b = -0.96$, $SE = .19$, $p < .001$; X5 White evaluator, $b = -0.78$, $SE = .19$, $p < .001$). Internal attributions were not, however, associated with improvement attitudes ($b = 0.06$, $SE = .05$, $p = .20$) and there were not significant indirect effects predicting improvement attitudes (See table 3.4).

Hypothesis 5: Internal attributions will mediate the association between condition and academic self-efficacy, where participants who received negative feedback will report greater internal attributions, which will be associated with lower academic self-efficacy.

Findings did not support my hypothesis, and there were no significant indirect effects predicting general self-efficacy, and internal attributions did not predict general self-efficacy $b = -0.06$, $SE = .03$, $p = .07$. However, there were relative direct effects. Specifically, when accounting for the nonsignificant contributions of internal attributions, participants in the Black evaluator providing negative feedback condition reported significantly less general self-efficacy than those in the Black evaluator providing positive feedback condition ($b = -0.21$, $SE = .10$, $p = .04$; see table 3.4 for full mediation results).

Table 3.4. Mediation results for experimental conditions and internal attributions predicting improvement attitudes and general self-efficacy

Predictor	Internal Attributions			Improvement Attitudes			General Self-Efficacy		
	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>
X1	-0.73	0.19	<.001	-1.88	0.15	<.001	-0.07	0.10	.47
X2	0.23	0.19	.22	-0.10	0.14	.47	0.09	0.10	.35
X3	-0.54	0.19	0.004	-2.05	0.14	<.001	-0.08	0.10	.39
X4	-0.96	0.19	<.001	-1.78	0.15	<.001	-0.08	0.10	.39
X5	-0.77	0.19	<.001	-1.94	.15	<.001	-.03	0.10	.78
X6	-0.19	0.19	.32	-0.17	0.14	0.24	-0.07	0.10	.49
Internal Attributions				0.06	0.05	0.20	-0.06	0.03	.07
Direct Effects									
Predictor				<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>
X1				-1.89	0.15	<.001	-0.22	0.10	.03
X2				-0.1	0.14	.45	-0.08	0.10	.42
X3				-2.05	0.14	<.001	-0.15	0.10	.13
X4				-1.78	0.15	<.001	-0.14	0.10	.17
X5				-1.94	0.15	<.001	-0.07	0.10	.47
X6				0.17	0.14	.24	0.15	0.10	.13
Indirect effects									
Predictor	Improvement Attitudes				General Self-Efficacy				
	<i>b</i>	Boot SE	Boot LLCI	BootULCI	<i>b</i>	Boot SE	Boot LLCI	BootULCI	
X1	-0.05	0.04	-0.13	0.03	0.04	0.03	-0.01	0.10	
X2	0.01	0.02	-0.05	0.01	-0.01	0.01	-0.05	0.01	
X3	-0.03	0.03	-0.10	0.02	0.03	0.02	-0.01	0.08	
X4	-0.06	0.05	-0.16	0.03	0.05	0.03	-0.01	0.13	
X5	-0.05	0.04	-0.13	0.03	0.08	0.05	-0.01	0.19	
X6	-0.01	0.02	-0.06	0.02	0.01	0.01	-0.01	0.05	

N = 260. X1. 0 = Black/Negative, 1 = Black/Positive. X2. 0 = Black/Negative, 1 = White/Negative. X3. 0 = Black/Negative, 1 = White/Positive X4. 0 = White/Negative, 1 = Black Positive. X5. 0 = White/Negative, 1 = White/Positive. X6. 0 = White/Positive, 1 = Black/Positive

Discussion

Results from study 2 add to the existing research regarding our understanding of Black Americans' attributions. First, I provided additional support for marginalized groups' chronic internalization of negative feedback from study 1. These findings once again indicate that stigmatized groups are vulnerable to theoretically maladaptive attributions of feedback. This outcome is notable considering the hypothetical feedback context change from a workplace evaluation in study 1 to academic essay feedback in study 2. The identical results' occurring despite the switch from a hypothetical occupational situation to a hypothetical academic situation, suggests that these attributional patterns may be generalizable across hypothetical contexts among Black adults.

Next, I found that negative feedback was associated with greater motivations to improve, though evaluator race did not influence these associations. In each comparison, the negative feedback group had more motivations to improve regardless of evaluator race. These findings are intuitive considering the nature of the improvement motivations scale, which may be more applicable for those who receive negative feedback and, therefore, have more motivation to utilize behaviors that would change their outcome. The lack of significant differences by evaluator race suggest that, contrary to previous research, participants trusted the motivations of the negative feedback from both evaluators.

Findings also indicated that participants' general self-efficacy were similar across all experimental conditions. Thus, it appears that their hypothetical confidence in their abilities were unaffected by their feedback experiences. These findings support research that stigmatized groups may separate their sense of self from performance evaluations due to previous

experiences of prejudice and beliefs that this feedback is due to those perceptions of prejudice (i.e., Britt & Crandall, 2000; Harber et al., 2012). These findings are supported by existing theories and research indicating that Black Americans tend to report greater amounts of self-esteem compared to other racial and ethnic groups despite theories of internalized inferiority (i.e., Nadal et al., 2021; James, 2021).

The lack of significant indirect effects further supports the existing theories that stigmatized groups do not connect evaluative feedback to their beliefs about themselves (i.e., Durkee et al., 2021; Strayhorn, 2009). Though participants internalized negative feedback at greater rates than positive, this internalization was not associated with improvement motivations nor general self-efficacy beliefs. This pattern goes against some findings that suggest internal attributions of negative feedback are associated with demotivation and poor self-efficacy (Phares, 1957; Rotter, 1966; Weiner, 2010). Additionally, stigmatized groups may trust that feedback from ingroup members is due to perceptions of high expectations, while they may distrust feedback from outgroup members due to perceptions of bias (Crocker et al., 1991; Guiffrida, 2005; Tuitt, 2012). Considering Houston's (2016) cross-sectional findings that internal attributions to negative feedback are beneficial in contexts where high performance expectations are overt, it is possible that stigmatized groups may not automatically perceive hypothetical feedback from ingroup members as an indication of high expectations. Overall, it appears that participants' internalization of evaluative feedback may have little to do with their actual performance outcomes, prompting questions regarding other ways participants may be internalizing this feedback.

CHAPTER 4 Study 3

Studies 1 and 2 clarified that a) Black adults follow prototypical maladaptive attribution styles, and b) these attributions do not have significant implications for improvement motivations or self-efficacy beliefs. These findings may support previous research findings in which marginalized individuals did not allow their personal or outsiders' beliefs about their marginalized identities to interfere with their views about themselves and their own potential for success. Instead, it is possible that these attributions reflect participants' awareness of their stigmatized identity, a process that may prompt both internal and external attributions (Remedios et al., 2020). To further understand stigmatized groups' internal attributions to feedback, study 3 will examine whether feedback and internal attributions are associated with perceptions of evaluator prejudice.

Hypotheses 1a and 1b: Replication of studies 1 and 2 main effects/interactions predicting internal attributions.

Hypotheses 2a and 2b: There will be a significant main effect and interaction between evaluator race and feedback predicting participants' perceptions of evaluator prejudice, with greater perceptions of evaluator prejudice after receiving negative feedback and among those with a White evaluator.

Due to previous experiences with racism and an awareness that outgroup members may make overt efforts to avoid appearing anti-biased, I expect that Black participants will

demonstrate self-protective strategies in response to negative feedback from a White evaluator where they will hold greater perceptions of evaluator prejudice. These findings would support previous research findings that marginalized populations may be more likely to make self-serving attributions in the face of failure (e.g., Crocker et al., 1991; Ni & Huo, 2018). However, research also suggests that marginalized individuals may attribute both positive and negative feedback from a White evaluator to pro-Black or anti-Black bias (Hoyt et al., 2007). Nonetheless, I expect that participants in the negative feedback, White evaluator condition to report greater perceptions of evaluator prejudice.

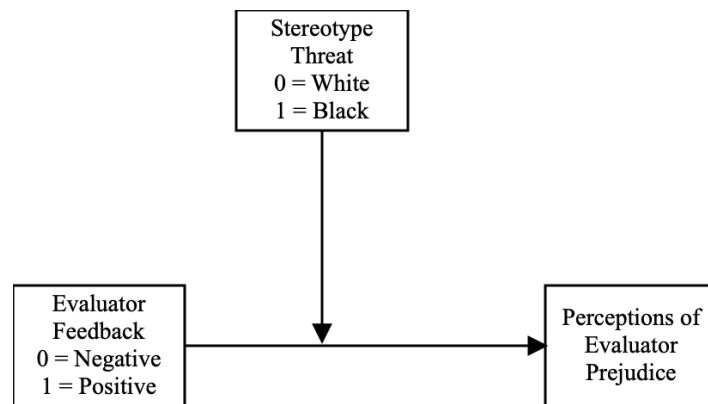


Figure 4.1. Analytical model for study 3 hypotheses 2a and 2b

Hypothesis 3: The association between experimental conditions and internal attributions will be mediated by perceptions of evaluator prejudice, with negative feedback from a White evaluator being associated with greater perceptions of evaluator prejudice, which in turn will be associated with lower internal attributions.

So far, this dissertation has established that Black adults tend to make prototypically maladaptive attributions, but these attributions do not influence cognitions that may directly impact their own success. However, it remains unclear whether this internalization is informed by one’s interpretation of the evaluator’s motives for providing this feedback. Existing research is uncertain whether perceptions of bias are an internal or external process for stigmatized

groups; however, recent findings suggest that self-blame may prompt greater internalization of discrimination (Blodorn et al., 2016). I therefore expect that participants who receive negative feedback from a White evaluator will have the greatest perceptions of evaluator prejudice, which in turn will be associated with the internalization of feedback. Findings will clarify the extent to which participants may believe that their feedback is due to an evaluator’s biases about Black people while simultaneously blaming this bias on internal processes.

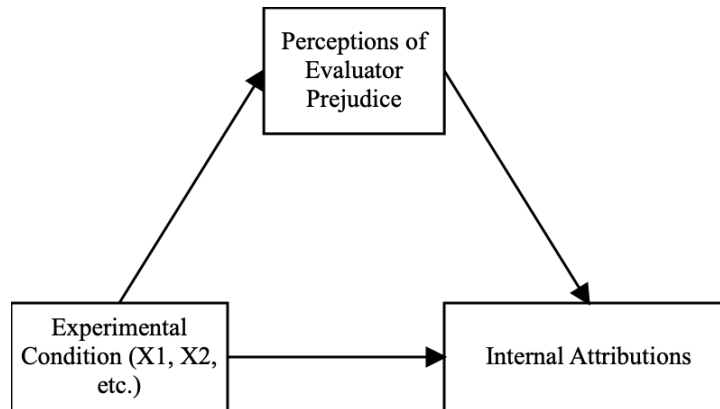


Figure 4.2: Analytical model for study 3 hypothesis 5

Participants & Procedures

Study 3 participants and procedures were similar to the essay feedback design in studies 1 and 2. The total sample consisted of 235 Black/African American identifying adults between the ages of 18 and 67 years old, recruited via Prolific survey software (51% Female; $M_{age} = 39.65$, $SD = 12.60$). Participants had similar educational backgrounds as previous studies, with 13% having a high school diploma, 13% holding a vocational or associate’s degree, 64% reporting some or a completed bachelor’s degree, and 10% reporting a master’s degree or higher. Covariates were not associated with outcome variables and were thus removed from the analyses.

Measures

Internal Attributions

Internal attributions were measured using the CDS-II, similar to studies 1 and 2. Average participant scores ranged from 1 to 8.3 and, again, scale reliability was good at .78.

Perceptions of Evaluator Bias

To evaluate participants' perceptions of evaluator's anti-Black bias, a 4-item scale was used. Scale items were adapted from Ni and Huo's (2018) measure of attributions of feedback to gender scale to be used for Black participants' perceptions of the evaluator's views about Black people. Participants were asked the extent to which they agree or disagree with each item, with sample items including "This professor's feedback was based on the student's race," and "The professor's feedback reflects their views about Black students." Items were measured on a scale of 1 (*Strongly disagree*) to 5 (*Strongly agree*). Mean scores were computed such that higher values indicated greater perceptions of evaluator bias, with participant scores ranging from 1 to 5 ($M = 2.11, SD = 1.01$). Reliability was good at .85.

Data Analysis

Similar analytical methods were used as in Study 2 to test all hypotheses. Hypothesis testing was conducted using SPSS v.29. Descriptive statistics and bivariate correlations are reported in Table 4.1. First, I conducted an ANOVA to replicate hypotheses 1a and 1b from studies 1 and 2. Next, I conducted an ANOVA to test hypotheses 2a and 2b regarding the interaction between feedback type and evaluator race to predict perceptions of evaluator prejudice. Finally, to test hypothesis 3, I used model 4 of Hayes' PROCESS Macro to understand whether internal attributions mediates the association between conditions and perceptions of evaluator prejudice. Dummy codes were created to compare each condition to each other in the analytical model (e.g., X1, X2, X3). X1 compared the White evaluator providing negative feedback condition (0) to the White evaluator providing positive feedback condition (1). X2 compared the White evaluator providing negative feedback condition (0) to the Black evaluator

providing negative feedback condition (1). X3 compared the White evaluator providing negative feedback condition (0) to the Black evaluator providing positive feedback condition (1). X4 compared the Black evaluator providing negative feedback condition (0) to the White evaluator providing positive feedback condition (1). X5 compared the Black evaluator providing negative feedback condition (0) to the Black evaluator providing positive feedback condition (1). Finally, X6 compared the Black evaluator providing positive feedback condition (0) to the White evaluator providing positive feedback condition (1).

Table 4.1. Means and standard deviations of internal attributions and perceptions of evaluator prejudice by experimental condition

	Internal Attributions			Perceptions of Prejudice	
	N	M	SD	M	SD
Black Negative	57	4.84	1.17	2.05 ^c	1.01
Black Positive	58	3.89	1.35	1.76 ^c	0.76
White Negative	60	4.88	1.14	2.63 ^{a, b, d}	1.12
White Positive	60	4.05	1.22	2.00 ^c	0.9

a (different from Black Negative)
b (different from Black Positive)
c (different from White Negative)
d (different from White Positive)

Results

Table 4.2. Means, standard deviations, and bivariate correlations

Variable	M	SD	1	2	3	4	5	6
1. Age	39.65	12.60						
2. Gender	1.49	0.50	-.22**					
3. Education	5.10	1.55	.17**	-.05				
4. Evaluator Race	0.49	0.50	-.04	.11	.02			
5. Feedback	0.50	0.50	-.06	-.05	.03	.00		
6. Perceptions of Prejudice	2.11	1.01	.13	.07	.06	-.20**	-.23**	
7. Internal Attributions	4.42	1.30	.05	.07	.09	-.04	-.35**	.42**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Gender: 1 = Male, 2 = Female. Evaluator Race: 0 = White, 1 = Black

Hypothesis 1a: There will be main effects of evaluator race and feedback predicting participants' internal attributions.

Findings confirmed hypothesis 1a. There was a main effect of evaluator feedback predicting internal attributions ($F(1, 235) = 31.24, p < .001$); however, there was no significant main effect for evaluator race ($F(1, 235) = 0.40, p = .53$). Participants made greater internal attributions after receiving negative feedback compared to positive feedback, regardless of evaluator race.

Hypothesis 1b: There will not be a significant interaction between evaluator race and evaluator feedback predicting internal attributions.

Similar to previous studies, findings supported my hypothesis, and the interaction was not significant ($F(1, 235) = 0.14, p = .71$).

Hypothesis 2a: There will be a significant main effect of evaluator race and feedback predicting participants' perceptions of evaluator prejudice, with greater perceptions of evaluator prejudice after receiving negative feedback or feedback from a White evaluator.

Findings from an ANOVA supported my hypothesis, and there were significant main effects of evaluator race ($F(1, 235) = 10.47, p = .001$) and feedback ($F(1, 235) = 13.61, p < .001$) predicting participants' perceptions of evaluator prejudice. Participants had greater perceptions of evaluator prejudice after feedback from a White evaluator compared to a Black evaluator, and after negative feedback compared to positive feedback.

Hypothesis 2b: There will be a significant interaction between feedback and evaluator race predicting perceptions of evaluator prejudice, where negative feedback from a White evaluator will result in greater perceptions of evaluator prejudice.

Findings did not support my hypothesis, and the interaction between evaluator race and feedback was not significant ($F(1, 235) = 1.80, p = .18$).

Table 4.3. One-way ANOVA table predicting internal attributions and perceptions of evaluator prejudice

Independent Variable	Dependent Variable	df	F	p
Feedback	Internal Attributions ^a	1	31.24	< .001
	Perceptions of Evaluator Prejudice ^b	1	13.61	< .001
Black	Internal Attributions	1	0.4	0.53
	Perceptions of Evaluator Prejudice	1	10.47	.001
Feedback * Black	Internal Attributions	1	0.14	0.80
	Perceptions of Evaluator Prejudice	1	1.80	0.18

a. R Squared = .121 (Adjusted R Squared = .109)

b. R Squared = .102 (Adjusted R Squared = .090)

$df_{btw} = 3, df_{within} = 232, df_{total} = 235$

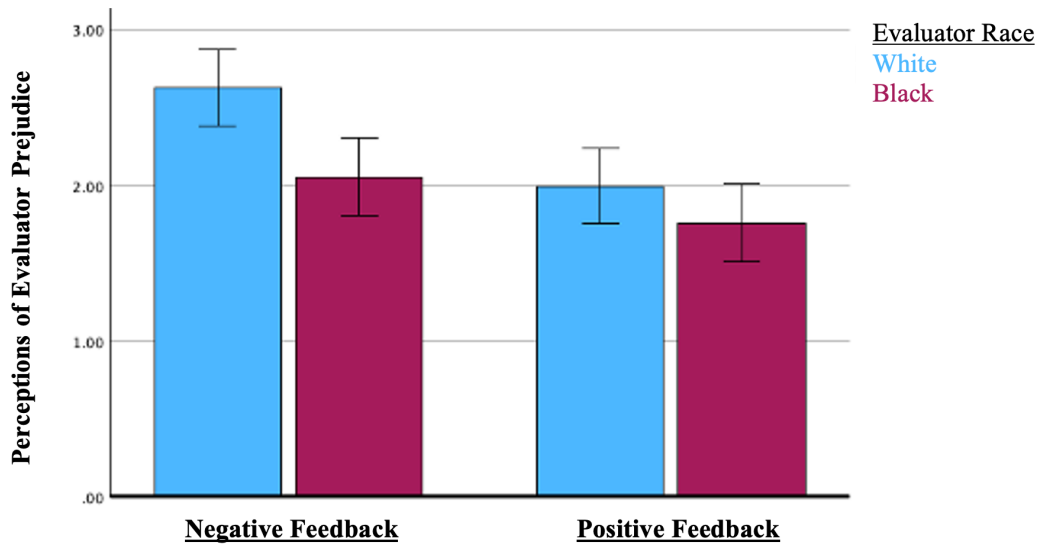


Figure 4.3. One-way ANOVA predicting perceptions of evaluator prejudice

Hypothesis 3: The association between experimental conditions and internal attributions will be mediated by perceptions of evaluator prejudice, with negative feedback from a White evaluator being associated with greater perceptions of evaluator prejudice, which in turn will be associated with lower internal attributions.

Findings from a mediation analysis partially supported my hypothesis. Participants reported greater perceptions of evaluator prejudice when the reference group was a White evaluator providing negative feedback compared to the other contrast variables (X1, White evaluator providing positive feedback, $b = -0.63, SE = .18, p < .001$; X2, Black evaluator

providing negative feedback, $b = -0.57$, $SE = .18$, $p = .001$; X3 Black evaluator providing positive feedback, $b = -0.87$, $SE = .18$, $p < .001$). Perceptions of evaluator prejudice were, surprisingly, associated with greater internal attributions ($b = .48$, $SE = .08$, $p < .001$). Analyses of indirect effects were significant for all comparisons (X1, $b = -0.23$, $SE = .08$, 95% CI [-0.40, -0.10]; X2, $b = -0.21$, $SE = .08$, 95% CI [-0.39, -0.06]; X3, $b = -0.32$, $SE = .08$, 95% CI [-0.48, -0.18]). There were also significant total effects for the X1 and X3 variables whereby participants in the White evaluator providing negative feedback condition reported significantly more internal attributions than those in the White evaluator providing positive feedback condition ($b = -0.99$, $SE = .23$, $p < .001$) and the Black evaluator providing positive feedback condition ($b = -0.83$, $SE = .22$, $p < .001$). The remaining direct effects after accounting for the mediating pathway also remained significant for the X1 and X3 variables (White evaluator providing positive feedback, $b = -0.58$, $SE = .22$, $p = .009$; Black evaluator providing positive feedback, $b = -0.53$, $SE = .21$, $p = .01$).

There were no significant indirect effects when the reference group was a Black evaluator providing negative feedback compared to the Black evaluator providing positive feedback condition (X5) and White evaluator providing positive feedback condition (X4). Specifically, there were no significant differences predicting perceptions of evaluator prejudice, though participants did report significantly more internal attributions in the Black evaluator/negative feedback condition. Finally, there were no significant indirect effects or path differences when the reference group was changed to the Black evaluator providing positive feedback or White evaluator providing positive feedback groups (X6; See table 4.4).

Table 4.4. Study 3 hypothesis 5 indirect effects

Predictor	Perceptions of Evaluator Prejudice			Internal Attributions		
	<i>b</i>	SE	<i>p</i>	<i>b</i>	SE	<i>p</i>
X1	-0.63	0.18	<.001	-0.83	0.22	<.001
X2	-0.57	0.18	.001	-.04	0.23	0.86
X3	-0.87	0.18	<.001	-0.99	0.23	<.001
X4	-0.06	0.18	.75	-0.79	0.22	<.001
X5	-0.29	0.18	.10	-0.81	.21	<.001
X6	0.24	0.18	.18	0.16	0.23	0.48
Perceptions of Evaluator Prejudice				0.48	0.08	<.001
Direct Effects						
X1				-0.53	0.21	.01
X2				.23	0.21	.28
X3				-0.58	0.22	.009
X4				-0.76	.21	<.001
X5				-0.95	0.23	<.001
X6				0.05	0.21	.82
Indirect effects						
	<i>b</i>	Boot SE	Boot LLCI	BootULCI		
X1	-0.30	0.10	-0.53	-0.12		
X2	-0.28	0.11	-0.51	-0.09		
X3	-0.42	0.10	-0.64	-0.23		
X4	-0.03	0.09	-0.2	0.15		
X5	-0.14	0.08	-0.31	0.02		
X6	0.11	0.07	-0.03	0.27		

N = 260. X1. 0 = White/Negative, 1 = White/Positive. X2. 0 = White/Negative, 1 = Black/Negative. X3. 0 = White/Negative, 1 = Black/Positive X4. 0 = Black/Negative, 1 = White/Positive. X5. 0 = Black/Negative, 1 = Black/Positive. X6. 0 = Black/Positive, 1 = White/Positive

Discussion

Findings indicated partial support of most hypotheses. First, I again confirmed findings from studies 1 and 2 that Black adults utilized theoretically harmful attributional styles irrespective of evaluator race. I also found that participants who received negative feedback also reported greater perceptions of evaluator bias, with participants in the White evaluator/negative feedback condition reporting significantly more perceptions of evaluator prejudice compared to all other conditions. These findings support previous research and suggest that marginalized

individuals may perceive negative feedback as a reflection of evaluator stigma. Notably, participants who received feedback from a Black evaluator reported similar perceptions of evaluator prejudice across feedback valence, while participants with feedback from a White evaluator reported significantly stronger perceptions of prejudice after negative, compared to positive, feedback. These findings confirm that stigmatized groups may inherently mistrust evaluative feedback from an outgroup member.

Next, I found that participants' perceptions of evaluator prejudice partially explained the association between evaluative feedback and internal attributions. After negative feedback from a White evaluator compared to other conditions, participants reported greater perceptions of evaluator prejudice, which in turn was associated with greater internal attributions. Previous research suggests attributions to one's racial group is both an internal and external process; however, the present findings imply that this process is more internal than external. Specifically, participants may blame their negative feedback on both their stigmatized identity status and the evaluator's biases *because of* their stigmatized identity status. This pattern aligns with causal reasoning theory (Martinko et al., 2002) and provides evidence to support cross-sectional findings regarding the potential implications of individual perceptions of the evaluator. Overall, these findings indicate that stigmatized groups not only make attributions to feedback based on their beliefs about the evaluator's own biases, but also that these biases are an internalizing process.

A closer look at the comparisons provides additional evidence that the effect of evaluator race does indeed shape individuals' internalizing attributions, but only after accounting for their perceptions of bias. In contrast to all other comparisons and in support of previous findings from this dissertation, the direct effect between the Black and White negative feedback conditions on internal attributions was not significant, suggesting that participants internalized this negative

feedback at similar rates. However, because negative feedback from a White evaluator was associated with greater perceptions of prejudice than negative feedback from a Black evaluator, it is unlikely that participants internalized the qualitative meaning of this feedback in similar ways. Specifically, these findings suggest that Black individuals may perceive negative feedback from an outgroup member as a reflection of anti-Black bias while negative feedback from an ingroup member may be differentially internalized as a reflection of one's ability. Overall, though both groups used theoretically maladaptive attributions, these maladaptive styles may not suggest the internalization of negative feedback as a reflection of one's own low ability, such as suggested by prototypical attributional styles, and instead may reflect one's own perceptions of the ways their stigmatized identity has influenced this feedback. Furthermore, because there were no significant differences between the positive feedback groups, these findings do not suggest that participants perceived positive feedback as a reflection of the evaluator's potential pro-Black bias.

CHAPTER 5 Overall Discussion

In a series of 3 studies, this dissertation sought to provide a deeper understanding of the ways stereotype threat, reflected here through the manipulation of evaluator race, influences historically marginalized groups' attributions to performance feedback. Results address various gaps in the research on stigmatized groups' attributions, including the lack of empirical work examining non-adolescent and non-college populations, the causal implications of contextual differences (i.e., feedback and stereotype threat) for our understanding of attributional styles, and the contributions of one's judgements of the evaluator. First, results provided consistent support to theoretical and cross-sectional findings that as a stigmatized group, Black Americans tend to follow theoretically "harmful" attributional styles, whereby they made stronger internal attributions to negative feedback compared to positive feedback. Second, findings indicated that the implications of these internal attributions do not extend to improvement motivations or general self-efficacy beliefs, supporting theories that Black individuals may make self-protective attributions to negative feedback. Finally, results found that participants' perceptions of evaluator prejudice were associated with internalizing attributions to feedback, addressing existing arguments in the literature regarding whether perceptions of discrimination are more of an internal or external process.

Stigmatized Groups' Causal Attributions

I first sought to test existing theories regarding stigmatized groups' patterns of causal attributions. Across three studies, Black adults made consistent internal attributions to hypothetical negative feedback at greater rates than to positive feedback. These findings provide empirical support for Nadal and colleagues' (2021) theoretical model for underrepresented minorities' vulnerability to internalizing new experiences as a reflection of a lifetime of internalizing negative stigma-based messages. When receiving behavioral feedback, such as evaluative performance feedback, historically marginalized groups must consider whether the cause of this feedback reflects causes that are internal to themselves, such as their own ability or their stigmatized identity status, or external to themselves, such as an evaluator's bias or luck (Mendoza-Denton, 2014). Most research suggests that, due to persistent experiences of stigma and discrimination, marginalized groups are more likely to externalize the causes of events, largely attributing negative experiences to bias or discrimination (Crocker & Major, 1989; Crocker et al., 1991). However, research also suggests that marginalized groups may associate attributions of stigma and discrimination to internal mechanisms, such as one's own stigmatized identity and self-blame (Blodorn et al., 2016; Nadal et al., 2021). Results from this dissertation support the latter theory and suggest that Black adults are vulnerable to blaming internal processes, such as ability or stigmatized identity status, for their negative experiences.

Internal Attributions: Implications and Contributions

Persistent internalization of negative feedback is theoretically indicative of a maladaptive attributional pattern because it suggests individuals do not believe they possess the resources for success, and that future failure is inevitable (Graham, 1994; Perry et al., 2008; Weiner, 1985, 2010). However, findings from this dissertation suggest that this process is not straightforward for marginalized populations. There were no significant associations between Black adults' internal attributions and improvement motivations or general self-efficacy beliefs. This null

result means that making these assumptions about the cause of their performance did not mean that Black adults would try less hard in the future. Furthermore, positive feedback was not associated with greater general self-efficacy as suggested by research among gender minority populations (Ni & Huo, 2018). These findings suggest that the attributions of racial minority populations are distinct from those of other stigmatized groups, where they may dismiss both positive and negative feedback messages (Crocker et al., 1991; Nadal et al., 2021).

Indeed, findings suggest that marginalized groups' internal attributions are largely informed by their judgements of the evaluator. Recall how, counter to my expected hypothesis, the evaluator race did not influence participants' internal attributions, and they made similar internal attributions to negative and positive feedback whether the evaluator was White or Black. This outcome is counterintuitive to existing findings, which had indicated contextual differences signaling high expectations (i.e., the Black evaluator; Banks et al., 1977; Coleman et al., 1991). However, study 3 revealed that participants associated this internalization with evaluator prejudice. Specifically, Black adults may simultaneously believe that negative feedback from a White evaluator is due to the evaluator's own biases *and* blame themselves and their stigmatized identity. While it is likely that these attributional patterns may protect against the psychological harms of negative feedback under stereotype threat, these findings seem to instead support Blodorn and colleagues' (2016) correlational findings that these perceptions of bias may be internalized as self-blame, with resulting harmful implications for psychological well-being. These results suggested that despite their alignment with theoretically maladaptive attributional styles, Black adults' internalizing processes may have less to do with their immediate attitudes regarding their performance and ability and may instead reflect how they believe majority group members perceive their stigmatized identity.

Limitations and Future Directions

Despite the notable additions to the existing literature that this dissertation provides, these findings are not without their limitations. First, the scale for internal attributions has rarely been tested among stigmatized groups. Many studies measuring attributions to events focus on trait-based scales, such as one's locus of control regarding general and lived experiences of success, failure, and discrimination (i.e., Martinko et al., 2011; van Laar, 2000). Though the Causal Dimensions Scale was used to understand individual attributions to specific hypothetical events varying from internal and stable to external and uncontrollable attributions, it is possible that this scale did not fully capture the types of attributions that may be unique to marginalized populations. For instance, because participants' internal attributions were also associated with their perceptions of evaluator prejudice, a more comprehensive measure of these attributions may have explicitly included whether one categorizes a stigmatized identity as an internal factor.

Furthermore, participants' average internal attribution scores across conditions were close to the midpoint as measured by the present scale, suggesting that they did not make completely internal or external attributions. Though the CDS-II measures the internality, stability, and perceived control of the attribution, this scale does not measure the extent to which participants' attributions are based on the specific qualities of themselves and the evaluator. Future research may benefit from nuanced attribution scales that are also more focused on the experiences of marginalized populations. Additionally, the hypothetical nature of these studies introduce potential bias, where findings may not reflect potential attributions in the real-world, or through experience studies (Vispoel & Austin, 1995). Thus, future research should evaluate participants' real performance outcomes and attitudes using tasks that require practical effort. However, the hypothetical nature of this study also removes potential extraneous variables and allows researchers to draw stronger causal inferences from study findings (Cook & Campbell, 1979;

Guinea, 2016). Despite these limitations, results reported here are among the few to link situational cues to Black adults' attributions of feedback experiences.

Another potential limitation is the method to induce stereotype threat in each study, as well as the different contexts between study one and studies two and three. Findings regarding the role of a White or Black evaluator may have been more pronounced if the experimental feedback conditions were in a typically stereotyped domain, such as STEM fields. STEM domains tend to be more unwelcoming to marginalized populations, and particularly African Americans (Major et al., 1998; Park et al., 2018). Research suggests that African American youth's causal attributions may be domain-specific, particularly with math being associated with more ability attributions (Swinton et al., 2011). Thus, it is possible that participants may report more severe maladaptive attributional patterns when responding to feedback in math and similar STEM domains due to their highly salient stereotypes. However, this study rests upon more recent research among Black adolescents that found a lack of domain generalizeability by causal attributions (Vuletic et al., 2019). Additionally, findings regarding internal attributions were similar across all three studies, suggesting that contextual differences between workplace and academic feedback may not influence participants' internalization patterns. Nevertheless, unique contextual differences that are more stereotypically relevant may shape participants' expectations of Black and White evaluators as they also grappled with existing stereotypes of intellectual inferiority. Future research should compare participants' immediate attributions between different domains. These findings would help determine whether Black adults' internalization of negative evaluative feedback varies by the perceived stereotype threat of the domain, and not just the evaluator. Despite this limitation, it is important to note that participants in all three studies followed similar patterns of attribution where they made greater internal attributions to negative

feedback compared to positive feedback. This pattern suggests that Black adults may generalize across contexts.

Though the present dissertation was based on attributional research of stigmatized and non-stigmatized groups in general, findings cannot be generalized to other historically marginalized groups. For instance, findings among women and overweight individuals suggest that positive feedback absent of stereotype threat is associated with greater self-esteem and psychological well-being (Crocker, 1998; Ni & Huo, 2018). However, Black adults in the present study did not demonstrate similar effects in response to positive feedback. This finding lends credence to nascent understandings of the implications of racial identity compared to other stigmatized identities; perhaps because of the connection to historic race-based oppression, how one feels about their racial identity has unique implications for individual well-being (Banks & Stephens, 2018). Along with other identities that are historically marginalized, future research must examine the implications of their attributions to feedback. For instance, recent research suggests that individuals with multiple marginalized identities may favor one stigmatized identity over the other when providing causal attributions to previous incivility experiences (Lopez et al., 2023). Furthermore, holding multiple stigmatized identities may exacerbate or attenuate systemic attributions of incivility and discrimination (e.g., Remedios et al., 2020). Finally, this study lacked a proper control condition, such as an anonymous evaluator condition. Though evaluator race on its own did not seem to influence internal attributions, it is unclear whether participants would have followed similar attributional patterns when the evaluator's race was not made salient. Indeed, Crocker and colleagues' (1991) experiments suggest that African Americans may have internalized negative feedback at lower rates if race was not a factor. However, it is important to note the rarity of completely anonymous evaluative feedback, especially in workplace and academic contexts, and scholars have called for more empirical

work examining these attributions (e.g., Graham, 1994). Future research may seek to understand how feedback from anonymous evaluators may influence internal attributions.

Theoretical and Practical Implications

Lasting discrepancies in educational attainment and employment rates suggest that added attention be paid to the cognitive processes that shape stigmatized groups' motivations and behaviors. First, I examined the internal attributions of African American adults, one of the most salient racially oppressed groups in the U.S., to expand existing research with mostly adolescent and college-aged populations. Findings also address early calls to examine African American's internal attributional processes outside of racial comparisons to European Americans (Graham, 1994). Furthermore, recent efforts to do so have been largely correlational and dispositional in nature, and the present findings add to the existing literature with situational support of stigmatized groups' internalization processes (Jones et al., 2023; Vispoel & Austin, 1995).

Findings are also among the first to support Nadal and colleagues' (2021) theoretical model of historic minorities' internalizing processes. Specifically, because results indicated both the consistent internalization of negative feedback and the chronic interpretation of internal attributions as a reflection of evaluator bias, findings support lay theories that histories of oppression make the feedback process particularly fraught. Further, findings suggest that instead of seeing perceptions of prejudice and discrimination as an external process, stigmatized groups may instead blame themselves (i.e., Blodorn et al., 2016), though they will not allow this self-blame to influence their performance outcomes. Instead, it is possible that these attributions warp the ways they view the evaluator, and especially majority group members. These findings bolster support for anti-bias training among majority group members who work with stigmatized groups. For instance, research suggests that explicit messages of support and indication of high expectations is beneficial for stigmatized groups' future success by removing attributional and

group-value ambiguity, prompting more beneficial attributional patterns (Brady et al., 2020; Wilson et al., 2002). These implications for beneficial attributional patterns are particularly likely considering individual factors that may influence these internal attributional processes. Though individual covariates such as gender and educational background did not influence outcome variables in the present study, it is possible that such individual variables may be more influential in non-hypothetical contexts.

Because causal reasoning theory states that people use value judgements and causal attributions to determine how to respond to future situations, the corruption of experiences of discrimination for both aspects of causal reasoning is potentially devastating for downstream consequences (Martinko et al., 2002). For instance, stigmatized groups may avoid feedback seeking and other improvement behaviors due to fears that they may be perceived as inferior to their colleagues (Roberson et al., 2003). While the present findings did not find strong implications of attributions for actual improvement attitudes and self-efficacy, the detrimental impacts on perceptions of evaluator prejudice suggest that stigmatized groups may further avoid feedback from evaluators with bias. Because perceptions of bias were associated with internal attributions, anti-bias trainings and feedback interventions should focus on addressing the individual experiences of stigmatized group members. White evaluators tend to avoid accurate evaluations of stigmatized group members due to a misplaced need to avoid appearing biased; however, the present results suggest that stigmatized groups tend to blame themselves whenever they perceive an evaluator as biased, explicitly decentering this White guilt. Anti-bias trainings should expand the curriculum to focus on the lived experiences of stigmatized groups and move away from perpetrators' internalizing processes of guilt and shame.

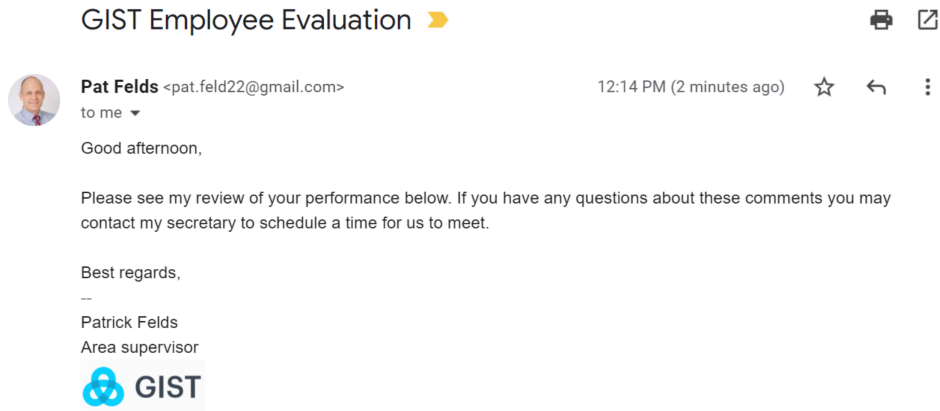
Finally, results further support the need to increase the diversity of high-status positions such as higher education faculty and managers. Stigmatized groups trust the evaluations of

ingroup members due to the lack of group-value ambiguity and attributional ambiguity, and the present findings go against existing theories that ingroup members may face similar perceptions of bias and distrust.

APPENDICES

Appendix A: Evaluator Manipulation Images & Email

Appendix Figure A. 1.: Email Manipulation White Male



Appendix Figure A. 2.: Image Manipulation White Female



Appendix Figure A. 3.: Image Manipulation Black Male



Appendix Figure A. 4.: Image Manipulation Black Female



Appendix B: Negative Job Performance Feedback

JOB PERFORMANCE EVALUATION FORM

Performance Rating Definitions

Exceeds Expectations Performance is routinely above job requirements

Meets Expectations Performance is regularly satisfactory and dependable

Below Expectations Performance fails to meet job requirements on a frequent basis

PERFORMANCE FACTORS

	Below Expectations	Meets Expectations	Exceeds Expectations
Interpersonal Skills – friendly, gets along with fellow employees	X		
Teamwork – cooperation, ability to work as part of a team		X	
Analytical Skills – analyzing facts and data, problem solving	X		
Technical Competence – technical skills, knowledge and understanding	X		
Professionalism - professional appearance and behavior	X		
Reliability - meets deadlines regularly	X		

GENERAL FEEDBACK FROM SUPERVISOR:

Overall I have found your performance during the last six months to be unsatisfactory. While your teamwork skills are adequate, you have not demonstrated the professionalism and knowledge up to par with the company's needs.

Appendix C: Neutral Job Performance Feedback

JOB PERFORMANCE EVALUATION FORM

Performance Rating Definitions

Exceeds Expectations Performance is routinely above job requirements

Meets Expectations Performance is regularly satisfactory and dependable

Below Expectations Performance fails to meet job requirements on a frequent basis

PERFORMANCE FACTORS

	Below Expectations	Meets Expectations	Exceeds Expectations
Interpersonal Skills – friendly, gets along with fellow employees			X
Teamwork – cooperation, ability to work as part of a team		X	
Analytical Skills – analyzing facts and data, problem solving	X		
Technical Competence – technical skills, knowledge and understanding		X	
Professionalism - professional appearance and behavior		X	
Reliability - meets deadlines regularly		X	

GENERAL FEEDBACK FROM SUPERVISOR:

Overall, I have found your performance during the last six months to be adequate. You've demonstrated clear competence in your work and are a satisfactory addition to the company.

Appendix D: Positive Job Performance Feedback

JOB PERFORMANCE EVALUATION FORM

Performance Rating Definitions

Exceeds Expectations Performance is routinely above job requirements

Meets Expectations Performance is regularly satisfactory and dependable

Below Expectations Performance fails to meet job requirements on a frequent basis

PERFORMANCE FACTORS

	Below Expectations	Meets Expectations	Exceeds Expectations
Interpersonal Skills – friendly, gets along with fellow employees			X
Teamwork – cooperation, ability to work as part of a team		X	
Analytical Skills – analyzing facts and data, problem solving			X
Technical Competence – technical skills, knowledge and understanding			X
Professionalism - professional appearance and behavior			X
Reliability - meets deadlines regularly			X

GENERAL FEEDBACK FROM SUPERVISOR:

Overall I have found your performance during the last six months to be beyond satisfactory. Your professionalism and knowledge are unparalleled and you have shown to be a great asset to the company.

Appendix E: Causal Dimensions Scale - II

Instructions: Think about the reason or reasons you have written above. The items below concern your impressions or opinions of this cause or causes of your performance. Circle one number for each of the following questions.

Is this cause(s) something:

- | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|-------------------------------------|
| 1. That reflects an aspect of yourself | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | reflects an aspect of the situation |
| 2. Manageable by you | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | not manageable by you |
| 3. Permanent | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Temporary |
| 4. You can regulate | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | you cannot regulate |
| 5. Over which others have control | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | over which others have no control |
| 6. Onside of you | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | outside of you |
| 7. Stable over time | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | variable over time |
| 8. Under the power of other people | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | not under the power of other people |
| 9. Something about you | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | something about others |
| 10. Over which you have power | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | over which you have no power |
| 11. Unchangeable | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | changeable |
| 12. Other people can regulate | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | other people cannot regulate |

Scoring: The total scores for each dimension are obtained by summing the items, as follows:
 1,6,9 = locus of causality; 5, 8, 12 = external control; 3, 7, 11 = stability; 2, 4, 10 = personal control.

Appendix F: Negative Essay Evaluation (Black woman)

ESSAY EVALUATION RUBRIC

	Below Expectations	Meets Expectations	Exceeds Expectations
Focus – Essay should have a clear cohesive story	X		
Organization – The introduction through conclusion clearly presents the main topic	X		
Word Choice – The writer should include a variety of word choice	X		
Ideas – Ideas should be coherent and expressed clearly and accurately	X		
Grammar and Spelling – Essay should be free of grammatical or spelling errors		X	



Comments from Dr. Felds:

Overall this essay needs a lot of improvement. Your arguments were unclear and disorganized and I had difficulty following your narrative. You should use the remainder of the course to improve your skills.

Appendix G: Positive Essay Feedback (Black woman)

ESSAY EVALUATION RUBRIC

	Below Expectations	Meets Expectations	Exceeds Expectations
Focus – Essay should have a clear cohesive story			X
Organization – The introduction through conclusion clearly presents the main topic			X
Word Choice – The writer should include a variety of word choice			X
Ideas – Ideas should be coherent and expressed clearly and accurately			X
Grammar and Spelling – Essay should be free of grammatical or spelling errors		X	



Comments from Dr. Felds:

Overall this was an incredible essay and you should be proud of your work. You've demonstrated superior skills and this paper is one of the best I've received for this assignment, I have no doubt you will excel for the remainder of the course.

Appendix H: Improvement Motivations Scale

	Extremely unlikely	Slightly unlikely	Neither likely nor unlikely	Slightly likely	Extremely likely
Change your study habits for the next essay?	x	x	x	x	x
Follow up with your professor about this essay?	x	x	x	x	x
Complete extra credit?	x	x	x	x	x
Revise and resubmit your essay?	x	x	x	x	x
Ask for help on the next essay?	x	x	x	x	x

Appendix I: General Self-Efficacy Scale

Please indicate the extent to which you believe each of the following statements are true *as if you received this professor's feedback*.

	Not at all true	Hardly true	Moderately true	Exactly true
1. I could always manage to solve difficult problems if I try hard enough				
2. If someone opposed me, I could find the means and ways to get what I want				
3. It would be easy for me to stick to my aims and accomplish my goals.				
4. I would be confident that I could deal efficiently with unexpected events.				
5. Thanks to my resourcefulness, I know how I would handle unforeseen situations.				
6. I could solve most problems if I invested the necessary effort.				
7. I could remain calm when facing difficulties because I could rely on my coping abilities.				
8. When confronted with a problem, I could usually find several solutions.				
9. If I were in trouble, I could usually think of a solution.				
10. I could usually handle whatever comes my way.				

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35-37). Windsor, UK: NFER-NELSON.

Appendix J: Perceptions of Evaluator Prejudice

Please indicate the extent to which you agree or disagree with the following items:

	Strongly Disagree	Somewhat Disagree	Somewhat agree	Strongly agree
This professor's feedback was based on the student's race				
This professor thinks all Black students are smart				
This professor evaluates all students fairly				
This professor is racist against Black students				

Ni, H. W., & Huo, Y. J. (2018). Same-gender supervisors protect women's leadership aspirations after negative performance feedback. *Journal of Applied Social Psychology, 48*, 437–447.
<https://doi.org/10.1111/jasp.12523>

BIBLIOGRAPHY

- Abdi, H., & Williams, L. J. (2010). Principal component analysis. *WIREs Computational Statistics*, 2(4), 433–459. <https://doi.org/10.1002/wics.101>
- Adamovic, M., & Leibbrandt, A. (2023). Is there a glass ceiling for ethnic minorities to enter leadership positions? Evidence from a field experiment with over 12,000 job applications. *The Leadership Quarterly*, 34(2), 101655. <https://doi.org/10.1016/j.leaqua.2022.101655>
- Amemiya, J., & Wang, M. T. (2018). Why effort praise can backfire in adolescence. *Child Development Perspectives*, 12(1), 199–203. <https://www.doi.org/10.1111/cdep.12284>
- Assari, S., Watkins, D. C., & Caldwell, C. H. (2015). Race attribution modifies the association between daily discrimination and major depressive disorder among blacks: The role of gender and ethnicity. *Journal of Racial and Ethnic Health Disparities*, 2(2), 200–210. <https://doi.org/10.1007/s40615-014-0064-9>
- Axt, J. R. (2017). An unintentional pro-Black bias in judgement among educators. *British Journal of Educational Psychology* (2017), 87(1), 408–421. DOI:10.1111/bjep.12156
- Bañales, J., Pech, A., Pinetta, B. J., Pinedo, A., Whiteside, M., Diemer, M. A., & Romero, A. J. (2022). Critiquing inequality in society and on campus: Peers and faculty facilitate civic and academic outcomes of college students. *Research in Higher Education*, 63(4), 589–609. <https://doi.org/10.1007/s11162-021-09663-7>
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191–215. <https://doi.org/10.1037/0033-295X.84.2.191>

- Banks, W. C., Stitt, K. R., Curtis, H. A., & McQuarter, G. (1977). Perceived objectivity and the effects of evaluative reinforcement upon compliance and self-evaluation in Blacks. *Journal of Experimental Social Psychology, 13*, 452-463.
- Benson, J. E., & Furstenberg, F. F., Jr. (2007). Entry into adulthood: Are adult role transitions meaningful markers of adult identity? *Advances in Life Course Research, 11*(1), 199 – 224. [https://www.doi.org/10.1016/S1040-2608\(06\)11008-4](https://www.doi.org/10.1016/S1040-2608(06)11008-4)
- Biernat, M., & Danaher, K. (2012). Interpreting and reacting to feedback in stereotype-relevant performance domains. *Journal of Experimental Social Psychology, 48*(1), 271–276. <https://doi.org/10.1016/j.jesp.2011.08.010>
- Blodorn, A., O'Brien, L. T., Cheryan, S., & Vick, S. B. (2016). Understanding perceptions of racism in the aftermath of hurricane Katrina: The roles of system and group justification. *Social Justice Research, 29*(2), 139–158. <https://doi.org/10.1007/s11211-016-0259-9>
- Boie, I., Lopez, A. L., & Sass, D. A. (2013). An evaluation of a theoretical model predicting dieting behaviors: Tests of measurement and structural invariance across ethnicity and gender. *Measurement and Evaluation in Counseling and Development, 46*(1), 114–135. <http://dx.doi.org/10.1177/0748175612468595>
- Brady, S. T., Cohen, G. L., Jarvis, S. N., & Walton, G. M. (2020). A brief social-belonging intervention in college improves adult outcomes for black Americans. *Science Advances, 6*(18). <https://doi.org/10.1126/sciadv.aay3689>
- Britt, T. W. & Crandall, C. S. (2000). Acceptance of feedback by the stigmatized and non-stigmatized: The mediating role of the motive of the evaluator. *Group Processes & Intergroup Relations, 3*(1), 79-95. <https://doi.org/10.1177/1368430200031005>
- Brown, D. L. (2008). African American resiliency: Examining racial socialization and social

support as protective factors. *Journal of Black Psychology*, 34(1), 32–48.

<https://doi.org/10.1177/0095798407310538>

Budig, M. J., Lim, M., & Hodges, M. J. (2021). Racial and gender pay disparities: The role of education. *Social Science Research*, 98(1), 1-17.

<https://doi.org/10.1016/j.ssresearch.2021.102580>

Chang, A., Chou, C. L., Teherani, A., & Hauer, K. E. (2011). Clinical skills-related learning goals of senior medical students after performance feedback. *Medical Education*, 45, 878–885. <https://doi.org/10.1111/j.1365-2923.2011.04015.x>

Chae, D. H., Lincoln, K. D., & Jackson, J. S. (2011). Discrimination, attribution, and racial group identification: implications for psychological distress among Black Americans in the National Survey of American Life (2001-2003). *The American Journal of Orthopsychiatry*, 81(4), 498–506. <https://doi.org/10.1111/j.1939-0025.2011.01122.x>

Ciarrochi, J., Heaven, P. C. L., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, 41, 1161–1178.

<https://doi.org/10.1016/j.jrp.2007.02.001>

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum

Coleman, L. M., Jussim, L., & Isaac, J. L. (1991). Black Students' Reactions to Feedback Conveyed by White and Black Teachers. *Journal of Applied Social Psychology*, 21(6), 460–481. <https://doi.org/10.1111/j.1559-1816.1991.tb00531.x>

Collins, J. B., Harsy, A., Hart, J., Haymaker, K. A., Hoofnagle, A. M., Janssen, M. K. ...

O'Shaughnessy, J. (2019). Mastery-based testing in undergraduate mathematics courses.

- Primus*, 29(5), 441–460. <https://doi.org/10.1080/10511970.2018.1488317>
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design & analysis issues in field settings*. Boston, MA: Houghton Mifflin.
- Crocker, J., & Major, B. (1989). Social stigma and self-esteem: the self-protective properties of stigma. *Psychological Review*, 96(1), 608-630. <https://doi.org/10.1037/0033-295X.96.4.608>
- Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology*, 60(2), 218-228. <https://doi.org/10.1037/0022-3514.60.2.218>
- Croft, A. & Schmader, T. (2012). The feedback withholding bias: Minority students do not receive critical feedback from evaluators concerned about appearing racist. *Journal of Experimental Social Psychology*, 48, 1139–1144. <https://doi.org/10.1016/j.jesp.2012.04.010>
- Cross, W. E. (1995). *The psychology of nigrescence: Revising the Cross model*. In J. G. Ponterotto & J. M. Casas, (Eds.), *Handbook of multicultural counseling*. Newbury Park, CA: Sage Publications.
- David, E. J. R., & Derthick, A. O. (Eds.). (2017). *The psychology of oppression*. Springer.
- David, E. J. R., Petalio, J., & Crouch, M. C. (2018). Microaggressions and internalized oppression: Intrapersonal, interpersonal, and institutional impacts of internalized microaggressions. In G. C. Torino, D. P. Rivera, C. M. Capodilupo, K. L. Nadal, & D. W. Sue (Eds.), *Microaggression theory: Influence and implications* (pp. 121–137). Wiley.
- David, E. J. R., Schroeder, T. M., & Fernandez, J. (2019). Internalized racism: A systematic

- review of the psychological literature on racism's most insidious consequence. *Journal of Social Issues*, 75(4), 1057–1086. <https://doi.org/10.1111/josi.12350>
- Dimotakis, N., Mitchell, D., & Maurer, T. (2017). Positive and negative assessment center feedback in relation to development self-efficacy, feedback seeking, and promotion. *Journal of Applied Psychology*, 102(11), 1514–1527. <https://doi.org/10.1037/ap10000228>
- Durkee, M., Perkins, T., Hope, E., & Keels, M. (2021). Academic affect shapes the relationship between racial microaggressions and academic attitudes. *Social Psychology of Education*, 24(1), 59-74. <https://doi.org/10.1007/s11218-020-09602-x>
- Fanon, F. (1952). *Black Skin, White Masks*. New York: Grove Press.
- Fanon, F. (1965). *The Wretched of the Earth*. New York, NY: Grove.
- Faul, F., Erdfelder, E., Buchner, A. & Lang, A. (2009) Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods* 41(1), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Godfrey, E. B., & Wolf, S. (2016). Developing critical consciousness or justifying the system? A qualitative analysis of attributions for poverty and wealth among low-income racial/ethnic minority and immigrant women. *Cultural Diversity and Ethnic Minority Psychology*, 22(1), 93–103. <https://doi.org/10.1037/cdp0000048>
- Goodwin, S. A., Williams, K. D., & Carter-Sowell, A. R. (2010). The psychological sting of stigma: The costs of attributing ostracism to racism. *Journal of Experimental Social Psychology*, 46(4), 612–618. <https://doi.org/10.1016/j.jesp.2010.02.002>
- Graham, S. (1994). Motivation in African Americans. *Review of Educational Research*, 64(1), 55-117. <https://doi.org/10.2307/1170746>
- Graham, S. (2020). An attributional theory of motivation. *Contemporary Educational*

- Psychology*, 61(1), 101861. <https://doi.org/10.1016/j.cedpsych.2020.101861>
- Guiffrida, D. (2005). Othermothering as a framework for understanding African American students' definitions of student-centered faculty. *Journal of Higher Education*, 76(6), 701-723. <https://www.doi.org/10.1353/jhe.2005>.
- Guinea, A. O. (2016). A pragmatic multi-method investigation of discrepant technological events: Coping, attributions, and 'accidental' learning. *Information & Management*, 53(6), 787–802. <https://doi.org/10.1016/j.im.2016.03.003>
- Gutierrez-Serrano, G., Romo, L. F., & Chagolla, D. (2023). Latina first-generation college students' motivation to persist: An attribution theory and self-determination theory perspective. *Journal of Latinos and Education*, 22(5), 2164–2177. <https://doi.org/10.1080/15348431.2022.2096611>
- Harber, K. D., Gorman, J. L., Gengaro, F. P., Butisingh, S., Tsang, W., & Ouellette, R. (2012). Students' race and teachers' social support affect the positive feedback bias in public schools. *Journal of Educational Psychology*, 104(1), 1149–1161. <https://www.doi.org/10.1037/a0028110>
- Harber, K. D., Reeves, S., Gorman, J. L., Williams, C. H., Malin, J., & Pennebaker, J. W. (2019). The conflicted language of interracial feedback. *Journal of Educational Psychology*, 111(7), 1220-1242. <http://dx.doi.org/10.1037/edu0000326>
- Harber, K. (1998). Feedback to minorities: Evidence of a positive bias. *Journal of Personality and Social Psychology*, 74, 622-628. <https://doi.org/10.1037/0022-3514.74.3.622>
- Hayes, A. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression based approach* (1st ed.). New York, NY: Guilford Press.
- Hood, R. (2023). *The number of women hired into leadership is increasing, but by less than 1%*

a year.

- hooks, b. (2004). *We real cool: Black men and masculinity*. New York: Routledge
- Houston, D. M. (2016). Revisiting the relationship between attributional style and academic performance: Attributional style and academic performance. *Journal of Applied Social Psychology, 46*(3), 192–200. <https://doi.org/10.1111/jasp.12356>
- Hoyt, C. L., Aguilar, L., Kaiser, C. R., Blascovich, J., & Lee, K. (2007). The self-protective and undermining effects of attributional ambiguity. *Journal of Experimental Social Psychology, 43*(6), 884–893. <https://doi.org/10.1016/j.jesp.2006.10.013>
- Hsieh, P.-H. P., & Schallert, D. L. (2008). Implications from self-efficacy and attribution theories for an understanding of undergraduates' motivation in a foreign language course. *Contemporary Educational Psychology, 33*(4), 513–532. <https://doi.org/10.1016/j.cedpsych.2008.01.003>
- James, D. (2021). The seemingly 'protective' effect of internalized racism on overall health among 780 Black/African Americans: The serial mediation of stigma consciousness and locus of control. *Psychology & Health, 36*(4), 427–443. <https://doi.org/10.1080/08870446.2020.1797028>
- Jones, D. M., Masyn, K. E., & Spears, C. A. (2023). Associations among discrimination, psychological functioning, and substance use among US Black adults aged 18–28: Moderation by racial attribution and sex. *Journal of Substance Use and Addiction Treatment, 153*(1). <https://doi.org/10.1016/j.josat.2023.209080>
- Kelley, H. (1973). The process of causal attribution. *American Psychologist, 28*(1), 107–128. <https://doi.org/10.1037/h0034225>
- Kurtz-Costes, B., McCall, R. J., Kinlaw, C. R., Wiesen, C. A., & Joyner, M. H. (2005). What

- does it mean to be smart? The development of children's beliefs about intelligence in Germany and the United States. *Journal of Applied Developmental Psychology*, 26, 217–233. <http://dx.doi.org/10.1016/j.appdev.2004.12.005>
- López, D. J., Yuan, Y., Booth, J., Wei, K., & Friedman, M. R. (2023). Discrimination and Rejection: The Effects of Ethnic and Sexuality-Based Discrimination Against Latino Gay and Bisexual Men. *Journal of Homosexuality*, 70(12), 2828–2847. <https://doi.org/10.1080/00918369.2022.2081105>
- Major, B., & Eliezer, D. (2011). *Attributions to discrimination as a self-protective strategy: Evaluating the evidence*. In C. Sedikides & M. Alicke (Eds.), *Handbook of self-enhancement and self-protection* (pp. 320–337). Guilford
- Major, B., Kaiser, C. R., & McCoy, M. K. (2003). It's not my fault: When and why attributions to prejudice protect self-esteem. *Personality and Social Psychology Bulletin*, 26(6), 772–781. <https://doi-org.proxy.lib.umich.edu/10.1177/0146167203029006009>
- Major, B., Kunstman, J. W., Malta, B. D., Sawyer, P. J., Townsend, S. S. M., Mendes, W. B. (2016). Suspicion of motives predicts minorities' responses to positive feedback in interracial interactions. *Journal of Experimental Social Psychology*, 62, 75–88. <http://dx.doi.org/10.1016/j.jesp.2015.10.007>
- Major, B., Sawyer, P. J., & Kunstman, J. W. (2013). Minority perceptions of Whites' motives for responding without prejudice: The perceived internal and external motivation to avoid prejudice scales. *Personality and Social Psychology Bulletin*, 39(3), 401–414. <https://doi.org/10.1177/0146167213475367>
- Martinko, M. J., Gundlach, M. J., & Douglas, S. C. (2002). Toward an integrative theory of

- counterproductive workplace behavior: A causal reasoning perspective. *International Journal of Selection and Assessment*, 10(1–2), 36–50. <https://doi.org/10.1111/1468-2389.00192>
- Martinko, M. J., Harvey, P., & Dasborough, M. T. (2011). Attribution theory in the organizational sciences: A case of unrealized potential. *Journal of Organizational Behavior*, 32(1), 144–149. <https://doi.org/10.1002/job.690>
- Maume, D. J. (1999). Glass ceilings and glass escalators: Occupational segregation and race and sex Differences in Managerial Promotions. *Work and Occupations*, 26(4), 483–509. <https://doi.org/10.1177/0730888499026004005>
- McAuley, E., Duncan, T. E., & Russell, D. W. (1992). Measuring causal attributions: The revised causal dimension scale (CDSII). *Personality and Social Psychology Bulletin*, 18(5), 566–573. <https://doi.org/10.1177/0146167292185006>
- McClain, S., & Cokley, K. (2017). Academic disidentification in Black college students: The role of teacher trust and gender. *Cultural Diversity and Ethnic Minority Psychology*, 23(1), 125–133. <https://doi.org/10.1037/cdp0000094>
- McGee, E. O., & Bentley, L. (2017). The troubled success of Black women in STEM. *Cognition and Instruction*, 35(4), 265–289. <https://doi.org/10.1080/07370008.2017.1355211>
- McNatt, D. B. (2022). The biasing impact of positive instructor reputation on student evaluations of teaching. *The International Journal of Management Education*, 20(1), 100607. <https://doi.org/10.1016/j.ijme.2022.100607>
- Mendes, W. B., Major, B., McCoy, S., & Blascovich, J. (2008). How attributional ambiguity shapes physiological and emotional responses to social rejection and acceptance. *Journal*

of Personality and Social Psychology, 94, 278-291. <https://doi.org/10.1037/0022-3514.94.2.278>

Mendoza-Denton, R. (2014). A social psychological perspective on the achievement gap in standardized test performance between white and minority students: Implications for assessment. *The Journal of Negro Education*, 83(4), 465-484.
<https://doi.org/10.7709/jnegroeducation.83.4.0465>

Mendoza-Denton, R., Goldman-Flythe, M., Pietrzak, J., Downey, G., & Aceves, M. J. (2010). Group-value ambiguity: Understanding the effects of academic feedback on minority students' self-esteem. *Social Psychological and Personality Science*, 1(2), 127-135.
<https://doi.org/10.1177/194855060935779>

Mendoza-Denton, R., & Mischel, W. (2007). *Integrating system approaches to culture and personality: The cultural cognitive-affective processing system (C-CAPS)*. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 175-195). New York: Guilford.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics and invariance in personality structure. *Psychological Review*, 102(1), 246-268. <https://doi.org/10.1037/0033-295X.102.2.246>

Museus, S. D. (2014). *Asian American students in higher education*. New York: Routledge.

Nadal, K. L., King, R., Gina Sissoko, D. R., Floyd, N., & Hines, D. (2021). The legacies of systemic and internalized oppression: Experiences of microaggressions, imposter phenomenon, and stereotype threat on historically marginalized groups. *New Ideas in Psychology*, 63. <https://doi.org/10.1016/j.newideapsych.2021.100895>.

- Naidoo, A. V., Bowman, S. L., & Gerstein, L. H. (1998). Demographics, causality, work salience, and the career maturity of African-American students: A causal model. *Journal of Vocational Behavior, 53*, 15-27. <https://doi.org/10.1006/jvbe.1997.1586>
- Ngunu, S., Kinai, T., Ndambuki, P., & Mwaura, P. (2019). Causal attributions as correlates of secondary school students' academic achievement. *Education Research International*. <https://www.doi.org/10.1155/2019/1950753>
- Ni, H. W., & Huo, Y. J. (2018). Same-gender supervisors protect women's leadership aspirations after negative performance feedback. *Journal of Applied Social Psychology, 48*(8), 437–447. <https://doi.org/10.1111/jasp.12523>
- Norton, M. I., Vandello, J. A., Biga, A., & Darley, J. M. (2008). Colorblindness and diversity: Conflicting goals in decisions influenced by race. *Social Cognition, 26*(1), 102–111. <https://www.doi.org/10.1521/soco.2008.26.1.102>
- Park, L. E., Kondrak, C. L., Ward, D. E., & Streamer, L. (2018). Positive feedback from male authority figures boosts women's math outcomes. *Personality and Social Psychology Bulletin, 44*(3), 359–383. <https://doi.org/10.1177/0146167217741312>
- Perry, R. P., Stupnisky, R. H., Daniels, L. M., & Haynes, T. L. (2008). Attributional (explanatory) thinking about failure in new achievement settings. *European Journal of Psychology of Education, 23*(4), 459–475. <https://doi.org/10.1007/BF03172753>
- Phares, E. J. (1957). Expectancy changes in skill and chance situations. *Journal of Abnormal Psychology, 54*(3), 339–342. <https://doi.org/10.1037/h0045684>
- Remedios, J. D., Reiff, J. S., & Hinzman, L. (2020). An identity-threat perspective on discrimination attributions by women of color. *Social Psychological and Personality Science, 11*(7), 889–898. <https://doi.org/10.1177/1948550620908175>

- Roberson, L., Deitch, E. A., Brief, A. P., & Block, C. J. (2003). Stereotype threat and feedback seeking in the workplace. *Journal of Vocational Behavior*, 62(1), 176–188.
[https://doi.org/10.1016/S0001-8791\(02\)00056-8](https://doi.org/10.1016/S0001-8791(02)00056-8)
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1–28.
<https://doi.org/10.1037/h0092976>
- Schwarzer, R., & Jerusalem, M. (1995). *Generalized Self-Efficacy scale*. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.
- Shapiro, J. R., Mistler, S. A., & Neuberg, S. L. (2010). Threatened selves and differential prejudice expression by White and Black perceivers. *Journal of Experimental Social Psychology*, 46(2), 469–473. <https://doi.org/10.1016/j.jesp.2009.12.013>
- Simpson, A., & Maltese, A. (2017). “Failure is a major component of learning anything”: The role of failure in the development of STEM professionals. *Journal of Science Education and Technology*, 26, 223–237. <https://doi.org/10.1007/s10956-016-9674-9>
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613-629. <https://doi.org/10.1037/0003-066X.52.6.613>
- Strayhorn, T. L. (2009). The burden of proof: A quantitative study of high-achieving Black collegians. *Journal of African American Studies*, 13(1), 375-387. <https://www.doi.org/10.1007/s12111-008-9059-0>
- Sue, D. W. (2001). Multidimensional facets of cultural competence. *The Counseling Psychologist*, 29(6), 790-821. <https://doi.org/10.1177/0011000001296002>

- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, *62*(4), 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Swinton, A. D., Kurtz-Costes, B., Rowley, S. J., & Okeke-Adeyanju, N. (2011). A longitudinal examination of African American adolescents' attributions about achievement outcomes. *Child Development*, *82*(5), 1486–1500. <https://doi.org/10.1111/j.1467-8624.2011.01623.x>
- Tuitt, F. (2012). Black like me: Graduate students' perceptions of their pedagogical experiences in classes taught by Black faculty in a predominantly White institution. *Journal of Black Studies*, *43*(2), 186-2-6. <https://www.doi.org/10.1177/0021934711413271>
- U.S. Department of Education. (2021) *Institute of Education Sciences, National Center for Education Statistics*. Retrieved from: <https://nces.ed.gov/fastfacts/display.asp?id=61>
- van Laar, C. (2000). The paradox of low academic achievement but high self-esteem in African American students: an attributional account. *Educational Psychology Review*, *12*(1), 33-61. <https://doi.org/10.1023/A:1009032900261>
- Vispoel, W. P., & Austin, J. R. (1995). Success and failure in junior high school: A critical incident approach to understanding students' attributional beliefs. *American Educational Research Journal*, *32*(1), 377–412. <https://doi.org/10.3102/00028312032002377>
- Voelz, Z. R., Haeffel, G. J., Joiner, T. E., & Dineen Wagner, K. (2003). Reducing hopelessness: The interaction of enhancing and depressogenic attributional styles for positive and negative life events among youth psychiatric inpatients. *Behaviour Research and Therapy*, *41*(10), 1183–1198. [https://doi.org/10.1016/S0005-7967\(03\)00030-5](https://doi.org/10.1016/S0005-7967(03)00030-5)
- Vuletich, H. A., Kurtz-Costes, B., Bollen, K. A., & Rowley, S. J. (2019). A longitudinal study

- of the domain-generalty of African American students' causal attributions for academic success. *Journal of Educational Psychology*, 111(3), 459-474.
<https://doi.org/10.1037/edu0000299>
- Wilson, S., Floden, R., & Ferrini-Mundy, J. (2002). Teacher preparation research: An insider's view from the outside. *Journal of Teacher Education*, 53(3), 190–204.
<https://doi.org/10.1177/0022487102053003002>
- Wilson, G. (2020). African American access to management post-1990: A review and critique of existing sociological research. *Sociology Compass*, 14(12), 1–10.
<https://doi.org/10.1111/soc4.12839>
- Weiner, B. (1985). An attribution theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573. <https://doi.org/10.1037/0033-295X.92.4.548>
- Weiner, B. (2010). The development of an attribution-based theory of motivation: A history of ideas. *Educational Psychologist*, 45(1), 28–36.
<https://doi.org/10.1080/00461520903433596>
- Wood, D., & Graham, S. (2010). Why race matters: Social context and achievement motivation in African American youth. In T. C. Urdan & S. A. Karabenick (Eds.), *Advances in Motivation and Achievement* (Vol. 16, pp. 175–209). Emerald Group Publishing Limited.
[https://doi.org/10.1108/S0749-7423\(2010\)000016B009](https://doi.org/10.1108/S0749-7423(2010)000016B009)
- Xing, L., Sun, J.-M., Jepsen, D., & Zhang, Y. (2023). Supervisor negative feedback and employee motivation to learn: An attribution perspective. *Human Relations*, 76(2), 310–340. <https://doi.org/10.1177/00187267211038514>
- Yeager, D. S., Purdie-Vaughns, V., Hooper, S. Y., & Cohen, G. L. (2017). Loss of institutional trust among racial and ethnic minority adolescents: A consequence of procedural

injustice and a cause of life-span outcomes. *Child Development*, 88(2), 658–676.

<https://doi.org/10.1111/cdev.12697>