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**INTERPRETING FEEDBACK IN THE WORKPLACE: AN
EXAMINATION OF STEREOTYPE THREAT AND STIGMATIZATION
WITH AFRICAN AMERICAN PROFESSIONALS**

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by

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ABSTRACT

This study sought to examine the effects of the presence of stereotype threat on perceptions of feedback in the workplace with African American professionals. The influence of workplace climate and solo/token status is examined as well. The participants for this study are 217 African American professionals representing a wide range of career fields.

The survey was administered via psychdata, an online research website. Participants were randomly assigned to either a stereotype threat priming condition or the control (non-primed) condition. Feedback perceptions were assessed via the supervisor version of the Feedback Environment Scale (FES; Steelman et al., 2004), and the Feedback Discounting Measure (FD; Roberson et al., 2003). The effect of workplace racial climate was assessed through the Climate Scale (CS; Holder & Vaux, 1998) and solo/token status was assessed by participants who endorsed having solo status on the demographic form.

Multiple Analysis of Covariance (MANCOVA) and sequential multiple regression were the analyses used to assess the two research questions. In the first analysis, contrary to the hypothesis, the presence of stereotype threat did not produce any significant differences in perceptions of feedback. In the second research question, the demographic variables age, gender, job tenure, education, and socioeconomic status were entered into the first block of the regression, workplace climate and solo/token status were put into the second block. As hypothesized, workplace climate and solo/token status accounted for a significant amount of the variance in perceptions of feedback, over and

beyond the influence of demographic variables. In particular, workplace climate significantly predicted perceptions of feedback.

The results of this study were inconsistent with previous studies that suggested that stereotype threat influenced perceptions of feedback. The results of this study provided additional support for the influence workplace climate on the perceptions of feedback. The results overall indicated that workplace climate is an important determinant of how African American professionals interpret feedback from supervisors. Understanding African Americans' perceptions of equality and fairness in the workplace can help organizations gain more insight into what is needed for a welcoming and productive work environment. Limitations of this study and directions for future research are discussed.

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Chapter 1

Feedback can be given in a variety of situations. From the classroom to relationships and the workplace, feedback is something that is a valuable source of information about how we are being perceived by others (Levy, Albright, Cawley, & Williams, 1995). One setting where feedback has a great deal of meaning is in the workplace. Feedback that is received in the workplace plays an important role regarding not only the dissemination of rewards such as promotions, salary, and social status; but also on how employees feel about their performance and the messages that they internalize about their abilities (Ashford, Blatt, & Vandewalle, 2003; Crocker & Major, 1989).

Feedback given in the workplace has been examined by several researchers. These researchers have focused on trying to understand the motivation behind seeking feedback and the ways in which people interpret feedback (Ashford et al., 2003; Mussweiler et al., 2000; Crocker & Major, 1989). One finding that seems evident is that there is no one way to interpret feedback. In addition, there are a myriad of reasons for why some people seek feedback and others do not (Ashford et al., 2003, Baumeister, 1997). One of these reasons is to gain information that can help to improve the performance of an employee (Ashford et al., 2003). Still another reason for seeking feedback may be to corroborate expectations of one's role in the work environment (Mussweiler, Gabriel & Bodenhausen, 2000). Similar to motivation, there are different ways to interpret the feedback that one receives in the workplace. One way is to internalize the feedback and view it as an accurate and honest representation of one's performance (e.g., Ashford et al., 2003). Another way that feedback is interpreted is

when one separates the message from his/her feelings of self-worth by judging the message as either inaccurate or as a limited view of their ability (e.g., Von Hippel, Von Hippel, Conway, Preacher, Schooler & Radvansky, 2005). Obviously, one difference in how feedback is interpreted may be in the type of feedback that is being received. If one is receiving positive feedback, it would be reasonable to think that this message would be internalized more so than negative feedback (Crocker, Voelkl, Testa & Major, 1991). On the other hand, if one is receiving negative feedback, it stands to reason that this message may be deflected by discounting the feedback and attributing it to something other than one's worth and ability as an employee (Crocker et. al., 1991). One of the main variables in this study is that of discounting feedback.

Discounting feedback is believed to be a common response to hearing feedback that threatens an individual's feelings of self-worth (Von Hippel et al., 2005). According to Ashford et al. (2003), in order to protect their egos and self-images, people employ mechanisms to avoid, distort, or discount harmful messages that are received through feedback. The types of messages that are believed to be the most harmful to recipients of feedback are those that may conjure up feelings of potential inferiority, especially in a setting where it is important that the person feel capable, such as the workplace. One population that has a significant history of being made to feel inferior in a variety of settings is African Americans (Major, Quinton & Schmader, 2003). Because of this, stigma research shows that African Americans have higher instances of discounting feedback that is seen as potentially damaging to their feelings of self-worth (Crocker, Voelkl, Testa & Major, 1991).

According to Von Hippel et al. (2005), when individuals feel that they are being stigmatized or stereotyped negatively through the feedback they are receiving, they will discount the feedback through disidentifying with the domain or devaluing the opinion of the person giving the feedback. This tendency to discount feedback interestingly enough is not limited to the receipt of only negative feedback. African Americans may experience being stigmatized or stereotyped in the workplace. As a result of this, the feedback that they receive, as well as the person giving the feedback, whether the message be positive or negative may be subject to more scrutiny in order to judge the intention of the giver. (Crocker et al., 1991).

Research shows that in cases where stereotypes and stigmas are thought to have an influence on the feedback message, the receiver is likely to discount both positive as well as negative feedback (Crocker et al., 1991). It is clear that negative feedback is discounted because people do not want to feel badly about their performance and ability in the workplace. In the case of African American employees who believe that their negative feedback is the result of some stigmatization and discrimination on the part of the person giving the feedback, it is easy to see how this feedback can be attributed to the negative stigmas and stereotypes about African Americans held by the people delivering the feedback and not their own performance deficits (Crocker et al., 1991). The case of discounting positive feedback on the other hand may be somewhat more difficult to justify. Research shows, however, that when stigmatization and stereotypes are thought to be inherent in the work environment, that even positive feedback becomes suspicious (Crocker et al., 1991; Brief et al., 1997). In this case, the person giving the feedback may

be seen as purposely trying to come across as fair and unbiased in their interaction, and not as genuinely believing that the employee's performance is superior.

The result of discounting the feedback in both situations is that the employee does not internalize any messages about their performance and therefore cannot gauge in any real way how they are performing their tasks (Mussweiler et al. 2000). This can have deleterious effects on the employee's ability to improve their standing in the workplace. Also, this situation presents a dilemma for those giving feedback to be able to communicate effectively with employees if the giver of the feedback is perceived as working from a stereotyping and stigmatizing paradigm.

Other factors that may influence how African American employees interpret feedback are the presence of stereotype threat and the climate in their workplace. Stereotype threat is a form of anxiety that is the result of a stigmatized individual's fear of confirming a negative stereotype or stigma about their group through their own behavior or performance (Steele, 1997). Stereotype threat has been predominantly researched in terms of how it affects African American students whose performance on standardized tests has been shown to be consistently below those of Caucasians (e.g., Steele & Aronson, 1995; Steele, 1997). The reasoning given for this type of threat is that when a domain (such as intelligence) is important for African American students, the well-known stigma of being intellectually inferior to Caucasians works against the performance of the students. This performance deficit is thought to occur because instead of focusing on the task at hand, the students become anxious and too focused on disproving the stereotype through their performance (Steele, 1997). Though the workplace is not the identical to the scenario with students and standardized testing, the

same stigmas of inferior intelligence and professionalism are working against the African American employees.

In the case of the workplace, African American employees might be likely to perceive stereotype threat because they are in an environment where they are being judged and evaluated by individuals who may be influenced by negative stereotypes and stigmas about this population (Smith, 2004). According to Steele and Aronson (1995), simply the knowledge that the stigmas exist is enough to influence the performance of those who are affected by stereotype threat. Therefore, any well-known stereotypes about African Americans that can be applied to the workplace can have negative affects on African American employees' performance. This is especially true when they are personally invested in their performance and how they are perceived in the workplace (Smith, 2004), such as those people who have worked hard to attain their professional status.

The effects and perception of stereotype threat may also be exacerbated by a negative racial climate in the workplace. One definition of workplace climate is the atmosphere that organizations' managers and majority-group members create (Watts & Carter, 1991). The perception of a negative workplace racial climate can include deliberate policies and practices by management or more subtle practices such as a paucity of racial minority upper level employees or minorities feeling left out of decision making in the organization. When a negative racial climate is perceived in the workplace, race has the potential to become a salient factor for employees who believe that they are being treated differently because of it (Hayes et al., 2002). This inherently will evoke stereotype threat by bringing stigmas and stereotypes to the forefront of African

American employees' interactions with others in the workplace. When race and stigmas are perceived to be the driving force behind one's treatment and interactions in the workplace, the motivation of feedback received is almost automatically brought into question, thus heightening the possibility of feedback being discounted (Crocker et al., 1991).

Another factor that may also influence the perception of stereotype threat and the perception of feedback in the workplace is whether or not one has solo/token status. Research shows that those who have solo/token status in the workplace may experience feelings of isolation from peers and supervisors which can negatively affect the work performance of African Americans (Holder & Vaux, 1998). According to Crocker and Major (1989), when one has solo status in the workplace the only gauge that they have to evaluate their performance and the feedback that they receive, is from out-group members. Token status has a similar effect causing the person to experience more visibility, more contrast between themselves and others in the workplace, and role encapsulation where they may feel incongruent with work-defined roles (Yoder, 1994). African American employees who have solo/token status in the workplace because of their increased invisibility and not having anyone with whom to compare their experience they are more likely to discount feedback and experience stereotype threat (Crocker & Major, 1989; Neimann & Dovidio, 1998).

The proposed study builds on that of Roberson et al. (2003) which examined how stereotype threat affects African American managers' tendency to seek and accept feedback in the workplace. This dissertation seeks to understand how perceptions of workplace climate, the presence of stereotype threat, and solo/token status in the

workplace influence African American professionals' interpretation of feedback from supervisors. This study used a survey research design with 217 African American professionals to explore how the presence of stereotype threat influences their response to feedback after controlling for the effects of solo/token status and workplace climate. Participants were randomly assigned to one of two conditions. Participants in one condition are exposed to stereotype threat and participants in the other condition are not exposed. All participants were asked to complete questionnaires about their workplace climate and how they interpret feedback from their supervisors as well as provide demographic information, such as whether or not they have solo status in their department. This dissertation has two primary goals. The first is to determine how feedback is interpreted by a highly stigmatized group in a potentially threatening environment. The second is to examine the effect of stereotype threat on this population to see if there is a difference in what influences feedback interpretation when this threat is primed versus when it is not.

Chapter 2

Racial minorities often face various forms of racism and discrimination in the workplace (Holder & Vaux, 1998). This racism is usually expressed in one of two ways. According to Major, Quinton, and Schmader (2003), it is either overt (i.e., openly displayed for everyone to see) or covert (difficult to detect or subtle). Due to the civil rights era of the 1960's, it is now considered inappropriate for institutions and organizations to condone overt racism or discrimination (Holder & Vaux, 1998). Covert racism, on the other hand, is thought to be rampant in many organizations, both professional and otherwise (Holder & Vaux, 1998). Within the workplace environment, racial minority employees might experience covert racism in terms of being "tactfully" excluded from decision-making processes or consistently passed over for promotions (Holder & Vaux, 1998). While these examples are actually rather glaring in comparison to some other forms of covert racism, they are still considered covert because they could be attributed to other "legitimate" factors and not racism.

Covert racism is thought to have deleterious effects on racial minority employees. These effects may vary from a general sense of distrust for their non-minority co-workers and supervisors to being very self-conscious about their every move for fear of being the target of this covert racism (Major et al., 2003). Covert racism is often thought to be due in part, to the result of negative social stigmas that are ubiquitous in American culture (Major, Spencer, Schmader, Wolfe & Crocker, 1998). Results of a research study by Major et al. (1998) demonstrate that negative stereotypes about stigmatized groups are often universally known and recognized even among those who reject them as truths. It is still true, however, that the group that is the most cognizant of these negative stereotypes

are those who are members of the group that is being stigmatized (Major et al., 1998). Major et al. (1998) stated, “the racial devaluation of African Americans is particularly apparent with respect to intellectual ability” (p. 36), and they go on to speculate that as a result of negative stereotypes such as this one, African Americans might come to expect racial bias and discrimination from others. The pressure of living in fear of being judged by others due to one’s membership in a racial group may not only influence psychological functioning in the workplace, but also have behavioral implications. One behavior that covert racism might influence in the workplace is how feedback from supervisors and co-workers is interpreted (Major et al., 1998).

I purport that when minority individuals perceive discrimination and racial bias in the workplace, they will be more likely to discount feedback because they have a lack of trust in the evaluator. In this study, the levels of perceived discrimination and bias will be assessed through the experience of stereotype threat, workplace climate, and solo or token status in the workplace. In the chapter, I review the available theoretical and empirical literature about each of these variables. In addition, I explicate how stereotype threat, negative workplace climate, and solo or token status may be related to African Americans’ reaction to feedback, particularly the discounting of feedback. In the following section, feedback in the workplace is examined. Feedback is generally examined in terms of its use in the workplace, followed by a discussion of feedback discounting and how this can affect African Americans in the workplace. Specifically, studies that examine how one might come to discount feedback and the consequences of discounting feedback are reviewed in order to understand some of the reasons why feedback discounting is problematic.

Feedback

Feedback is a subset of information about oneself or one's performance that can be made available to individuals in different environments (Levy, Albright, Cawley & Williams, 1995). Feedback has been examined in school settings (Winning, Lim & Townsend, 2005), with relationships (Kumashiro & Sedikides, 2005) and in therapy (Mansell, 2005). Feedback can include both verbal statements as well as non-verbal cues. Nonverbal cues are an integral part of communication that can reveal people's thoughts, feelings and attitudes and meaning is assigned to these cues based on the interpreters' perception (Manusov, 2005). In short it is not just what people say, but how they say it that affects how communication is interpreted. Both verbal as well as nonverbal communication conveys important messages in a variety of settings (Berry, Pennebaker, Mueller & Hiller, 1997).

One setting where feedback is extremely important is the workplace (Levy et al., 1995; Ashford, Blatt, & Vandewalle, 2003; Bailey et al., 1997; Greller, 1992). Research has long supported the importance of feedback on both organizational and individual performance (e.g., Levy et al., 1995; Norris-Watts & Levy, 2004). Organizational settings more than any other setting make the process of both seeking and receiving feedback critical (Ashford et al., 2003) because of the systematic way that organizations value certain feats and select particular acts and people for subsequent success. Feedback is thought to be of vital import in the workplace because it often determines one's standing in the workplace in terms of promotions, salary, and social status (Mussweiler, Gabriel & Bodenhausen, 2000).

According to a theoretical paper by Ashford et al. (2003), people are thought to seek feedback because they believe it can give them information that helps them to achieve their goals and regulate their behavior. Empirical studies indicate that feedback has been found to foster goal attainment and enhance performance in the workplace (e.g., Mussweiler et al., 2000; Major et al., 1998). Obtaining feedback is thought to be an inherent part of attaining and maintaining awareness and insight into one's performance in the workplace. Feedback is also thought to reduce uncertainty regarding the roles and performance expectations in the workplace environment (Ashford et al., 2003). Some scholars assert that employees who seek feedback may develop a more accurate view of their skills and abilities resulting in better performance than those who do not seek feedback (Ashford et al., 2003; Crocker & Major, 1989). The available theory and research data support the conclusion that feedback is important for employees, particularly relative to performance in the workplace (e.g., Ashford et al., 2003; Mussweiler et al., 2000; Crocker & Major, 1989). Yet, receiving feedback does not ensure that one will internalize the information or alter one's performance. In the following section, I review the process of feedback discounting and examine some of the reasons why feedback discounting occurs.

Feedback Discounting. Feedback is thought to be different from other types of information because it is more emotionally charged (Ashford et al., 2003). Some theories in the psychological literature suggest that people are motivated to defend and protect their egos (Ashford et al., 2003, Baumeister, 1997). In order to protect their egos and self-images people are thought to employ mechanisms to avoid, distort, or discount harmful information received through feedback (Ashford et al., 2003, Baumeister, 1997).

Feedback is more likely to be discounted when the employee is performance-goal oriented and when the feedback is unsolicited (Ashford et al., 2003, Roberson et al., 2003). Ashford et al. (2003) hypothesized that people will sometimes attempt to bolster their self-image by seeking positive feedback, even if it has no information value (e.g., seeking feedback from those with whom they have a good relationship such as peers).

Discounting feedback in response to the threat of social comparisons is thought to be a common response to feelings of potential inferiority (Mussweiler, Gabriel, & Bodenhausen, 2000). In a research study conducted by Mussweiler et al. (2000), researchers found that individuals can minimize the psychological pain that feelings of inferiority may cause by redefining the meaning and importance of the particular domain. I will review this study to demonstrate that people discount feedback when they are in danger of feeling inferior to others. In the study, 46 Caucasian female participants were asked to perform the perception task. These participants received one of two types of false feedback on their task performance. They either received feedback that they performed better than a group of Asian women or that they performed worse than the Asian women. All the participants completed a modified version of the Identity subscale of Luhtanen and Crocker's (1992) Collective Self-Esteem Scale. One question from the Centrality subscale of the Multidimensional Inventory of Black Identity (Sellers, Rowley, Chavous, Shelton & Smith, 1997) was also administered. The measures assessed the extent to which the participants focused on either their ethnicity or gender. Cronbach's α for the scale was .88. Results of a 2 (high vs. low self-esteem) x 2 (worse vs. better performance) ANOVA indicated that when outperformed, participants were significantly more likely to focus on the unshared identity ($t(60)= 2.6, p<.02$) than the shared identity.

The results supported the authors' hypothesis that "European American women who had been outperformed by an Asian woman would selectively emphasize their ethnic identity, because this identity differentiated them from the superior performer, making her performance seem like a less relevant basis for self-evaluation" (p. 401).

Research has also shown that when individuals are faced with the threat of feeling stigmatized by others they are able to maintain a positive self-concept by either denying the evaluative nature of the stigma that is informing the feedback or by denying the relevance of the domain in which they are being evaluated (Von Hippel, Von Hippel, Conway, Preacher, Schooler & Radvansky, 2005). Feedback discounting occurs when people feel that they are in a position to be stigmatized or stereotyped negatively and they choose to cope with this by denying incompetence in the domain, either by disidentifying with the domain or devaluing the opinion of those who are giving the feedback (Von Hippel et al. 2005). There have been several studies on feedback discounting (Crocker et al., 1989, 1991; Major et al., 2003; Roberson et al., 2003) and the results of these studies all indicate that people are more likely to discount feedback when they feel that they are being portrayed negatively through the feedback (Von Hippel et al., 2005; Ashford et al., 2003; Roberson et al., 2003; Mussweiler et al., 2000). I have reviewed the theoretical research by Ashford et al.(2003) and the Mussweiler et al. (2000) study. I next review an additional study on discounting negative feedback.

Studies suggest that members of stigmatized groups are aware of the possibility that they are being discriminated against and blame negative feedback on this discrimination when it is plausible (Major, Quinton & Schmader, 2003; Crocker, Voelkl, Testa & Major, 1991; Crocker & Major, 1989). The Crocker et al. (1991) study is

reviewed later in this chapter in relation to African Americans discounting feedback. In the Major et al. (2003) study, 87 female participants completed a creativity task. Ethnicity of participants was not reported. Each participant received negative feedback on the task. The participants were exposed to three different levels of situational cues of prejudice. In the overt prejudice condition, participants were told by a confederate that the evaluator was prejudiced against women (Major et al., 2003). In the ambiguous prejudice condition, the participants were told that the evaluator judges men and women differently. In the no prejudice condition, participants were given no prejudicial cues at all. The dependent variable was an attribution questionnaire that the authors created for the purposes of this study that assessed the extent to which the participants thought their evaluation was due to “sex discrimination,” “unfair treatment against you,” and “prejudiced evaluator.” Tukey HSD tests demonstrated that participants in the overt prejudice condition ($M= 3.94$) were significantly more likely to attribute their negative feedback to discrimination than were participants in the ambiguous prejudice condition ($M= 3.00$) who were in turn significantly more likely to attribute their negative feedback to discrimination than participants in the no prejudice cues condition ($M= 1.14$; all $ps < .05$). These results support the notion that when prejudice cues are present, people are more likely to attribute negative feedback to discriminatory practices in the evaluation and not on their own performance abilities (Major et al., 2003). This study concluded that as situational cues of prejudice increase, so too does the probability that negative feedback will be attributed to discrimination. Though this study uses gender as the stigmatizing variable it is conceivable that these results may have implications for other stigmatized identities as well.

In summary, it is evident from how feedback is used and the important personal significance that people attach to feedback why discounting might occur in the workplace. If people are able to separate their personal merit from the feedback they are receiving than they are likely to maintain their feelings of self-worth if the feedback is negative. In the following section I will take findings from some of the most relevant studies on this topic and examine the available information about feedback discounting with African Americans in the workplace.

Feedback discounting with African Americans. One group that is thought to be at a high risk of being stigmatized in the workplace is African Americans. I next review the two studies that I have found on feedback discounting with African Americans in some detail and review what is known about feedback discounting with this population.

The effects of feedback discounting are demonstrated in a study by Crocker et al. (1991). In this study, 38 African American and 45 Caucasian participants were randomly assigned to conditions where they received either positive or negative feedback on a self-description form that included information about the participants' likes and dislikes, strengths and weaknesses, and personal qualities. In addition, the participants were either able to see the race of their evaluator or they were unable to see the race of their evaluator. After receiving the feedback, the participants received a measure created for this study where they were asked to indicate the degree to which they felt the evaluators' response to them was influenced by their sex, race, religion, and personality and also by the evaluators' racism. Participants also indicated the degree to which they felt that they had been discriminated against by the evaluator.

A 2 (race of subject) x 2 (type of feedback) x 2 (visibility of evaluator) ANOVA was performed and resulted in a main effect for the participant's race. African American ($M= 6.58$) participants were significantly more likely than Caucasian ($M= 4.89$) participants to attribute negative feedback to prejudice $F(1, 74)= 11.30, p<.002$. For African Americans, the effects for feedback $F(1, 36)= 24.12, p<.0001$ and visibility $F(1, 36)= 5.97, p<.02$ were significant. According to participants' results on the Rosenberg Self-Esteem Scale (1965), which is a 10-item measure of personal self-esteem with a reported high internal consistency and a test-retest reliability of .80 over a 6-week period, self-esteem increased when they believed the evaluator was blind to their race, but significantly decreased when they believed the evaluator knew their race. The authors speculated that this occurred because those being evaluated attributed the positive feedback to their stigmatizing condition, instead of to personal attributes that are unrelated to the stigma. Specifically, if participants believed that others were being nice to them or were evaluating their work positively out of sympathy for their "condition" or fear of appearing prejudiced, then positive outcomes did not make these individuals feel any less stigmatized (Crocker et al., 1991). This finding was supported in a review of literature by researchers (Brief, Buttram, Reizenstein, Pugh, Callahan, Mcline & Vaslow, 1997) who reported that there are a number of studies where Caucasian participants who suspected that their racial attitudes were being investigated did not treat Blacks unfavorably, however, when the purpose of the studies was well hidden, some Caucasian participants felt free to act on their negative racial attitudes. The conclusion that these authors came to was that Caucasians holding negative racial attitudes restrained

themselves from expressing these feelings unless they believed that they would not be identified as racist (Brief et al., 1997).

One can see how discounting feedback can be problematic in that it makes it almost impossible for a stigmatized individual to get any “reliable” feedback on their performance in the workplace. Additionally feedback discounting is also harmful for those giving feedback, in that it makes it extremely difficult to effectively communicate feedback to those who are members of stigmatized groups. Crocker et al’s (1991) discussion of their study implied that those giving feedback might fear being perceived as either biased and prejudicial, or as only wanting to seem socially desirable. This implication also was supported in the Mussweiler et al. (2000) study.

In the previously reviewed study by Mussweiler et al. (2000, see p. 4 of this manuscript), the authors found that when one is able to focus on the aspect of their identity that is different from the evaluator that this significantly decreased the relevance of the feedback. I believe that these results can be generalized to African Americans in the workplace. Again, this study found that when participants underperformed in comparison to a “standard” that the participants tended to focus on aspects of their identities that separated them from the “standard.” When this occurs, feedback may not be attributed to the ability of the person who is being evaluated, but instead on the attributes of the evaluator (Mussweiler et al., 2000). This behavior can lead to the employee not taking responsibility for their performance (positive or negative) in the workplace. When applied to African Americans in the workplace this behavior might leave supervisors and coworkers not knowing how to interact or talk candidly with African Americans because they may not be perceived as a reliable source of feedback.

Crocker and Major (1989) contend that African Americans might tend to rely on one another (when this is available) for an honest indicator of how they are doing.

One study examined feedback discounting (Roberson et al., 2003) in the workplace with African Americans. In this experiment, the researchers wanted to investigate the relationship of stereotype threat to feedback seeking and feedback acceptance. In the Roberson et al. (2003) study, 166 African American participants completed several questionnaires to examine how their perceptions of stereotype threat influenced their tendency to both seek feedback and discount feedback from their supervisors. The authors used measures of stereotype threat, feedback seeking strategies, and feedback discounting in their study. The feedback discounting measure consisted of four items that were adapted from a measure used by Crocker et al. (1991). Crocker et al. (1991) reported an internal consistency coefficient of .76 for this scale and Roberson et al. reported a reliability coefficient of .77. Crocker et al. (1991) found that the scale was responsive to the study manipulations as predicted, indicating construct validity.

In the Roberson et al.(2003) study, four sequential regressions were performed for each hypothesis. For each sequential regression, three control variables were entered at the first step (i.e., organizational tenure, gender, and educational level). The first hypothesis was that solo status in the work group is associated positively with the experience of stereotype threat. This hypothesis was supported. The African American professionals of solo status reported experiencing a greater amount of stereotype threat on the job ($r = .16$; $p \leq .05$) over and above organizational tenure, gender and educational level. The second hypothesis was that stereotype threat relates negatively to direct feedback seeking. This hypothesis was not supported. Using sequential regression, with

tenure, education and sex entered as step 1, stereotype threat did not account for a significant amount of the variance in direct feedback seeking ($\beta = .02$), $t(165) = .08$, $p > .01$). The third hypothesis, that stereotype threat would account for significant variance in indirect monitoring feedback seeking, was supported. Results concluded that the presence of stereotype threat accounted for a significant amount of the variance in feedback monitoring ($\beta = .22$), $t(165) = 7.63$, $p < .01$) over and above organizational tenure, gender and educational level. The fourth hypothesis was that stereotype threat relates positively to feedback discounting. This hypothesis was also supported. Stereotype threat accounted for a significant amount of the variance in discounting feedback from supervisors ($\beta = .32$), $t(165) = 18.687$, $p < .001$). The variance accounted for in stereotype threat by feedback monitoring was 5% and for feedback discounting was 10%. Feedback-seeking was not significant in the analyses. The results of this study support the conclusion that African Americans who perceived stereotype threat in the workplace were more likely to engage in feedback discounting, and to a lesser extent, feedback monitoring.

Feedback Environment. Another factor that could influence how feedback is accepted is the feedback environment that is present in the workplace. According to Norris-Watts and Levy (2004), as opposed to formal performance appraisals, the feedback environment refers to the daily interactions between members of an organization regarding the way feedback is presented, received, and used. Feedback environment has more recently been examined in terms of how it affects workplace performance (Norris-Watts & Levy, 2004; Rosen, Levy & Hall, 2006). Certain contextual variables have been examined in regards to feedback environment. These factors include the accuracy of the feedback message

that is delivered, the manner in which the feedback is delivered, the credibility of the individual giving the feedback and the perceived fairness of the feedback (Norris-Watts & Levy, 2004). Researchers emphasize that the feedback environment should not be thought of as one stable aspect but instead as a continually changing, dynamic system (Norris-Watts & Levy, 2004; Steelman, Levy & Snell, 2004).

In the Norris-Watts and Levy (2004) study the authors were examining affective commitment which is defined as “identification with, involvement in, and emotional attachment to the organization” and is highly correlated with management receptiveness, organizational dependability, organization support, and support from supervisors (p. 355). The study also examined organizational citizenship behaviors (OCBs) which are categorized as behaviors that are beneficial and supportive for the organization yet are not required by the demands of the task or job, and may not have as clear a direct link to organizational rewards such as altruism, conscientiousness, sportsmanship, courtesy, and civic virtue (Norris-Watts & Levy, 2004). In this study the authors hypothesized that affective commitment would mediate the relation between the feedback environment and OCBs. They also hypothesized that there are OCBs that the organization is responsible for (OCBOs) and OCBs that the individual is responsible to uphold (OCBIs; Norris-Watts & Levy, 2004). The second hypothesis asserted that the relation between the feedback environment and OCBI shows a stronger mediation through affective commitment than the relation between the feedback environment and OCBO. In other words affective commitment was expected to have more of an impact on the relation of the feedback environment and individual’s organizational citizenship behaviors than

between feedback environment and the organization's organizational citizenship behavior.

The study had 140 undergraduate student participants who were employed at least part-time and gave permission to have their supervisors contacted to participate in the study. There were 71 supervisors who responded to the surveys, yielding a response rate of 51%. The average age of the student participants was 22.98 with 70% of the sample being made up of women; 75% were Caucasian, 15% were African American, and 10% identified themselves as Asian, Hispanic, or Other. The supervisor participants' mean age was 40.1 with 68% of the sample being made up of women; 91.5% were Caucasian. The authors used the Feedback Environment Scale (FES; Steelman et al., 2004) to assess supervisor and feedback environment perceptions. This 63-item Likert scale assesses each feedback environment and the seven facets within each. The FES has both coworker and supervisor subscales but the authors in this study only used the supervisor subscale of the FES. In this study the reliabilities for each scale were as follows: Source credibility $\alpha = .83$, Feedback Quality $\alpha = .90$, Feedback Delivery $\alpha = .83$, Favorable Feedback $\alpha = .92$, Unfavorable Feedback $\alpha = .81$, Source Availability $\alpha = .82$, Promotes Feedback Seeking $\alpha = .76$ (Norris-Watts & Levy, 2004). Items are rated on a 1 to 7 Likert-type scale ranging from strongly disagree to strongly agree, with higher scores representing more favorable views of the feedback environment (Steelman et al., 2004). Affective commitment was measured using the Affective Commitment Scale (Allen & Meyer, 1990). Norris-Watts and Levy (2004) do not report the psychometric properties of this measure except to say that it yielded an acceptable level of reliability $\alpha = .83$. Supervisors were asked to complete questionnaires about the performance of their employees. They

used the OCB scale by Podsakoff et al. (1990) to measure the organizational behavior of their employees. This 24-item scale assesses all five dimensions of OCB (altruism, conscientiousness, sportsmanship, courtesy, and civic virtue) on a 7 point Likert-type scale. The reliability for this scale is $\alpha=.86$ with reliabilities for the subscales at $\alpha=.79$ for altruism, $\alpha=.67$ for conscientiousness, $\alpha=.76$ for sportsmanship, $\alpha=.76$ for courtesy, and $\alpha=.80$ for civic virtue (Norris-Watts & Levy, 2004). The OCBI was computed by calculating the mean across the altruism and courtesy items of the OCB and OCBO was computed by calculating the mean of the sportsmanship, civic virtue, and conscientiousness items of the OCB (Norris-Watts & Levy, 2004).

The correlations between the supervisor FES and work outcome behaviors showed that overall, the feedback environment related positively to supervisory reported OCB so that the more positive the employee rated the feedback environment the more OCBs their supervisor reported the employee displaying. Stepwise regressions were then conducted to test the mediating effects of affective commitment. First, affective commitment was regressed on the FES and was found to be significant, $F(1,69)= 11.30$, $p<.01$, $\beta=.38$, $t=3.36$, $p<.01$. The first hypothesis was supported because the relation between the FES score and OCB was partially mediated by affective commitment $F(1,69)=5.49$, $p<.01$, $\beta=.28$, $p<.05$ with 14% of the variance in OCBs being explained by FES and affective commitment. The second hypothesis was also supported by a mediational path analysis which showed that the effect of the feedback environment on OCBs and OCBI was significantly mediated by affective commitment (Indirect path coefficients at .06 and .08 with z-scores of 1.73 and 1.78 respectively; $p<.05$) whereas the effect of the feedback environment on OCBOs was only marginally significant ($p<.10$;

Norris-Watts & Levy, 2004). In general this study demonstrated that the environment in which feedback is given and received is differentially related to behavioral outcomes, and this is likely due to the impact of that the feedback environment has on variables such as affective commitment (Norris-Watts & Levy, 2004). Although a study has not been found that examines feedback environment and stereotype threat directly; it seems that it would be similar to feedback discounting in that the feedback environment can be perceived negatively especially when the feedback given is seen as arbitrary and unfair.

Methodological critique and summary. In this section we have reviewed discounting feedback and the feedback environment. We have focused particularly on African Americans in the workplace. The research reviewed here demonstrates that feedback discounting can have detrimental effects on these individuals in the workplace. Roberson et al. (2003) and Crocker et al. (1991) speculated that the reason African American participants in their studies discounted feedback was a result of their belief that the feedback that they received from supervisors and/or coworker was a result of these individual's negative stereotypes about African Americans or from their desire to appear unprejudiced. Researchers have asserted that when this occurs that the feedback is not seen as an accurate indicator of their performance (Roberson et al. 2003; Crocker et al. 1991).

Discounting feedback has been found to have both positive and negative effects on the stigmatized individual (Crocker & Major, 1989; Crocker et al, 1991; Major et al. 1998). Researchers theorize that the positive effect is that it can serve as a buffer for the self-esteem of the person being evaluated and attribute negative feedback to something other than his/her performance. The negative effect is that it is difficult for the individual

to take ownership and responsibility for his/her performance in the workplace. Negative feedback is usually attributed to the bias, prejudice, or other illegitimate judgments of the person providing the feedback (Major et al. 1998), and not to one's own ability or performance levels in the workplace. The tendency to discount feedback has another negative consequence. Workers who discount feedback may not only discount negative feedback, but positive feedback as well. This can occur when the positive feedback is perceived as being the evaluator's desire to seem unprejudiced or appear socially desirable (Crocker et al, 1991; Roberson et al. 2003). These negative effects are not only limited to employees in these circumstances, but also to supervisors trying to communicate effectively with employees. This tendency to discount feedback makes it difficult for supervisors who want to be able to express their views to their employees in a way in which they will be understood and acknowledged accurately.

There were many strengths to the studies that I have reviewed regarding feedback. One consistent strength that I have found is the way in which feedback is operationally defined. This consistency helped to make clear what was considered feedback in a variety of settings. Another strength of the feedback studies is that they consider the different ways that it can be useful for the receiver. This was helpful because it helped to layout the ways in which feedback can be both understood and used effectively and also misunderstood and therefore used in misguided ways. There were some weaknesses in the feedback studies. Some of the measures that the studies used were not effective for assessing the construct of feedback and its effect on the participants. Some of the concerns with measuring feedback discounting in the ways that we have reviewed are that it might be more effective to get a combined evaluation from both the employee as

well as the supervisor regarding the extent to which one discounts feedback in the workplace. This, however, is difficult to do without compromising the safety of participants. It will also be important that the measure for feedback discounting is distinguishable from the other measures such as stereotype threat or workplace climate so that the same concept is not being measured.

The following sections will examine and attempt to explain some of the proposed reasons why African Americans might discount feedback in the workplace. First, I will examine the perception of stereotype threat as a possible contributor to African Americans discounting feedback in the workplace. Then, in the next section I will review studies that examine stereotype threat and focus on those studies that shed light on how stereotype threat influences African Americans in the workplace.

Stereotype threat

In this section I review stereotype threat in general and examine research on this topic, and then continue with a more specific discussion of the role of stereotype threat in the workplace with African Americans. In considering contributing factors for discounting feedback in the workplace, it seems plausible that the experience of negative stigma might be a significant mechanism for discounting feedback. Stereotype threat is a term that was created to describe a perception that has affected and continues to affect the performance of stigmatized individuals on many different stereotypically relevant tasks. In general, Steele (1997) defined stereotype threat as a form of anxiety that is the result of a stigmatized individual's fear of confirming a negative stereotype or stigma about their group through their own behavior or performance. Steele (1997) postulated that people who are members of stigmatized groups are often negatively affected by this concept

because when stereotype threat is activated, one's attention and concentration is transferred from a particular task to their concern about their level of performance and what their performance could signify to others about their group.

Stereotype threat is usually experienced as it is activated, often through the presentation of a word or concept that triggers a memory and makes the stereotype more accessible. One type of priming was exhibited in a study by Steele and Aronson (1995), where 35 African American participants and 33 Caucasian participants were asked to complete a task and were assigned to one of three conditions (diagnostic, nondiagnostic, or control). In the diagnostic condition, the experimenter expressed that the task to be completed was going to be representative of their mental ability. In the nondiagnostic condition, the experimenter expressed that the task was just to learn more about the task and not about the participants' abilities. In the control condition, there was no experimenter and the participants received no verbal cues and only completed the task that was waiting for them on a desk. Before these tasks were completed, participants' membership in a racial group was primed by asking them to complete a stereotype activation measure which consisted of a list of words that was generated by Caucasian students to represent the image of African Americans (Steele & Aronson, 1995). These words were used to trigger African American participants' awareness of their membership in their racial group. This measure included words such as __ CE (RACE); LA__ (LAZY); __ OR (POOR), etc. An ANCOVA analyses was performed and significant results were obtained ($F(2, 61) = 3.30, p < .05$). African American participants in the diagnostic condition produced more race-related completions on the stereotype activation measure ($M = 3.70$) than did African American participants in the

nondiagnostic condition ($M= 2.10$), $t(61) = 3.53$, $p < .001$. This type of stereotype activation is rather overt in comparison to priming in which the participant's membership in a group is triggered by simply asking the participants to identify their race on a demographic measure (Steele & Aronson, 1995).

Stereotype threat is thought to affect anyone with a group identity about which there are widely known stereotypes; thus, the person does not have to believe that the stereotypes are true in order for stereotype threat to affect them (Steele & Aronson, 1995). They need only believe that they will be judged by either evaluators or observers who will be influenced by these stereotypes. Stereotype threat is thought to often lead to performance deficits in the most "highly" skilled individuals (Steele & Aronson, 1995). One hypothesized reason for this is because individuals who are highly skilled in a particular domain have usually spent more time learning and perfecting their skills. Thus, it is believed they have more personally invested in the domain and in the implications of their performance (Smith, 2004). Stereotype threat is thought to be dependent upon one's investment in the domain and their performance because if the person has nothing invested in the domain than they have no reason to feel threatened (Brown & Pinel, 2003).

Stereotype threat negatively affects peoples' performance because it creates a concern for how others are evaluating them and diverts their concentration from the task they are doing to their feelings of self-consciousness about how they are being perceived (Smith, 2004). The stigmatized individuals' performance suffers (Brown & Pinel, 2003), primarily when widely held negative stereotypes seem relevant to the domain in which one is being evaluated. For example, a commonly-held stereotype is that women are

worse at math than men. This stereotype would not negatively affect a woman completing a task in a history class, because the stereotype is not relevant to the domain in which she is being evaluated. There are many groups about which negative stereotypes are widely known. These negative stereotypes about certain groups or social identities provide a structure for interpreting the behavior and determining the treatment of members of these groups (Davies, Spencer & Steele, 2005).

When one has membership in more than one stigmatized group, it is the social identity that is the most salient for that individual that will have the greatest effect on his or her functioning during a given situation. The identity that will be the most salient is often influenced by society's attitudes towards the identity within that particular setting (Davies et al., 2005). One's race, gender, or sexual orientation might become most salient in any given situation depending on the stereotype that is relevant within the domain in which they are being evaluated. By confirming negative stereotypes about one's group through negative performance in a valued domain, the stigmatized individual is likely to feel that they have let down their group or feel devalued in the domain in which they have underperformed (Steele & Aronson, 1995).

Research shows that the activation of stereotypes undermines the effects of an otherwise positive performance in the mind of the stigmatized individual (Stangor et al., 1998). In this study, 56 female participants were asked to perform two tasks that they were told would be diagnostic of their intellectual ability and college performance. The first task was a word-finding task and after this was completed the participants received performance feedback that was designed to produce either high or low confidence in their skill level. The participants were then told that they would be completing the second task

and for the second task there were two conditions. In the first condition, the participants were told that men were known to perform better than women in this task; this action was meant to activate stereotype threat in the participants. In the second condition, the participants were told that men and women performed equally on this task. The participants were then asked to estimate their likely performance on the second task. All of the measures used were designed by authors for this study. The results used a 2 (task feedback) x 2 (task description) x 2 (task rated) ANOVA analysis and concluded that when stereotype threat was not activated, participants who received positive feedback estimated that they would perform better on Task 2 ($M= 6.14$) than on task 1 ($M= 5.07$) in comparison with those who had received ambiguous feedback ($M_s= 5.43$ and 5.78 respectively). When stereotype threat was activated, however, whether the feedback the participants received was positive ($M= 5.36$) or ambiguous ($M= 5.64$) did not influence how participants rated their performance ($F(1, 52)= 8.30, p<.01$). These results support the finding that when stereotype threat is activated even when given positive feedback that people will tend to underestimate (or in this case not rate as positively) their performance potential (Stangor et al, 1998). Again, though this study used gender as its stereotypic variable, it is plausible to think that the implications of the study would hold for racial stereotypes.

There has been a good deal of research on stereotype threat in terms of differences between stigmatized and non-stigmatized groups in academic settings (Steele, 1997; Steele & Aronson, 1995, Brown & Pinel, 2003; Smith, 2004; Spencer, Steele & Quinn, 1999; Sackett, Hardison & Cullet, 2004; Steele & Davies, 2003). These studies support the finding that stigmatized groups tend to perform worse when the stereotype is salient

and relevant to the task. The following section will review those studies which focus on African Americans' performance on particular tasks and how stereotype threat has affected African Americans.

Stereotype threat with African Americans. Much of the literature on stereotype threat and African Americans is mostly theoretical or anecdotal in nature. One reason that stereotype threat is thought to be effective in decreasing performance is the assertion that people are affected by their perceptions of prejudice through the activation of "category-relevant" stereotypes, even in the absence of overprejudicial behavior (Stangor, Carr, & Kiang, 1998). There are many "category relevant" stereotypes for African Americans, and because there are so many negative stereotypes about this group there are many domains in which these stereotypes have the potential to be salient (Steele & Aronson, 1995). Stereotypes inform a person of the societal assumptions that devalue their group's social identity. Researchers believe that as a group, African Americans are well aware that many societal stereotypes accuse them of being intellectually inferior, aggressive, or confrontational (Davies et al., 2005). African Americans have lower performance on intellectual tasks when they are made particularly aware of their race and when race-related stereotypes have been activated (Steele & Aronson, 1995). I will now review some ways in which stereotype threat is thought to affect African Americans.

Priming negative racial stereotypes activates the individual's self-doubts in relation to the stereotype being primed (Steele & Aronson, 1995). As was mentioned earlier, there are different ways to activate stereotype threat. When Steele and Aronson (1995) wanted to find out if African American participants would underperform relative to Caucasians in both diagnostic and nondiagnostic conditions they used a stereotype

activation measure to assess the cognitive activation of constructs that were either recently primed or that were self-generated by the participant. When the participants felt threatened by a racial stereotype, it affected their thinking and the information processing related to that stereotype. In order to adequately activate stereotype threat, it is thought that the racial stereotype along with the self-doubts that are connected to that stereotype should be cognitively activated. As was discussed earlier when Steele and Aronson (1995) split their 68 participants into separate groups, the group in which stereotype threat was purposely activated was told that they would be evaluated on their performance on a particular task. The evaluative nature of the task was thought to be the activating component through the stereotype that African Americans do not perform well on evaluative tests. It is a widely held stereotype that African Americans consistently score lower on tests than other groups, in this case other Caucasian participants. According to the tenets of stereotype threat, once the African American participants were notified of the evaluative nature of their task, stereotype threat was already cognitively activated (Steele & Aronson, 1995), and the results that were reviewed earlier supported this assertion.

Another study that used a priming technique to incite stereotype threat is from Davis, Aronson, and Salinas (2006). In this study the authors wanted to investigate if and when racial identity status attitudes moderate intellectual performance in high and low stereotype threatening situations. They used Cross' (1971, 1991) developmental model of Black racial identity development. In this model there are four statuses which are considered mindsets through which one can pass but through which they can also return in response to significant life events (Helms, 1995). The four statuses of the model are

the Pre-encounter status, the Encounter status, the Immersion-Emersion status and the Internalization status. The Pre-encounter status is characterized by a denigration of being Black or a de-emphasis of race (e.g. “I’m an American, not Black”); there may also be an unquestioning acceptance of the negative stereotypes associated with Black people (Davis et al., 2006). The Encounter status signifies a situation where circumstances or an event induce an identity change. This can include such incidents as racial profiling or other types of discrimination where the person must choose whether or not to deny the racial encounter and the possible meaning of that encounter. The next status is Immersion-Emersion. In the early phase of this status a person may change his or her dress to more Afrocentric attire or narrow their social contacts to predominately Black organizations and people. An us-versus-them mentality may emerge during this phase with Whites being seen as the enemy (Davis et al., 2006). The final status is Internalization. In this status the individual embraces an identity that is not exclusionary. In this phase individuals realize that they can be proud of their ethnic heritage without having to disparage Whites and may make an effort to try to educate others to end injustices and discrimination (Davis et al., 2006). Because there are such different meanings assigned to experiences of racial discrimination in specific statuses of this model, the different statuses of racial identity development are proposed to underlie different responses to racially relevant situations (Davis et al., 2006).

The authors hypothesized that African American students who subscribe to a higher ethnic identity status have a buffer against social threats associated with race (Davis et al., 2006). In order to assess if this hypothesis was true they created low, medium, and high stereotype threat situations, which allowed for the exploration of

additive effects of stereotype threat cues in the environment. In the low threat condition, they hypothesized that those who were in the Pre-Encounter and Immersion-Emersion statuses would have decreased performance on a task. The authors asserted that individuals with a Pre-Encounter status would be most vulnerable to the effects of stereotype threat because they believe many of the negative stereotypes suggested about Black people (Davis et al., 2006). Similarly those endorsing the Immersion-Emersion status would also be at risk, because they identify so strongly with being Black. For this reason, they are especially vulnerable to stereotype threat because they want to work hard to contradict the stereotypes of Blacks being intellectually inferior (Davis et al., 2006). Internalization status participants, according to Davis et al, (2006) should have fewer conflicts about what it means to be Black and be less likely to see the task and their performance on the task as a confirmation or validation of their race. The authors purported that racial identity status will moderate test performance, with better performance among students who, measures indicate strongly prescribe to the Internalization status attitudes compared with those who more strongly endorse the attitudes of the Immersion-Emersion status (Davis et al., 2006). The authors predict that the differences in the task performance will be most evident when stereotype threat is low or moderate rather than high because when cues are salient and stereotype threat is high, individual differences in racial identity attitudes will exert less influence over performance (Davis et al., 2006).

The participants in this study were 120 Black undergraduate students. The study had two parts and only 98 students (64 female; 34 male) completed the entire study. The mean age of participants was 20.8 with the median age being 20 years old. There were

33% freshman, 12% sophomores, 27% juniors and 25% seniors. The participants completed the Racial Identity Attitudes Scale- Revised (RIAS; Helms & Parham, 1990), which has its theoretical foundation in Cross's (1971) model (Davis et al., 2006). This is a 50-item self-report measure in which there are four subscales (one per status) and participants are asked to indicate their agreement with statements on a 1-strongly disagree to 5- strongly agree, Likert-type scale. Helms (1990) reported Cronbach's alpha reliabilities for the four subscales which were Pre-Encounter=.65, Encounter=.49, Immersion-Emersion=.65, and Internalization=.63. In this study the authors internal consistency reliability coefficients for the subscales were, Pre-Encounter=.72, Encounter=.51, Immersion-Emersion=.75, and Internalization=.50. The measure that the authors gave to prime for stereotype threat was the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). This was used to ensure that participants were thinking about issues of race and ethnicity immediately before completing the task, thereby creating a high threat situation. The MEIM is a 14-item measure that assesses three aspects of ethnic identity: positive ethnic attitudes and sense of belonging; ethnic identity achievement, including both exploration and resolution of identity issues; and ethnic behaviors or practices (Phinney, 1992). The items are rated on a 4-point scale from strongly agree to strongly disagree where higher scores indicate a higher ethnic identity (Phinney, 1992). The reliability of this scale is .90 as reported by Phinney (1992), but the current study did not report any reliability or validity information. The participants were also asked to complete some verbal items from section 2 of the GRE. This served as the dependent variable in this study.

In the first part of this study the participants completed the RIAS (Helms & Parham, 1990) and a demographic questionnaire. In the second part of the study the students were randomly assigned to one of three conditions: low, medium or high threat. In each condition the participants were asked to complete the GRE verbal task. In the low threat condition, participants were told that the experimenter was interested in “understanding how students respond when confronted with a challenging problem solving exercise.” In the medium and high threat conditions, participants were told that the verbal task was a measure of their “verbal ability and verbal intelligence.” In the high threat condition participants were also asked to complete the MEIM (Phinney, 1992) before taking the verbal task. The experiment has the following three conditions (a) low: no race prime with problem-solving instructions, (b) medium: no race prime with verbal intelligence instructions; and (c) high: race prime followed by verbal intelligence instructions (Davis et al., 2006).

The results used an ANCOVA to test the hypothesis that those in the low threat condition would perform better on the verbal task than those in the high threat condition. In the analysis there was a main effect found by condition ($F_{1,95} = 3.99$; $p < .05$). Students in the high threat condition solved fewer items on the verbal task ($x = 14.64$) than those in the low threat condition ($x = 16.7$). This hypothesis supported the hypothesis that the best performance would occur when race was not primed and the task was described as nondiagnostic (Davis et al., 2006). Another hypothesis was that high Internalization attitudes would be positively related to higher performance in the low threat condition. The results showed a significant positive correlation between the performance on the task in the low threat condition and Internalization status ($r_{24} = .424$; $p < .05$). Students who

endorsed more Internalization attitudes performed better on the verbal task than those who did not score high on the Internalization status. In contrast, other racial identity variables did not correlate significantly with performance in any of the threat conditions. To test the hypothesis that racial identity would moderate the effects of threat on the task performance, the authors followed the procedures outlined by Aiken and West (1991) for examining interaction effects using multiple regression. There was a significant effect for Internalization status attitudes $F(1,95)=4.78$, $\beta=.89$, $t=2.09$, $p<.05$ and for the interaction between type of threat condition and Internalization status attitudes $F(1,95)=-2.65$, $\beta=.90$, $t=1.14$, $p<.05$ (Davis et al., 2006). The interaction effect graph shows that in the high threat condition, Internalization status attitudes did not have an effect on performance. In the low threat condition, however, those with Internalization status attitudes performed better on the task. This supports the hypothesis that in the low threat racial identity attitudes seemed to have served as a buffer against the negative effects of the threat (Davis et al., 2006).

One aspect of both the Steele and Aronson (1995) and the Davis et al. (2006) studies that is important to consider is that stereotype threat was activated by having the participants complete a task where they either filled in word fragments using letters from words that are commonly associated with well-known stereotypes of the African American community or completed a measure that caused participants to think about issues related to race and ethnicity immediately before completing the other measures. This manipulation merits further examination. As mentioned earlier, the authors, in the Steele and Aronson (1995) study, in an attempt to make sure that the word fragments came from words that were relevant to stereotypes of the African American community,

asked a group of Caucasian students to generate a set of words that reflected their perceptions of African Americans. This displays further evidence that negative stereotypes about African Americans are widely held in society by others, especially those who might be in a supervisory position of the stigmatized individual (Steele & Aronson, 1995; Roberson et al., 2003).

Methodological Critique and Summary. Due to the notoriety of the stigma of intellectual inferiority, African Americans' performance on intellectual tasks is likely to be at high risk of being threatened. Their intellectual performance has the potential to confirm negative societal stereotypes and suspicions about their group's intellectual ability and competence (Steele & Aronson, 1995). As this threat continues, over time it may have the effect of pressuring these individuals to protect themselves by disidentifying with the domain in which they are being evaluated. This is thought to cause diminished interest, motivation, and achievement within the domain (Steele & Aronson, 1995). These effects are evident in the higher drop out rates and the lower achievement scores and college enrollment of African American students. Stereotype threat is also thought to lead to African Americans displaying some self-handicapping behavior by demonstrating less preparation for a performance and disidentifying with the domain in which they are being evaluated (Von Hippel, Von Hippel, Conway, Preacher, Schooler & Radvansky, 2005).

As a result of continued exposure to negative stereotypes concerning their ability, African Americans are thought to internalize something called "inferiority anxiety," and this can cause them to blame others for their difficulties, underutilize available resources, and form the identity of a "victim" (Steele & Aronson, 1995). African Americans who

are vulnerable to negative stigmatizing judgments about their group's intellectual ability usually exhibit a decrease in their performance levels (Steele & Aronson, 1995). Even subtle reminders of negative stereotypes are thought to produce significant changes in performance and confidence (Aronson & Inzlicht, 2004). Some researchers (Rushton & Jensen, 2005) imply that African Americans' perceptions of stereotypes are something that is imagined, and that they are not based in reality. The effects of stereotype threat only require the perception of a threat; numerical minority status does not change the effects of stereotype threat. African Americans carry the knowledge of stereotypes around with them wherever they go; it does not disappear even when they are in the majority numerically (Suzuki & Aronson, 2005). Research (Steele & Aronson, 1995; Stangor et al., 1998; Steele, 2003) has shown, however, that stereotype perceptions are real for the people who perceive them and as long as individuals perceive that stereotypes are present, these stereotypes will continue to have negative effects on the performance and self-concept of those who are members of these stigmatized groups (e.g., African Americans, women, elderly).

In this section we have reviewed how stereotype threat can affect stigmatized groups, in particular African Americans, and the ways in which they are often stigmatized. It seems as though African Americans might experience stereotype threat in a variety of settings. The large amount of well-known stigmas and the variety of environments in which these stigmas would be applicable almost make it difficult to imagine a setting in which African Americans would not experience stereotype threat. In the next section we will review how stereotype threat can affect African Americans in the

workplace. We then make a connection between how some African Americans might feel in the workplace and how this might influence feedback discounting.

Stereotype threat with African Americans in the workplace. To date there is only one known study that examines stereotype threat as it relates to African Americans in the workplace (Roberson et al., 2003). As a result of the lack of available research on this topic, and given its centrality to this study, the study by Roberson et al. (2003) will be discussed in some detail and was also discussed in a previous section. In the Roberson et al. (2003) study, the authors obtained a sample of 166 African American managers to examine their perceptions of stereotype threat in workplace settings and investigate the relationship between stereotype threat and feedback seeking and acceptance (Roberson et al., 2003). Using Steele and Aronson's (1995) model for stereotype threat, the authors asserted that because the participants were managers one can assume that intellectual ability is a salient factor for their positions. Thus, priming relevant stereotypes would activate stereotype threat. As was mentioned previously, one of the most pervasive negative stereotypes about African Americans is intellectual inferiority (Steele & Aronson, 1995; Steele, 1997; Roberson et al., 2003; Suzuki & Aronson, 2005). This stereotype has crucial relevance for those African Americans who are professionals and have jobs where their intellectual ability is essential to their success. For African Americans who have obtained a position of influence in the workplace, it would not be surprising that they care about their performance at work and have a vested interest in how they are perceived by others in that environment (Roberson et al., 2003).

African Americans' perception of stereotype threat in the workplace might include several different widely known stigmatizations about their group. According to

stereotype threat theory, African American professionals will perceive more stereotype threat in the workplace because this is a domain in which it is important that they succeed in order to disprove many negative stereotypes. In the Roberson et al., (2003) study, the authors were investigating how stereotype threat affects African American managers' propensity to seek feedback and to accept feedback in the workplace. The authors asserted that those experiencing stereotype threat would be less likely to try and obtain direct feedback from their supervisors due to their suspicion about the supervisor's motivation (prejudiced or not); they would instead rely on observable feedback through indirect monitoring.

Roberson et al (2003) also believed that participants in their study were also more likely to discount feedback that they received, believing that any feedback they received is biased either positively or negatively by their ethnicity. The authors hypothesized that the negative feedback that participants received would not be taken in an evaluative manner, but would instead be attributed to their evaluator's biases or prejudicial beliefs about African Americans. Similarly, the authors also hypothesized that the positive feedback that participants received would again not be taken in an evaluative manner by the participants, but instead would be attributed to their evaluator's desire to seem unbiased rather than from an internal belief about the level of the participant's performance (Roberson et al., 2003).

In this study, stereotype threat was not primed. Rather it was assessed using a Steele and Aronson (1995) measure of stereotype threat that was adapted by Roberson et al. (2003) for this study. The 166 African American participants completed the items on the measure to assess their perceptions of stereotype threat in the workplace. Steele and

Aronson (1995) did not report any reliability information on their scale, but validity was demonstrated through the scores of Black participants being significantly higher than that of White participants. In the Roberson et al. (2003) study the internal consistency coefficient for the scale was $\alpha = .77$. Feedback seeking strategies were assessed using two different scales; one to assess direct inquiry feedback and the other to assess feedback monitoring. The direct inquiry feedback scale was drawn from work by Ashford (1986) and Ashford and Tsui (1991) where respondents were asked how frequently they engage in various feedback seeking strategies (Roberson et al, 2003). The measure used for this study yielded an internal consistency coefficient of .81. The feedback monitoring scale was also drawn from the work by Ashford (1986) and Ashford and Tsui (1991) where respondents were asked how frequently they engage in feedback monitoring strategies (Roberson et al, 2003). This measure yielded an internal consistency coefficient of .80 in this study. The feedback discounting measure consisted of four items that were adapted from a measure used by Crocker et al. (1991). Crocker et al. (1991) reported an internal consistency coefficient of .76 for this scale and Roberson et al. (2003) reported a reliability coefficient of .77. Crocker et al. (1991) found that the scale was responsive to the study manipulations as predicted, indicating construct validity.

The results of the study (which were reported previously) used four sequential regressions for each hypothesis. For each sequential regression, three control variables were entered at the first step (i.e., organizational tenure, gender, and educational level). The first hypothesis was that solo status in the work group is associated positively with the experience of stereotype threat. This hypothesis was supported. The African

American professionals of solo status reported experiencing a greater amount of stereotype threat on the job ($r = .16$; $p \leq .05$). The second hypothesis was that stereotype threat relates negatively to direct feedback seeking. This hypothesis was not supported. Using sequential regression, with tenure, education and sex entered as step 1, stereotype threat did not account for a significant amount of the variance in direct feedback seeking ($\beta = .02$), $t(165) = .08$, $p > .01$). The third hypothesis, that stereotype threat would account for significant variance in indirect monitoring feedback seeking, was supported. Results concluded that the presence of stereotype threat accounted for a significant amount of the variance in feedback monitoring ($\beta = .22$), $t(165) = 7.63$, $p < .01$). The fourth hypothesis was that stereotype threat relates positively to feedback discounting. This hypothesis was also supported. Stereotype threat accounted for a significant amount of the variance in discounting feedback from supervisors ($\beta = .32$), $t(165) = 18.687$, $p < .001$). The variance accounted for in stereotype threat by feedback monitoring was 5% and was 10% for feedback discounting. Feedback-seeking was not significant in the analyses. This finding suggests that higher utilization of a low-cost feedback seeking strategy was believed to be more beneficial by those experiencing stereotype threat (Roberson et al., 2003). These results also support the assertion that African Americans who experience stereotype threat are more likely to dismiss the feedback they received, doubt its accuracy, and question the motivations of the feedback source (Roberson et al., 2003). These results imply that if African Americans receive performance feedback from Caucasian supervisors, they might discount the feedback they receive and see it as a function of the supervisors' racism or social desirability. Further, this effect seems to be exaggerated by the perception of stereotype threat in the workplace.

Methodological critique and summary. Throughout this section we have reviewed stereotype threat and examined how stereotype threat can affect African Americans and influence their perceptions of the workplace. In the Roberson et al. (2003) study it seems as though the participants' experience of stereotype threat increased their tendency to discount feedback. I am wondering if there other variables that might influence feedback discounting in the workplace. I think that the Roberson et al. (2003) study made an excellent attempt at addressing feedback discounting but it was not their primary variable. I believe that attention should be paid to other possible contributing factors that might influence African Americans to discount feedback in the workplace. If African Americans feel devalued in the workplace, it would be easy to understand why they would not trust the feedback that they receive. In addition to the perception of stereotype threat in the workplace, an additional variable that might affect African Americans' propensity for discounting feedback is a negative workplace climate. In the next session I examine workplace climate and discuss how the affects of a negative workplace climate might influence African Americans.

The strengths of the stereotype threat studies were that they each effectively discussed the effects of stereotype threat and the rationale for why stereotype threat occurs. This is a strength because it lends support for the position that stereotype threat has a deleterious effect on the performance of those who perceive it in their environments. The weakness of the stereotype threat studies is that there is a paucity of studies examining stereotype threat in the workplace; and in particular there are few studies that examine stereotypes that are relevant to particular workplace settings. There

are also variations in how priming occurs in stereotype threat studies which might make it difficult to decide which is the best and most effective way to prime stereotype threat.

Workplace Climate

In this section I will review workplace climate and describe how it can affect African Americans in the workplace. I am doing this in an attempt to connect how a workplace climate that is perceived negatively can cause African Americans to feel stigmatized in their workplace and potentially lead to stronger perceptions of stereotype threat and feedback discounting. According to Watts and Carter (1991), workplace climate describes the “atmosphere that managers...and majority-group members create” (p. 330). An organization’s climate is generally thought to be an individual’s perception of the interaction between their personal characteristics and values, and the organization’s characteristics and values (Watts & Carter, 1991). When these values diverge, a negative climate is perceived. This perception of workplace climate crosses the spatial boundaries of the actual workplace environment; and can include other activities that take place outside of the workplace. Some activities that can influence one’s perception of the workplace climate includes company parties or other social gatherings at which colleagues are interacting with one another in a more informal manner than what occurs in the workplace. Much of the literature on workplace climate, in terms of how it affects ethnic minorities in particular, is mostly theoretical or anecdotal in nature. Because of this, I will review the empirical articles on this subject in some detail.

Personal values are thought to influence the perceptions of the workplace environment; instrumental values (or beliefs about how people should act) are usually the most relevant to climate perceptions (Hayes et al., 2002; Rentsch, 1990). I first describe

in general the concept of workplace climate and how it has come to be viewed by employees. Then I review negative workplace climate and how it might affect workplace dynamics for employees. I believe that in the presence of stereotype threat a more negative workplace climate is perceived and increases the tendency to discount feedback.

Workplace climate is theorized to be a multidimensional, global perception of an organization developed from a variety of factors in a variety of situations, not just from one policy or opportunity distribution (Hayes, Bartle & Major, 2002). Organizational procedures are believed to be reflections of the values held by the people who created the procedures, and so they are related to attitudes towards the organization (Hayes et al., 2002; Rentsch, 1990). Employees purportedly see the actions of the organizations' representatives as actions of the organization itself. Therefore even when an organization has anti-discrimination policies, if the actions of the representatives are incongruent with those policies, the organization will likely be perceived as having a negative climate (Hayes et al., 2002).

Organizational policies, practices and procedures are thought to give implicit and explicit messages to employees about the organization's stance, so when policies tend to more often negatively impact members of certain minority groups (underpaid, passed over for promotion, not hired) than others, a message is sent that the organization does not value its minority employees (Hayes et al., 2002). Title VII of the Civil Rights Act of 1964 states that it is unlawful to discriminate against anyone on the basis of race, sex, religion, color or national origin (Hayes et al., 2002). This act puts companies who openly discriminate against minorities in a vulnerable position; but the implementation of policies and procedures do not necessarily solve the issue of discrimination in the

workplace. There are subtleties that take place in a work environment that may impact whether people feel as though their work environment is supportive of them or not (Hayes et al., 2002).

A negative climate is thought to exist when employees perceive that the organization's practices are unfair (Hayes et al., 2002). This climate is a psychological climate on an individual level. Organizational perceptions of fairness are thought to be influential in determining this climate, but even more influential are peoples' personal experiences within the organization (Hayes et al., 2002). Perceptions of workplace climate usually develop either because of events that have been experienced, or observed. Employees can use a variety of criteria to develop their perceptions (Hayes et al., 2002; Rentsch, 1990).

The effects of workplace climate on employees. Employees who perceive a negative climate might be less committed to the organization and be more likely to quit (Hayes et al., 2002; Parker, Baltes, Young, Huff, Altmann, Lacost & Roberts, 2003). Group norms within an organization may unintentionally create unfair treatment of certain group members (Hayes et al., 2002). The observable characteristics of an organization are important in the development of perceptions of fairness (equality, equity, and needs; Parker et al., 2003; Hayes et al., 2002; Rentsch, 1990). Supervisors have control over what is considered favorable behavior in the workplace as well as control over the treatment of their work groups through assigning jobs, promotions, and disciplinary actions. Hayes et al. (2002) assert that when supervisors do not treat all of their employees equally, that this affects the behavior and attitudes of the employees.

Brief and Hayes report that African American employees earn less than their Caucasian counterparts in all jobs, and at all levels. Another point that the authors made is that African Americans rarely occupy the higher levels of organizational hierarchies to attain the positions of management executives (Brief & Hayes, 1997). Brief and Hayes (1997) also report that there has also been evidence of intentional segregation of minority employees in organizations in order to localize the departments. In the authors' opinion, what makes these examples stand out is that the management in these examples claimed to be unaware of these circumstances, which leads them to one of two conclusions. The first is that the management is truly unaware in which case they are bordering on neglect of their employees and the conditions in their organization (Brief & Hayes, 1997). The second is that the management is not being truthful and is purposely discriminating against their employees (Brief & Hayes, 1997). Both conclusions result in a negative racial climate for the organization and negative experiences for minority employees, which can result in feelings of mistreatment and suspicion towards the management of these organizations. African Americans have a high perception of discrimination in their work environments. In negative workplace climates people are confronted with environmental cues that prime various social identities that put them at risk of being devalued in various contexts (Brief & Hayes, 1997).

The possibility of real and perceived discrimination in many workplace activities including training, performance appraisal, selection, promotion, compensation, and job mobility can influence how minorities feel at work (Hayes et al., 2002). One study that looked at African Americans and their experiences in their work environments was done by Holder and Vaux (1998). In this study there were 112 participants who were African

American professionals working in predominantly White work settings. “The purpose of the study was to examine: (a) the types of stressors experienced by African American professionals, (b) the moderating influences of spirituality, internal locus of control, and social support as resources available to African American professionals, and (c) the relation of these variables to job satisfaction” (Holder & Vaux, 1998, p. 319). The authors hypothesized that work related stressors and race-related stressors would be related to job satisfaction. A sample of 112 African American professionals who had obtained at least a bachelor’s degree, were mailed surveys to assess their level of work-related and race-related stress.

The authors found through hierarchical regression that race-related stressors (i.e., climate, workplace racial treatment, and personal discrimination) were significant and negative predictors of job satisfaction $F(3, 108) = 27.98, p < .001$, accounting for 42% of the variance in job satisfaction. Climate yielded a significant result of $F(3, 108) = 4.67, p < .05$, and was measured by the Climate Scale a modified 20-item measure of the Racial Climate Scale created by Watts and Carter (1991). The Climate Scale was used to measure race-related workplace climate in terms of policies and procedures. This measure obtained a coefficient α reliability of .91 (Holder & Vaux, 1998). There was no validity information reported by the authors. Personal discrimination also yielded a significant result of $F(3, 108) = 8.60, p = .01$ and was measured by the Personal Discrimination Scale (PDS). This measure is a modified six-item version of the PDS used to measure workplace discrimination in the study by Watts and Carter (1991). The coefficient α of the PDS was .94 and there was no validity information available for this measure (Holder & Vaux, 1998). Workplace racial treatment was not found to be

significant. The Workplace Racial Treatment Scale (WRTS) which consists of 15-items to measure the extent to which African American professionals perceive interactions and treatment at work as racially biased, did yield an α of .91 (Holder & Vaux, 1998). This study concluded that race-related stressors appeared to have augmented race-related stress and job satisfaction for these participants.

In another study, Holcomb-McCoy and Addison-Bradley (2005) examined whether African American counselor educators' perceptions of departmental racial climate predicted their level of job satisfaction. The authors wanted to examine the relationship between African American counselor educators' perceptions of racial climate and their job satisfaction (Holcomb-McCoy & Addison-Bradley, 2005). The authors mailed out questionnaires and this resulted in a sample of forty-eight African American counselor educators. The participants completed the Minnesota Satisfaction Questionnaire- Short Form (MSQ-SF; Weiss, Dawis, England, & Lofquist, 1967). The MSQ-R is one of the most used multidimensional job satisfaction measures in the career and vocational field. It is also used to assess the job satisfaction of persons working in higher education. It yielded an alpha coefficient of .88 in this study (Holcomb-McCoy & Addison-Bradley, 2005). The Racial Climate Scale (RCS; Watts & Carter, 1991) consists of 18 items that measure decision-making processes, reward system, perceptions of "adverse impact" and interpersonal processes. This measure yielded an alpha of .93 and construct validity has been supported through its use in both the Watts and Carter (1991) and the Holder and Vaux (1998) studies.

A correlation analysis was done between scores on the RCS and the MSQ-SF and a significant negative relationship existed between the two $r(46)=-.41, p <.01$. The

correlation between African American counselor educators' job satisfaction and perceptions of departmental/program racial climate was between medium and large; there was a moderately high correlation between the two variables (Holcomb-McCoy & Addison-Bradley, 2005). In addition to the correlation analysis, a linear regression analysis was conducted to examine the prediction of job satisfaction from the RCS scores of the participants. These results showed that as overall job satisfaction increased, the overall scores on the RCS decreased (lower scores on the RCS denote a more positive racial climate). In conclusion, racial climate was significantly related to job satisfaction. African American counselor educators who were satisfied with their jobs tended to have lower scores on the RCS. Approximately 25% ($R^2 = .246$) of the variance of the scores on the MSQ-SF was accounted for by its linear relationship with the scores on the RCS (Holcomb-McCoy & Addison-Bradley, 2005). This study supported the assertion that job satisfaction is significantly related to perceptions of racial climate in the workplace.

Methodological critique and summary. Through this section I have explained how a negative workplace racial climate can lead to African Americans feeling stigmatized and devalued in the workplace. When this occurs it might be reasonable to expect that these individuals might contribute to the effects of stereotype threat in the workplace and through those feelings of anxiety and distrust begin to discount feedback.

The strengths in the studies on workplace climate include the ways in which climate was discussed and the ways in which it is thought to influence job satisfaction. This is helpful because it identifies ways in which climate can influence how a person interacts and thrives in their work environment. One particular way that people interact and thrive in their work environment includes how they choose to engage in feedback

monitoring in particular workplace climates. The weaknesses of these studies are the inconsistencies in the significant effects that climate is shown to have on workplace factors. This inconsistency makes it difficult to ascertain the degree to which employees' climate influences different workplace factors. In the next section I will examine solo status and tokenism in the workplace and explore how these variables might cause one to feel isolated and ostracized in the workplace and amplify some of the effects of stereotype threat and feedback discounting.

Solo status and Tokenism

Solo status or being the only member of one's group in an all majority workplace can be very difficult for a racial minority individual in many different ways. Solo status can produce feelings of isolation from peers and supervisors, reduce social interactions, and negatively affect performance in African Americans (Holder & Vaux, 1998). The importance of social interactions with other minorities to combat the effects of discrimination in the workplace is something that has been considered in theoretical studies (Crocker & Major, 1989; Franklin & Boyd-Franklin, 2000). Franklin and Boyd-Franklin (2000) theorize that the "ability of African Americans to catalog and obtain corroboration of prejudice and discrimination experienced from each other often serves as validating evidence" (p.33). When one has solo status, the only gauge that this individual has for evaluating his/her performance is provided by out-group members, and this decreases the feasibility of in-group comparisons (Crocker & Major, 1989). These comparisons are thought to be essential to the self-healing of dealing with stereotypes in the workplace setting (Franklin & Boyd-Franklin, 2000).

Tokenism is associated with the perception that one is the representative of their minority group either through an organizations' symbolic gesture of integration by hiring someone outside of the majority, or through affirmative action mandates that require organizations to hire minority individuals based solely on their membership in that group (Holder & Vaux, 1998). In general, affirmative action refers to policies intended to promote access to education and employment aimed at a historically disenfranchised non-majority group (i.e. minorities and women). These disenfranchised individuals are qualified for these positions in employment and education but because of racism and discrimination on multiple levels, they have been denied access to these opportunities. There are three negative processes thought to be associated with tokenism: visibility, contrast and role encapsulation (Neimann & Dovidio, 1998). Yoder (1994) defines visibility in terms of the extra attention directed toward tokens because they stand out in their workgroup and suffer exacerbated pressures to perform. Contrast refers to the amplification of differences between tokens and the numeric majority, which often results in the social isolation of the token. Finally Yoder (1994) describes role encapsulation as a variety of incidents in which tokens are constrained by stereotypical roles that are often incongruent with work-defined roles.

Solo and token status can be operationalized and differentiated through the following example according to Thompson and Sekaquaptewa (2002). The only African American student in an all-White classroom would be considered to have solo status. Unlike the term token, the term solo does not imply that a person has been preferentially selected for a position by virtue of his or her social category (i.e. gender or race). Instead, solo status describes the situation of any individual who is the only representative of his

or her social group present in a given situation. Though this is true, to the extent that social and political contexts support Whites as ideal workers and students in many fields, racial-minority solos may be perceived by others (as well as themselves) as tokens, even when they were not selected for positions based on their race. As such, tokenism and solo status may be indistinguishable in many settings and may likely involve similar experiences.

Solo and token statuses for minority individuals are important positions to examine in the experience of workplace dynamics. Both solo and token status produce negative consequences for underrepresented and stigmatized groups by making them feel further isolated and different from others because of their group membership. In a study by Neimann and Dovidio (1998) the authors wanted to examine if solo status exacerbated the perceptions of distinctiveness in the workplace. In this study, 513 participants responded to surveys that the authors mailed out to members of the American Psychological Association. The demographic composition of those who reported their information was 280 men and 219 women, and 247 Caucasians, 88 African Americans, 50 Hispanics, 63 Asians, 6 Arabs, and 34 others (Neimann & Dovidio, 1998). From the sample used for this study, 27% of the African American, 25% of the Hispanic, and 15% of Asian participants indicated that they have solo status in their departments. The participants completed a distinctiveness measure that was developed for the purposes of this study and yielded an internal consistency of .91. This measure was used to assess the processes of visibility, contrast, and role encapsulation. The results used a hierarchical multiple regression analysis, and included feelings of distinctiveness, solo status (solo vs. non-solo minority status), race/ethnicity (African American, Hispanic, or Asian), and

academic rank (assistant, associate, or full professor). Neimann and Dovidio (1998) found that solo minority respondents ($M=4.75$) indicated higher ratings of distinctiveness than did non-solo respondents ($M=3.77$); $\beta = -.36$, $t(155) = 4.89$, $p < .001$ with solo status accounting for 18.6% of the variance in racial distinctiveness. Planned comparisons within each of the three minority groups showed that the differences for solo and non-solo status were significant for African Americans, $M_s = 5.14$ versus 4.04 , respectively, $t(155) = 2.81$, $p < .01$; significant for Hispanics, $M_s = 4.57$ versus 3.82 respectively, $t(155) = 2.42$, $p < .01$; and non significant for Asians, $M_s = 3.97$ versus 3.45 respectively, $t(155) = 1.20$, $p > .15$. The effect for academic rank for distinctiveness was not statistically significant $\beta = -.12$, $t(155) = 1.56$, $p < .121$. Another interesting finding by Neimann and Dovidio (1998) is that of the minority solo status participants African Americans reported the highest level of ratings of distinctiveness $F(2, 155) = 4.93$, $p < .01$, ($M=4.40$), followed by Hispanics ($M= 4.40$), and then Asians ($M=3.54$). These results support the assertion that solo and token status in the workplace increases the salience of being viewed distinctively through negative stereotypes and stigmatizations and as this study shows particularly for African American employees (Neimann & Dovidio, 1998).

Also, in the Roberson et al. (2003) study discussed previously, solo status was a variable that the 166 participants reported on in the examination of stereotype threat. The results were such that those who reported solo-status also reported higher levels of stereotype threat. The descriptive statistics in this study showed that the variable of solo status was correlated significantly with the perception of stereotype threat ($r = .16$, $p < .05$). The conclusion supported the notion that those with solo-status might perceive stereotype threat more than those who did not report solo-status in their workplace.

Sekaquaptewa and Thompson (2002) examined whether solo status had more detrimental effects on the performance of African American or White women on a verbal task. Their premise was that solo status is a negative experience for members of traditionally disadvantaged groups. Sekaquaptewa and Thompson (2002) posited that racial minorities are often treated negatively as solos. This is thought to affect their performance. Solo status negatively affects disadvantaged groups such as African Americans even in the absence of differential treatment (Sekaquaptewa & Thompson, 2002). They asserted that the distinctiveness of being a solo comes with the price of being overly scrutinized, judged more extremely, and stereotyped in comparison to their non-solo counterparts.

In this research study, 40 White and 38 African American women were asked to complete certain tasks. They were first sequestered from everyone else in the experiment so that they did not know the races of any of the other participants. They then learned some information about classes of animals and were then introduced to the rest of the group by being shown either a videotaped group of same-race (non-solo condition) or other-race (solo condition) group members. The participants were then told that they would be answering questions aloud in front (via videotape) of these group members. The overall performance scores were analyzed in a 2 (race) x 2 (solo or non-solo) ANOVA. There were no main effects but a two-way interaction emerged, ($F(1, 74) = 5.67, p < .02$). Contrast analyses indicated that African American participants who tested as solos performed worse than White women who tested as solos, ($t(1,74) = 2.43, p < .02$). African American and White women did not perform differently when they tested as non-solos, ($t < 1$). Additionally, African American women performed worse as solos than as non-

solos, ($t(1,74) = 1.96, p < .05$); whereas White women performed the same as solos or as non-solos, ($t(1,74) = -1.39, p = .18$). These results support the assertion that the performance of the African American participants was more affected by solo status than the performance of the White participants (Sekaquaptewa & Thompson, 2002). One important point to take from this study was that the difference in the way privileged and disadvantaged group experience solo status may contribute to performance differences between these groups (Sekaquaptewa & Thompson, 2002).

In a study that specifically examined tokenism, Yoder, Aniakudo and Berendsen (1996), investigated the effects of racial differences on tokenism perceptions. These researchers point out that in the past token has been defined as a person who is a member of a group that composes less than 15% of a the overall population (Yoder et al., 1996). But more recently it has been thought that a token is when a person is different by virtue of an ascribed status that subordinates (i.e., female or non-White) rather than privileges (i.e., male or White) (Sekaquaptewa & Thompson, 2002). In this study there were fifty-three African American and seventy-six White participants. They were each given one of eight vignettes in which either a female African American or White target was described as a college professor in a Gender and Ethnic Studies Program. In the vignettes the target was either a member of the dominant group by virtue of her race and gender or was a token whose difference was created in one of three ways. A target who was a token based on gender only was the same race but not gender of the numerically dominant group; the token target defined by race shared the gender, but not race of the dominant group; and the token by virtue of both race and gender differed from the dominant group in along both lines (Yoder et al., 1996). These vignettes reflected a 2 x 4 factorial design

crossing rater's/target's race (White or African American) and token difference (dominant or token by virtue of gender, race or both). The analysis used a one-way multivariate analysis of variance and concluded that White women were expected to be less disadvantaged by their racially defined token difference than African American tokens $F(3,29)=2.83, p=.056$. White women tokens experienced better social relations ($M=3.41, sd=.76$), more supportive colleagues ($M=3.27, sd=1.09$), and lower stress ($M=3.62, sd=.92$) than African American women ($M=2.80, sd=.42$; $M=2.47, sd=.70$; $M=4.42, sd=.79$, respectively). These results support that being racially different from the dominant group is less negative for White women because they are privileged by the characteristic of race that defines their token difference. The seemingly same token setting in this example is thought to be experienced as more stressful by African American women than by White women (Yoder et al., 1996).

Methodological critique and summary. This section sought to show that due to the lack of any gauge for comparison of feedback it is plausible that African Americans would have a higher tendency to feel distinctive in their work environments. This distinction would likely be in terms of stereotypes that they would be thought to represent. This would likely increase their perceptions of stereotype threat and feedback discounting if they have solo or token status in their workplace.

The strengths of the solo and token status studies are that they include a comprehensive analysis of exactly why being a solo or token member in the workplace affects individuals. This helps to make the case for why these individuals may have more negative experiences in the workplace compare to their non-solo or token counterparts. The weaknesses of the solo and token status studies are that sometimes it seems difficult

to differentiate the effects of solo versus token status or to determine if solo status is included in the effects of token status and vice versa.

Purpose and Hypotheses

Racism and stigmatization in the workplace can have negative psychological effects on minority individuals working in predominantly majority work environments (Holder & Vaux, 1998). One effect of racism and stigmatization that has been addressed in the literature is the feedback discounting and feedback monitoring behavior that some minority individuals tend to exhibit in response to an evaluation (Roberson et al., 2003). One group that is consistently stigmatized in workplace settings due to ingrained societal negative stereotypes is African Americans (Holder & Vaux, 1998). Stereotype threat is a likely effect of racism and stigmatization for African Americans in a work environment where they feel that the situation that they are in presents an opportunity to confirm a negative stereotype or stigma about African Americans (Steele, 1997). When the effects racism and stigmatization are combined with the influences of a negative work environment research shows that this might exacerbate the perception of stereotype threat in the workplace. The purpose of this study is to examine some of the factors that relate to African Americans discounting feedback in the workplace. The review of literature has examined these different concepts in an attempt to provide support for two hypotheses:

Research Question. After controlling for the effects of gender, solo/token status and workplace climate, how does the presence of stereotype threat influence response to feedback?

Hypothesis 1: Those participants exposed to stereotype threat priming will have significantly higher scores on ratings of supervisors' feedback and feedback discounting.

Research Question. What variables influence perceptions of feedback in a non-threat condition and in a threat condition?

Hypotheses 2: Workplace climate, stereotype threat and solo/token status will influence perceptions of feedback, over and above the influence of the demographic variables age, gender, amount of years in current occupation and level of education.

Chapter 3

This chapter presents the method for exploring the research questions and hypotheses of the proposed study. The inclusion criteria for and the manner of recruiting participants, the procedures of data collection, a description of the instruments, and an outline of the analysis of data to be utilized are described.

Participants

Demographic profile of the respondents. Table 1 summarizes the demographic profile of the 217 respondents who met the inclusion criteria for the analysis. There were 312 participants who began completing the study but after screening the data only 217 of those cases were utilized for the results of this study. Study participants (N=217) were 22 to 64 years of age ($m= 37.5$, $sd= 10.6$). Approximately 34.6% (N=75) of the participants identified as male and the remaining 65.4% identified as female (N= 142). No one endorsed the “transgender” option. The sample was 100% African American, with five participants (2%) endorsing African American as their race along with an additional race (i.e. Asian, Native American, Latino). With respect to highest level of education completed .9% of participants earned a high school diploma/GED, 6% have some college, 2.8% have an associate’s degree, 28.6% have a bachelor’s degree, 40.1% have a master’s degree, and 21.7% have a post master’s education (e.g., M.D., Ph.D., J.D.). With respect to socioeconomic status (SES) .9% of participants feel that they are currently in the lower class, 11.1% identify being in lower middle class, 53.5% report being in the middle class, 21.7% report being in the upper middle class, and only .5% of respondents report being upper class. These rates of current SES are compared to respondents’ family background of SES. For this question 13.8% reported that the family that they grew up in

was lower class, 26.3% endorsed their family was lower middle class, 35.5% responded that their family was middle class, 11.5% responded that their family was upper middle class, and the same .5% responded that their family was upper class.

Employment profile of the respondents. Table 2 summarizes the employment profile of the 217 respondents who met the inclusion criteria for analysis. Participants' career fields varied widely across many different areas. These areas were broken down into six fields: 1) Medical Field, 2) Computers, 3) Psychology/Counseling, 4) Criminal Justice, 5) Business, and 6) Education. The breakdown of these fields in the current study is 4.6% (N=10) were in the Medical Field, 9.2% (N=20) were in Computers, 11.6% (N=25) were in Psychology/Counseling, 4.6% (N=10) were in the Criminal Justice Field, 35% (N= 76) were in Business, 22.6% (N=49) were in Education, and 12.4% (N=27) did not respond. With respect to the amount of time participants had been in their field, these numbers ranged from 6 months to 36 years. The length of job tenure with the highest percentages were 5 years (20.3%) and 2 years (13.4%), and 1 year (11.5%). With respect to solo/token status 33.6% (N=76) of participants reported being the only African American employee in their workplace.

Inclusion criteria. For this study, recruitment notices requesting the participation of African American professionals were circulated via electronic formats. A copy of the recruitment notice to be used in the study can be found in Appendix A. Participants were required to be U.S. born Black professionals. We required participants to be U.S. born to increase confidence that participants possess a basic knowledge of American stereotypes and common discriminatory practices against African Americans. Further, only participants employed in a professional capacity were included in the study. Given that

the goal of this study is to examine the effects of stereotype threat and other workplace variables on feedback discounting, the professional status of the participants is an important factor. Having professional status indicates that the individual has accomplished a certain level of training and/or education to have attained their position. This is relevant because the premise of stereotype threat is that the individuals are usually high-achieving and that it is important to them to be perceived as competent in this specific domain. The usual distinction between professional and other employment is often that professional is considered any job that is a salaried position, is more clerical in nature, and does not include manual labor. To assess this, there was a question on the demographic form asked participants if they considered their jobs to be professional (i.e., salaried, no manual labor); 100% of the respondents endorsed that they did consider their jobs to be of a professional nature.

Data Collection

Procedure. Participants for this study are African American professionals that have been recruited through African American college alumni, professional, and social listservs as well as other African American organizations with available internet listings. Thirty-five organizations were contacted to request access to their listservs for the purpose of this study. The listservs that granted permission were substantially lower than the amount contacted. Only seven listservs responded positively to the request allowing the recruitment letter to be posted on their listservs. The research measures were sent out via email to the following African American listservs: National Organization of Black Law Enforcement (NOBLE), Penn State NROTC, National Organization of Minority Architects (NOMA), the Association of Black Sociologists, Black Graduate Students, the

Counseling Psychology listserv at Penn State, and the Career Communications Group . All participants were employed and were over 18 years of age.

Data was collected using an anonymous online survey accessible via Psychdata.net (www.psychdata.net), a web-based company dedicated to hosting social science related research. The recruitment notice and informed consent documents (see Appendices A and B) specified the inclusion requirements for the study listed. Implied informed consent was obtained. I randomly assigned participants to one of two conditions. One hundred and nineteen (54.8%) of the participants were randomly assigned to a condition where they completed a priming measure for stereotype threat. Stereotype threat is a form of anxiety that is the result of a stigmatized individual's fear of confirming a negative stereotype or stigma about their group through their own behavior or performance. By randomly assigning to the stereotype threat condition I was able to gain a better sense of whether feedback is discounted in the presence of stereotype threat. Participants in both conditions completed the instruments in the following order: climate scale, feedback measures, demographic questionnaire. The same order was chosen for both conditions so that any observed difference could be attributed to the priming measure.

Prior to sending out recruitment e-mails, I asked five people to review the website to ensure that the instructions were clear. Additionally, this pilot aided in obtaining accurate information for the recruitment notice with regard to the length of time participants should expect to spend completing the survey. Preliminary study participants reported that the completion of the survey took about 15-20 minutes. Participants also

reported ease of utilization of the webpage and clarity of the instructions and no changes were made.

Security of responses and protection of participants. Participants were given a code for their survey so that they could complete it at any time or come back to it if they did not finish initially and turn it in at their convenience. The online system of completing the surveys had a security measure so that only the participant completing the measures and the creator of the study had access to the surveys. Approval to conduct research with human subjects was obtained from The Pennsylvania State University Institutional Review Board prior to conducting the study. Participation in this study was voluntary and anonymous. During the data collection procedure, one participant offered feedback that the survey did not allow participants to skip questions without exiting the survey, and asked if this represented truly voluntary participation. After consulting with the Pennsylvania State University Institutional Review Board, the process was changed so that participants could skip questions while completing the survey.

Stereotype threat. Stereotype threat was activated for half the participants via a racial priming task. Participants in the priming condition were given a paragraph to read prior to completing the other instruments. This paragraph (see Appendix C) was a statement describing how some African Americans are discriminated in their workplace and the possible effects that this might have on them. This paragraph's purpose was to ensure that participants are thinking about issues of race and ethnicity immediately before completing the other measures, thereby creating a threat situation.

Instruments

Six measures, including a demographic questionnaire, were administered to assess the effects of the independent variable (stereotype threat) and covariates (workplace climate, gender, and solo/token status) on the dependant variables (feedback discounting and feedback environment). The following is a description of each measure, including the rationale for the use of the measurement. The total survey is comprised of 99 items.

Demographic questionnaire. A researcher constructed demographic questionnaire obtained the following information about participants: age, gender, occupational status, length of time at current occupation, ethnic/racial identity, educational level, and country of birth. There were also two items addressing where the participants feel they fit in categories of Socioeconomic Status as defined by Hollingshead and Redlich (1958). They were asked where they believe they currently fit as well as what they believe their family background would fit in these categories. This is to explore the influence of family SES background on current perceptions. Items addressing solo/token status were also included. This demographic form is included in Appendix D.

Climate Scale (CS). This is a 20-item version of the Climate Scale (Watts & Carter, 1991; Appendix E) modified for use with African American employees by Holder and Vaux (1998). It is used to measure race-related workplace climate in terms of policies and procedures. A sample item is “Few attempts have been made to alter services or organizational functioning to accommodate the cultural perspectives of Black professionals.” This scale was initially adapted from Barbarin and Gilbert’s (1981) Climate for Racism scale which was created with the purpose of “assessing the

acceptance of minorities, participation by minorities in decision making, and a respect for cultural diversity” (Watts & Carter, 1991). Support for the validity of this scale was supported by the finding that climate was significantly related to spontaneously reported incidents of racist incidents ($r=.44$). The measure also had a coefficient alpha of .77 indicating support for internal consistency (Barbarin & Gilbert, 1981).

The Climate Scale utilizes a five-point scale ranging from 1 (strongly agree) to 5 (strongly disagree). In this measure, there are 12 items that are reverse coded because they are negatively worded and have negative factor loadings (Watts & Carter, 1991). Coefficient α is reported as .91 (Watts & Carter, 1991; Holder & Vaux, 1998). Hypotheses involving racial climate were confirmed in both Holder and Vaux’s (1998) and Watts and Carter’s (1991) studies, which lends support to the scales’ construct validity (Holcomb-McCoy & Addison-Bradley, 2005). The alpha coefficient for this measure in the current study was .81.

Solo/Token Status. To assess solo/token status, one question on the demographic measure asked if the participant was the only African American in their department/organization. This most efficient way of gaining this information appears to be using self-report (Neimann & Dovidio, 1998; Roberson et al., 2003). This question will also address token status, because if participants have solo status in their workplace than they are also by default, tokens in the workplace. The tenets of tokenism which according to Yoder’s (1994) study are visibility, contrast, and role encapsulation, are expected to be experienced by people who have solo status in their work environments.

Feedback Discounting. Feedback discounting behavior was assessed using four items that have been adapted from a measure used in the study by Crocker et al. (1991)

and adapted for use in the workplace for Roberson et al. (2003). One sample question is “To what extent do you believe that your manager’s evaluations of your performance are influenced by his/her prejudice?” Response options were given on a six-point Likert-type scale (1= not at all, 6= completely) for each item.

Crocker et al. (1991), reported an internal consistency coefficient of .76 and Roberson et al. reported a reliability coefficient of .77 for this scale. Crocker et al. found that the scale was responsive to the study manipulations as predicted, indicating construct validity (Roberson et al., 2003). An ANOVA that Crocker et al. (1991) performed on this measure revealed a main effect for participant’s race, indicating that Black students attributed the feedback more to prejudice ($M=6.58$) than did White students ($M= 4.89$), $F(1,74)=11.30$, $p<.002$. In the Roberson et al. (2003) study the hypothesis that stereotype threat relates positively to feedback discounting was supported with the use of this feedback discounting measure. Stereotype threat accounted for a significant amount of the variance in discounting feedback from supervisors ($\beta= .32$), $t(165) = 18.687$, $p<.001$). The variance accounted for in stereotype threat by feedback discounting was 10% (Roberson et al., 2003).

Due to the small number of items in this measure and the vagueness of some of the questions related to discounting feedback , I decided to add four additional items to the four that the authors (Roberson et al., 2003) created. The additional questions were also answered on the same 6 -point Likert-type scale. All appeared at the end of the scale to avoid invalidating the original scales’ psychometric properties. The new questions are numbers 5-8, please see Appendix F to view all questions. An internal reliability analysis and an exploratory factor analysis was run on the feedback discounting measure both

with only the original items and then with the added questions. Cronbach's alpha for internal consistency was .89 for the original measure and increased to .95 with the newly added items. An exploratory factor analysis with principal axis factoring was attempted in order to examine the factor structure. One factor was extracted, with an eigenvalue of 5.69, the eigenvalues for the second and third factors were .62 and .56 respectively. The original 4-item measure yielded only one factor with an eigenvalue of 3.42, with eigenvalues for the second and third factors being .29 and .21 respectively. All eight items loaded highly onto the factor with coefficients ranging from .63 to .93. These findings support the new items being used in the measure for the final study.

Feedback Environment Scale (FES). This measure was developed by Steelman, Levy, and Snell (2004) to better understand the feedback environment in organizations. The two factors that the FES measures are Supervisor and Coworker feedback. Steelman et al. (2004) reported that feedback environment is defined as a multifaceted construct with two major factors (Supervisor and Coworker) that separately assess different factors of feedback. Within each of these two factors there are seven subscales, including Source Credibility, Feedback Quality, Feedback Delivery, Favorable Feedback, Unfavorable Feedback, Feedback Availability and Promoting Feedback Seeking (Steelman et al., 2004). The seven different subscales address different aspects of the feedback environment. Source Credibility involves the supervisor's expertise and trustworthiness, Feedback Quality involves the consistency and usefulness of the feedback and Feedback Delivery involves the perceptions about the supervisors' intentions in giving feedback and how this affects reactions and responses to the feedback (Steelman et al., 2004). Favorable Feedback involves the frequency of positive feedback from supervisors and

Unfavorable Feedback is the frequency of negative or critical feedback from supervisors (Steelman et al., 2004). The last two subscales include Feedback Availability which involves the amount of contact that an employee has with the supervisor and the ease with which feedback is obtained, and the final subscale is Promotes Feedback Seeking which involves the extent to which the environment encourages individuals to actively seek feedback (Steelman et al., 2004).

For the purposes of this research we will only use the Supervisor version and not the Coworker version. This omission is supported by its use in a study by Norris-Watts and Levy (2004) in which they only used the supervisor subscale of the FES. In their study the reliabilities for each scale were as follows: Source credibility $\alpha = .83$, Feedback Quality $\alpha = .90$, Feedback Delivery $\alpha = .83$, Favorable Feedback $\alpha = .92$, Unfavorable Feedback $\alpha = .81$, Source Availability $\alpha = .82$, Promotes Feedback Seeking $\alpha = .76$. Items are rated on a 7-point Likert-type scale ranging from strongly disagree to strongly agree, with higher scores representing more favorable views of the feedback environment (Steelman et al., 2004). This factor has thirty-two items and yielded an internal consistency reliability of .96 for the Supervisor sub-scale. The test-retest reliability is .85 for the Supervisor interval. Ten items on the FES are reverse coded because of their negative wording in comparison with other items as well as negative factor loadings (Steelman et al., 2004).

Steelman et al. (2004) report evidence for convergent validity of the FES from finding that the external variables of satisfaction with feedback, motivation to use feedback, feedback seeking frequency, and leader-member exchange quality all related to facets of the FES in consistent and predictable ways. The hypothesized seven-factor

structure for the Supervisor version was assessed with a Confirmatory Factor Analysis using a maximum likelihood estimation procedure; and the FES model fit the data within acceptable parameters for the Supervisor factor (X^2/df ratio= 1.81; Steelman et al., 2004). Hu and Bentler (1999) suggest that models that yield a standardized root mean square residual value of .08 or lower and a Comparative Fit Index (CFI) of .97 or more represent relatively good-fitting models. The supervisor factor meets the two-index criteria of fit in the confirmatory factor analysis with a CFI a priori value of .97 (Steeleman et al., 2004).

In this study the seven subscales yielded good reliability coefficients; Source Credibility had an alpha coefficient of .90, Feedback Quality $\alpha = .94$; Feedback Delivery $\alpha = .81$; Favorable Feedback $\alpha = .90$, Unfavorable Feedback $\alpha = .90$; Feedback Availability $\alpha = .79$ and Promotes Feedback Seeking $\alpha = .85$. The Feedback Environment Scale in its entirety yielded $\alpha = .96$ which is consistent with what the authors originally reported. Please see Appendix G.

Table 1
Personal Demographics Description of Sample

	<i>N</i>	<i>% of sample</i>
<i>Gender Identity</i>		
Female	142	65.4
Male	75	34.6
<i>Age</i>		
22-29	47	21.7
30-39	102	47
40-49	28	13
50-59	29	13.3
60-64	11	5
<i>Race/Ethnicity</i>		
African American	217	100
Native American	2	.9
Asian American	1	.1
Hispanic/Latino American	2	.9
Other	0	0
<i>Education Level</i>		
High School/GED	2	.9
Some College	13	6
Associates Degree	6	2.8
Bachelors Degree	62	28.6
Masters Degree	87	40.1
Post Masters Education	47	21.7
<i>Current SES</i>		
Lower Class	2	.9
Lower Middle	24	11.1
Middle Class	116	53.5
Upper Middle	47	21.7
Upper Class	1	.5
<i>Family of origin SES</i>		
Lower Class	30	13.8
Lower Middle	57	26.3
Middle Class	77	35.5
Upper Middle	25	11.5
Upper Class	1	.5

Table 2
Employment Profile of Respondents

	<i>N</i>	<i>% of sample</i>
<i>Job Tenure</i>		
6 months-10 yrs	172	79.3
11 yrs- 20 yrs	26	12
21 yrs- 30 yrs	10	4.6
31yrs- 36 yrs	9	4.1
<i>Solo/Token Status</i>		
Yes	73	33.6
No	144	66.4
<i>Current fields of occupation</i>		
	<i>N</i>	<i>% of sample</i>
<i>Six Fields of Employment</i>		
Medical Field	10	4.6
Computers	20	9.2
Psychology	25	11.6
Criminal Justice	10	4.6
Business	76	35
Education	49	26
Did not respond	27	12.4

Chapter 4

Results

Outline of Analysis

This chapter includes the analysis of the data collected through the online survey. The research questions that were asked in this study are as follows:

Research Question. After controlling for the effects of gender, solo/token status and workplace climate, how does the presence of stereotype threat influence response to feedback?

Hypothesis 1: Those participants exposed to stereotype threat priming will have significantly higher scores on ratings of supervisors' feedback and feedback discounting.

Research Question. What variables influence perceptions of feedback in a non-threat condition and in a threat condition?

Hypotheses 2: Workplace climate, stereotype threat and solo/token status will influence perceptions of feedback, over and above the influence of the demographic variables age, gender, amount of years in current occupation and level of education.

Prior to addressing the two research questions, a description of the study participants and results of the preliminary analyses are presented. Second, descriptive statistics are described for the data. Third, the multivariate analysis results are presented for the first research question, followed by the presentation of the sequential regression results for the second research question.

Pre-Analysis

First, the survey data was downloaded from the www.psychdata.com website. Because the data was directly downloaded into SPSS, this ruled out the issue of data

entry errors. A total of 312 individuals began to participate in the study; however, there were a number of individuals who began to complete the study but did not continue to the first question. To this end, data were visually inspected to eliminate surveys where there were no data completed. This process led to the removal of fifty-four cases. At this point the data was then scanned to assess how many individuals failed to complete the demographic information on the survey. This led to the removal of another twenty-four cases. The remaining cases were then reviewed to determine if the individuals met the criteria for inclusion in this study. This review led to the removal of seventeen cases who reported that the positions they held were not professional. The total number of participants who were included in the final analyses consisted of 217 African American professional participants.

Replacement of missing data

Following the procedure outlined by Tabachnick and Fidell (2007), the pattern of the missing data was analyzed. For 217 participants, with 60 items (total of 13,020 entries) there were 432 (3.3% instances of missing data for all items). The missing data do not appear to have a distinct pattern. Tabachnick and Fidell (2007) indicate that there are no definite guidelines regarding missing data. They recommend that if there is less than 5% of the data missing in a large data set and if it is missing in a random pattern then almost any procedure for handling missing values will produce similar results. In this study the missing data was determined to be Missing at Random (MAR). In other words, there was no discernable pattern to the missing data that might be thought to affect the generalizability of the results (Tabachnick and Fidell, 2007). To address the issue of the MAR data, the researcher utilized one of the methods suggested by Tabachnick and

Fidell (2007), mean substitution. In this process, the mean of a normally distributed variable is calculated from the available data and this value is used to replace the missing values. If the variable is not normally distributed, either the median or the mode value is used to replace the missing value (Tabachnick & Fidell, 2007). After the missing values were replaced with the mean, median, or mode of the particular variable the researcher examined whether this replacement procedure resulted in any substantive changes in the overall values of the variables by comparing the “new” variable summary statistics with the previous variable summary statistics before the missing values had been replaced. The mean values remained the same after the value replacement.

Summary Statistics of Scales

The means, standard deviations, and maximum and minimum scores for all measures are presented in Table 3. Within the FES measure there are seven subscales and each of these subscales were used in the analysis. Each subscale measures a different aspect of the feedback environment, all of which are important factors when considering what constitutes a positive feedback environment. The seven subscales are as follows: Source Credibility, Feedback Quality, Feedback Delivery, Favorable Feedback, Unfavorable Feedback, Source Availability, and Promotes Feedback Seeking (Steelman et al., 2004). Therefore for the analysis in the first research question there are eight different dependent variables. These eight are made up of each of the seven subscales in the Feedback Environment Scale and the measure of Feedback Discounting. In the second research question only two of the subscales were used from the Feedback Environment Scale. These two were the Favorable and Unfavorable feedback subscales and they were chosen because they represent two very distinct aspects of the feedback

environment and are of particular interest in this study. These two subscales along with the Feedback Environment Scale in its entirety are used in the second research question. These three along with Feedback Discounting represent the four dependent variables that are used in the hierarchical regressions.

The means of the variables suggest that respondents in this sample reported that their feedback environment was somewhat positive, while most seemed undecided about the climate in their work environments. Sample means also suggest that respondents of this survey had low levels of feedback discounting. Specifically, participants in this study indicated that they did not have reason to suspect their supervisor's evaluations of their performance (Lowest Value Reported $m = 1.9$, Highest Value Reported $m = 5.88$).

An investigation of the correlations between variables resulted in a number of significant findings, but few strong correlations. Only correlations significant at $p \leq .01$ will be reported in this analysis. A stringent p-value was selected because of the large sample size which often results in relatively small correlations being significant at the $p \leq .05$.

Correlations between demographic variables and scales of interest are presented in Table 4. Significant correlations were found between the demographic variables age and job tenure ($r = .60$), indicating that older participants have more tenure in their respective positions. There was also a significant correlation between gender and the covariate of solo status ($r = .36$), indicating that male participants are more likely to have solo status in their work departments. The total score of the Feedback Environment Scale (FES) was significantly correlated with all seven subscales (Src Crd. $r = .88$; Fb. Qual. $r = .87$; Fb. Deliv. $r = .82$; Favor. $r = .83$; Unfavor. $r = .34$; Fb. Avail. $r = .79$; Prmt. Fb. $r = .85$)

as well as with the Climate Scale (CS; $r = -.40$) and Feedback Discounting ($r = -.67$).

These correlations indicate that the FES subscales are all significantly correlated which is in accord with what Steelman et al.(2004) reported. This also indicates that participants with more positive feedback environments also experienced more positive workplace climates and discount feedback less.

The first subscale dependent variable of FES was Source Credibility (Src. Crd.) and it produced significant correlations with six out of the seven subscales. The correlations are as follows (Fb. Qual. $r = .82$; Fb. Deliv. $r = .80$, Favor. $r = .68$; Fb. Avail. $r = .62$; Prmt. Fb. $r = .70$). Source Credibility also had significant correlation with Feedback Discounting ($r = -.62$) and Climate Scale ($r = -.35$). These correlations show that the credibility of the feedback source is related to all of the other FES subscales except Unfavorable Feedback, which indicates that the credibility of the source had no influence on how participants' perceived unfavorable feedback. Source Credibility also seems to have a negative relationship to both Feedback Discounting and Workplace Climate so that the more credible the feedback source was perceived to be the less likely participants were to discount feedback and they experienced a more positive workplace climate.

The second subscale dependent variable of FES was Feedback Quality (Fb. Qual.) and it produced significant correlations with all of the remaining subscales (Fb. Deliv. $r = .75$; Favor. $r = .61$; Unfavor. $r = .26$; Fb. Avail. $r = .57$; Prmt. Fb. $r = .64$). Feedback quality also correlated significantly with Feedback Discounting ($r = -.56$) and with workplace climate ($r = -.39$). These correlations indicate that the quality of feedback is directly related to all of the other FES subscales including Unfavorable Feedback, which shows that the quality of feedback is a vital component in assessing the feedback environment

overall. The negative correlations with Feedback Discounting and workplace climate show that the higher the quality of feedback the less likely participants were to discount feedback and they experienced a more positive workplace climate.

The next dependent variable subscale of the FES was Feedback Delivery (Fb. Deliv.) and it produced significant correlations with three of the remaining subscales (Favor. $r = .66$; Fb. Avail. $r = .48$; and Prmt. Fb. $r = .65$). Feedback Delivery also had significant negative correlations with Feedback Discounting ($r = -.59$) and workplace climate ($r = -.34$). These correlations show that the way the supervisor communicates the feedback, has an influence on how participants perceive both favorable feedback and the availability of feedback in the workplace, and also how they feel about seeking out feedback. The delivery of feedback also has a negative relationship with feedback discounting and workplace climate shows that the more positive the delivery is perceived to be the less likely participants were to discount feedback and they experienced a more positive workplace climate.

The next dependent variable subscale from FES was Favorable feedback (Favor) and it produced significant correlations with two of the remaining subscales (Fb. Avail. $r = .66$; and Prmt. Fb. $r = .68$). Favorable feedback was also significantly correlated with the Feedback Discounting ($r = -.69$) and with Workplace Climate ($r = -.41$). These correlations suggest that when participants receive positive feedback in the workplace, it influences their perception of the availability of feedback in the workplace as well as how they feel about seeking out feedback. The negative correlations with Feedback Discounting and Workplace Climate indicate that participants who receive positive

feedback from their supervisors discount feedback less and have a more positive view of their workplace climate.

Unfavorable Feedback (Unfavor) is the next dependent variable subscale from FES and it was significantly correlated only one subscale and this was Feedback availability (Fb. avail. $r = .20$). This correlation shows that when participants perceive that they are receiving more negative feedback that this influences their perceptions of the availability of feedback in the workplace, in that they perceive feedback to be more available.

The next dependent variable FES subscale was Feedback Availability (Fb. Avail.) and it produced significant correlations with the last subscale of Promotes Feedback Seeking (Prmt. Fb. $r = .70$), as well as with Feedback Discounting ($r = -.58$), Workplace Climate ($r = -.27$), solo/token status ($r = -.22$) and the demographic variable gender ($r = -.20$). These correlations indicate that the more availability of feedback in the workplace in the more participants sought out feedback from their supervisors and that the more available feedback was in the workplace the less likely participants were to discount feedback. Feedback Availability also related to Workplace Climate in that the more available feedback was for participants the more positively they perceived their workplace climate. These results also suggest that those with solo/token status in the workplace have a more negative perception of feedback availability and that males are more likely to have negative perceptions of feedback availability.

The final FES subscale was Promotes Feedback Seeking (Prmt. Fb) and it was significantly correlated to Feedback Discounting ($r = -.59$) and Workplace Climate ($r = -.30$). This shows that the more a feedback environment encouraged participants to seek

out feedback, the less likely participants were to discount feedback and they also had a more positive perception of their workplace climate. Feedback Discounting (FD) was significantly correlated with Workplace Climate ($r = .46$), indicating that those participants who tended to discount feedback were more likely to experience a more negative workplace climate.

Results for Research Question One

Research question one addresses the differences between participants in the two conditions of stereotype threat (ST). In this analysis a one-way MANCOVA was used with eight dependent variables (Source Credibility, Feedback Quality, Feedback Delivery, Favorable Feedback, Unfavorable Feedback, Feedback Availability, Promotes Feedback seeking and Feedback Discounting) and one independent variable (Stereotype Threat, primed or unprimed) and three covariates (gender, solo/token status and Climate Scale). MANCOVA will be used to evaluate the degree to which stereotype threat affects perception of feedback after controlling for gender, solo/token status and workplace climate. Since one independent variable is tested in this analysis, questions must also take into account the possible interaction between factors. A power analysis was conducted to determine if the number of participants recruited was sufficient to obtain the appropriate effect size for the planned multivariate analysis of covariance (MANCOVA). According to Tabachnick and Fidell (2001), each cell should have a sample size of 20 to ensure robustness and a strong final number of participants when using a MANCOVA. Given the assumption of 20 per cell, there was a minimum of 160 participants needed to ensure robustness. With a sample size of 217, there was a sufficient sample size for a MANCOVA.

According to Tabachnick and Fidell (2007) the data must be reviewed to determine if all assumptions for a MANCOVA are met. These assumptions include multivariate normality, linearity, outliers, homogeneity of variance-covariance matrices, homogeneity of regression (covariates and DVs for step-down), reliability of covariates (and DVs for step-down), and multicollinearity and singularity. The first assumption examined was the normality for the dependent variables and covariates. In order to check for normality, the means, standard deviations, range, skewness and kurtosis for each variable was analyzed. If the skewness value for a dependent variable was greater than 2 or less than -2 than a transformation of the variable would have been considered. None of the dependent variables met these criteria and so no transformation was necessary. The assumption of multivariate normality is met if all variables are normally distributed. Based on the skewness and kurtosis values, the dependent variables have reasonably balanced distributions and meet the criteria for multivariate normality for a MANCOVA (Tabachnick & Fidell, 2007).

After checking for normality, the next assumption to be examined was linearity. In addition to the skewness and kurtosis values already indicating balance between the dependent variables, an additional test of linearity was performed. Linearity between the dependent variables and covariates were assessed by creating a scatterplot matrix and calculating Pearson correlation coefficients (Table 5). Scatterplots and correlation coefficients indicate linear relationships. Although some of the correlation coefficients are significant ($p < .001$), the relationships are still fairly weak.

After checking for normality and linearity, the data was inspected for univariate and multivariate outliers. Univariate outliers are cases with extreme values on one

variable and multivariate outliers are cases with unusual combinations of scores on two or more variables (Tabachnick and Fidell, 2007). Box-plots and stem-and-leaf tables were used to determine if there were any univariate outliers in the dependent variables. Because the variables were primarily of a normal distribution, no significant outliers were identified. The Mahalanobis distances were checked for multivariate outliers.

Mahalanobis distance is commonly used to check for multivariate outliers, because it is the method through which multivariate outliers are most easily detected (Tabachnick and Fidell, 2007). For this study there were eight dependent variables and so according to Tabachnick and Fidell (2007), $\chi^2(8) = 26.13$, $p < .001$. Because there were no Mahalanobis distances that were greater than 26.13, there were no significant outliers identified through this process.

Next, the test assumptions of homogeneity of variance-covariance matrices and homogeneity of regression slope were tested. According to Tabachnick and Fidell (2007) if Box's *M* test of homogeneity (Table 6) is significant ($p < .001$) then robustness is not guaranteed. In this analysis Box's *M* test was not significant ($p = .35$) therefore, the homogeneity assumption was satisfied and robustness should not be an issue. Because this data indicates homogeneity of variance-covariance, $F(36, 144117.33) = 1.07$, Wilks' Lambda will be utilized as the test statistic for the multivariate analyses.

To test the reliability of covariates assumption, all the DVs must be reliable because in a step down analysis all act as covariates (Tabachnick & Fidell, 2007). Based on the nature of the scales' development and the data collection procedures, there is no reason to expect unreliability of a magnitude harmful to covariance analysis for the seven

subscales in the Feedback Environment Scale and Feedback Discounting (reliabilities are reported in Chapter 3).

Finally, multicollinearity and singularity were examined. Singularity occurs when one variable is a combination of two or more of the other variables in the study. Since all of the DV are mutually exclusive, singularity can be ruled out as an issue.

Multicollinearity was determined by running bivariate correlations between all the dependent variables to ascertain if any of the correlations are greater than .90 (Tabachnick & Fidell, 2007). Table 5 shows the bivariate correlation matrix for all of the dependent variables and none yielded a correlation larger than .90 indicating that there was no need to remove any variables.

It was hypothesized that participants who were exposed to ST priming would have significantly lower ratings of feedback environment as measured by the subscales of the FES and higher scores on feedback discounting (FD) after controlling for the influences of gender, solo status and the climate scale (CS). A one-way MANCOVA was conducted to determine the effect of the stereotype threat priming condition on eight DVs (Src. Crd., Fb. Qual., Fb. Deliv., Favor, Unfavor, Fb. Avail., Prmt. Fb. and FD) while controlling for gender, solo/token status and CS.

MANCOVA results are presented in Table 7 and indicate no significant interactions between the independent variables and the covariates. Contrary to the stated hypothesis, MANCOVA results showed no significant main effects among groups on the stereotype threat condition (Wilks' lambda= .97, $F(8, 194) = .85$, $p = .56$). There was also no significant main effect, between the covariate workplace climate and the dependent variables (Wilks' lambda = .96, $F(8, 194) = .91$, $p = .51$) nor between the covariate solo

status and the dependent variables (Wilks' lambda = .97, $F(8, 194) = .83$, $p = .58$). There were also no significant main effects between the covariate gender and the dependent variables (Wilks' lambda = .97, $F(8, 194) = .86$, $p = .56$).

Table 7 reveals that factor and covariate interactions are not significant for either stereotype threat condition and climate scale (Wilks' $\Lambda = .96$, $F(8, 194) = .90$, $p = .52$, eta squared = .04) nor for stereotype threat condition and solo/token status (Wilks' $\Lambda = .97$, $F(8, 194) = .87$, $p = .55$, eta squared = .05). There was also no significant effect between the factor and covariate interaction for stereotype threat condition and gender (Wilks' $\Lambda = .96$, $F(8, 194) = .97$, $p = .46$, eta squared = .04). There were also no significant three way interaction between stereotype threat condition, workplace climate and solo/token status (Wilks' $\Lambda = .91$, $F(16, 388) = .91$, $p = .34$, eta squared = .04), nor between stereotype threat condition, workplace climate and gender (Wilks' $\Lambda = .92$, $F(16, 388) = .92$, $p = .40$, eta squared = .04) nor was there a significant interaction between stereotype threat condition, solo/token status and gender (Wilks' $\Lambda = .93$, $F(16, 388) = .88$, $p = .59$, eta squared = .04). There was also no main effect for the interaction between the covariates (CS, solo/token status and gender) and the independent variable of stereotype threat condition (Wilks' lambda = .92, $F(16, 388) = 1.07$, $p = .39$, eta squared = .04). Overall, the results of this analysis did not confirm the hypothesis that the S.T. condition alone without the effects of workplace climate, solo/token status and gender, would have an influence on the perceptions of feedback.

Research Question Two

The second research question addresses the variables that influence perceptions of feedback in both the stereotype threat and the non-threat conditions. For this research

question, sequential regressions were performed on the dependent feedback variables of the Feedback Environment Scale (FES), the Favorable Feedback subscale (Favor), the Unfavorable Feedback subscale (Unfavor) and the measure of Feedback Discounting (FD). A sequential multiple regression allows the researcher to enter variables into the equation in a specific order to assess the amount of variance each variable predicts above and beyond the previously entered variables (Tabachnick & Fidell, 2007). A sequential multiple regression was used in this study to determine the contribution demographic variables, the stereotype threat condition, workplace climate, and solo status had in predicting perceptions of feedback in the workplace.

The hypothesis for this research question is that the stereotype threat condition (S.T.), workplace climate (CS) and solo/token status will influence perceptions of feedback (FES, Favorable, Unfavorable, and FD) in both conditions, over and above the influence of the demographic variables age, gender, job tenure and level of education. In this sequential regression the demographic variables of age, gender, job tenure and education were entered into the model first in order to first explore the effects that these characteristics may have on the perceptions of feedback. The next variables to be placed in the model were the stereotype threat condition, workplace climate via the Climate Scale and solo/token status. The rationale for entering the demographic variables first is that overall these were hypothesized to account for the least amount of variance in the perception of feedback in comparison to the amount of variance that workplace climate and solo/token status might have. According to DeCoster (2006), entering the least influential variables into the model before the more theoretically strong variables is what

is recommended for sequential regressions. Further, conceptually one might suppose that these are characteristics that existed prior to entering a workplace.

According to Tabachnick and Fidell (2001) the calculation $N \geq 50 + 8(m)$, where m is equal to the number of predictor variables, is used to obtain a medium level effect size ($\alpha = .05$, $\beta = .20$). Seven predictor variables are included in this study. Therefore, it was necessary to gain a minimum participation of 106 individuals for the regression analyses to detect a medium effect size. The first task in this analysis was to review the data to see test for the assumptions of a regression analysis (Tabachnick & Fidell, 2007). These assumptions include multivariate normality, linearity, homogeneity of variance, and multicollinearity and singularity.

The first assumption that was checked was for normality. The means, SD, range, skewness and kurtosis for each variable were examined. Skewness values greater than 2 or less than -2 should be transformed, however, none of the variables needed to be transformed (Tabachnick and Fidell, 2007). Table 8 shows the skewness and kurtosis for each variable. Heteroscedasticity and nonlinearity can be caused by non-normality of data (Tabachnick & Fidell, 2001). Four residual plots (one per DV) were examined to rule out heteroscedasticity and non-linearity. The plots are located in Tables 9-12. The residual plots are somewhat scattered but they are not extreme. The plot that seems the most extreme is that related to the Feedback Discounting variable. This plot showed substantial positive skewness (1.39) and so a base 10 logarithmic transformation was performed to transform the variable in order to discard positive skewness. This transformation reduced skewness to .70 but did not alter the regression analysis. Therefore the transformation was abandoned and the variable was used in its original

form. After reviewing the residual plots, it was determined that linearity and homoscedasticity assumption were met. Finally, multicollinearity and singularity were also examined. Multicollinearity happens when variables are very highly correlated (.90 and above); singularity refers to the redundancy of the variables (Tabachnick & Fidell, 2001). Multicollinearity was examined by checking the Variance Inflation Factor and Tolerance. The Variance Inflation Factor must be less than 3 and the tolerance should be greater than .3. These criteria were met. Multicollinearity was also determined by running bivariate correlations between the dependent variables and the independent variables (as is shown in Table 5) to see if correlations were above .90. None of the correlations was above .90, thus no variables needed to be removed.

SPSS linear regression analysis was used to develop four separate equations, one equation for each of the dependent variables Feedback Environment Scale, Favorable Feedback, Unfavorable Feedback and Feedback Discounting. The use of only two of the subscales (Favorable Feedback and Unfavorable Feedback) for this analysis is based on their unique distinction from one another in assessing a feedback environment and the fact that the FES scale in its entirety is also being utilized. For each equation the same predictor variables (demographics, climate scale and solo/token status) were entered in two steps. Demographic variables (age, gender, education and job tenure) were entered in the first step. Solo/token status and workplace climate were entered in the second step of the equation in order to determine their unique contribution beyond that of the demographic variables in step one.

Tables 13-16 summarize the results from the multiple regression equations predicting FES, Favorable feedback, Unfavorable feedback, and FD. The results from the

sequential multiple regression equation predicting FES will be discussed first, followed by the Favorable and then Unfavorable feedback regression equations. Finally a discussion of the equation predicting FD will be presented.

The first step in the regression equation, the demographic variables, failed to account for a significant amount of the variance of the FES ($R^2 = .04$, $F(4, 212) = 2.32$, $p = .06$). In step two, the addition of the stereotype threat condition, solo/token status and workplace climate significantly increased the variance of FES ($R^2 = .21$, $\Delta R^2 = .17$, $\Delta F(3, 209) = 14.67$, $p < .001$). Specifically, workplace climate ($\beta = -.41$, $p < .001$) was found to be significant. The entire model explained approximately 21% of the variance. This shows that participant's perceptions of the feedback environment were more significantly influenced by workplace climate than by demographic variables.

The second regression examined the dependent variable of Favorable feedback. The first step in the regression equation, demographic variables, failed to account for a significant amount of the variance of favorable feedback ($R^2 = .03$, $F(4, 212) = 1.66$, $p = .16$). In the second step the addition of the stereotype threat condition, workplace climate and solo/token status significantly increased the amount of variance of favorable feedback ($R^2 = .21$, $\Delta R^2 = .18$, $\Delta F(3, 209) = 15.44$, $p < .001$). Specifically, workplace climate ($\beta = -.40$, $p < .001$) was found to be significant. The entire model explained approximately 21% of the variance. This shows that workplace climate did affect participant's perceptions of favorable feedback beyond the influence of demographic variables.

The third regression examined the dependent variable of Unfavorable feedback. The first step in the regression equation, demographic variables, failed to account for a

significant amount of variance ($R^2 = .01$, $F(4, 212) = .25$, $p = .91$). In the second step of the equation, the addition of workplace climate and solo/token status failed to significantly increase the amount of variance for unfavorable feedback ($R^2 = .02$, $F(3, 209) = .72$, $p = .26$). Contrary to the stated hypothesis for this research question, the addition of the stereotype threat condition, workplace climate and solo/token status failed to significantly increase the amount of variance for unfavorable feedback. The entire model explained 2% of the variance. This shows that participant's perceptions of unfavorable feedback were not significantly affected by workplace or solo/token status.

The fourth and final regression examined the dependent variable Feedback Discounting (FD). The first step in the regression equation using only demographic variables failed to account for a significant amount of the variance ($R^2 = .04$, $F(4, 212) = 2.31$, $p = .06$). In the second step of the regression, adding the stereotype threat condition, workplace climate and solo/token status to the equation did significantly increase the variance of FD ($R^2 = .26$, $\Delta R^2 = .22$, $\Delta F(3, 209) = 20.93$, $p < .001$). Specifically, workplace climate ($\beta = .46$, $p < .001$) was found to be significant. The entire model explained 26% of the variance. This shows that participant's perception of discounting feedback was influenced by their perceptions of their workplace climate.

Content Analysis

There were two qualitative questions that were asked at the end of the survey to assess participants' perceptions about their feedback environments. The first question was "Please address the extent to which your supervisor's non-verbal behavior influences the degree to which you see their feedback as legitimate?" The second question was "What conditions must be present in order for you to take and implement feedback

seriously?” A content analysis was performed for both of these questions to assess the frequency with which certain terms and phrases were used for each question. The responses to the qualitative questions were reviewed and responses were separated into common ideas. For the first question regarding non-verbal feedback, there were several themes that were consistent across the different responses.

There were 167 responses to the question “Please address the extent to which your supervisor’s non-verbal behavior influences the degree to which you see their feedback as legitimate?” These responses were divided into those that stated that non-verbal behavior was an important factor and those that stated that it was not. From the group that stated that non-verbal behavior was important, specific themes were chosen. One phrase that was represented heavily in the responses was that supervisors’ non-verbal behavior is important in determining the legitimacy of feedback. Individuals varied in terms of the range of how important non-verbal communication was for them. Some individuals stated that they did not have much face-to-face contact with their supervisors and so the non-verbal cues that they paid attention to were response times to emails and the availability of phone meetings with supervisors. Other participants stated that in their work environment the feedback that they receive is not really judged in a non-verbal way and that they only pay attention to verbal statements and concrete feedback. Still other participants noted that there is incongruence between the verbal feedback they receive and the non-verbal cues that they notice. These individuals did state that this has a negative impact on how legitimately they view the feedback and also on how they view their supervisors as well. Overall the written responses to this question were consistent with the scale data in that to the extent that non-verbal behavior is

perceived as being an important indicator of workplace climate, it has a significant impact on the legitimacy of feedback for many participants.

There were also 167 responses to the second question of “What conditions must be present in order for you to take and implement feedback seriously?” As before, these responses were divided into those that stated that they required certain conditions and those that stated that they did not require any conditions. From the group that stated that they did need certain conditions, there again were several themes and phrases that were consistent throughout the responses to this question. One very consistent theme was that participants believed that in order for them to take feedback seriously, that their supervisors should be familiar with their work and with the tasks that they complete on a day to day basis. Some participants also noted that feedback should be given on a one-on-one basis and done so in a serious and deliberate manner. Another theme was that the feedback given should be directly related to something that they have done and that there should be written as well as verbal feedback. The equality and consistency of feedback across employees regardless of race and gender was another theme that was mentioned in response to this question. Most participants were able to find ways that their feedback environment could be improved but mostly they seemed to want honesty, respect, and genuineness from their supervisors. Overall the responses to this question support the idea that employees want their supervisors to be consistent when delivering feedback but there were very few responses that mentioned racial similarity being a necessary condition for them accept feedback.

Table 3. Descriptive Statistics (Means, Standard Deviations, Skewness and Kurtosis)

Variable Name	N	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
FES	217	1.28	7.00	5.13	1.10	-.90	.50
FES- Src. Crd.	217	1.00	7.00	5.34	1.33	-1.15	1.02
FES- Fb. Qual.	217	1.00	7.00	4.90	1.59	-.80	.05
FES- Fb. Deliv.	217	1.00	7.00	5.13	1.35	-1.16	1.36
FES- Favor	217	1.00	7.00	4.85	1.61	-.73	-.32
FES- Unfavor	217	1.00	7.00	5.01	1.32	-.66	.68
FES- Fb. Avail.	217	1.00	7.00	5.24	1.35	-.63	-.33
FES- Prmt. Fb.	217	1.00	7.00	5.45	1.45	-1.05	.42
FD	217	1.00	5.88	1.93	1.20	1.39	1.10
CS	217	1.60	4.35	3.09	.53	-.18	-.29
Solo/token	217	1.00	2.00	1.66	.47	-.70	-1.53
Education	217	1.00	6.00	4.66	1.09	-.98	1.06
Age	217	22.00	64.00	37.48	10.57	.92	-.13
Gender	217	1.00	2.00	1.65	.48	-.65	-1.59
Job Tenure	217	1.00	36.00	7.84	8.11	1.79	2.52

Note. **S.T. condition**- Stereotype threat random assignment condition; **FES**- Feedback Environment Scale; **Src. Crd.**- Source credibility subscale; **Fb. Qual.**- Feedback quality subscale; **Fb. Deliv.**- Feedback delivery subscale; **Favor**- Favorable feedback subscale; **Unfavor**- Unfavorable feedback subscale; **Fb. Avail.**- Feedback availability subscale; **Prmt. Fb.**- Promotes feedback seeking subscale; **FD**- Feedback Discounting Measure; **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no); **Education**- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Table 4
Correlation Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
S.T. condition (1)	-															
FES (2)	-.05	-														
FES- Src. Ctd. (3)	.01	.88**	-													
FES- Fb. Qual. (4)	-.05	.87**	.82**	-												
FES- Fb. Deliv. (5)	-.04	.82**	.80**	.75**	-											
FES- Favor (6)	-.09	.83**	.68**	.61**	.66**	-										
FES- Unfavor (7)	.04	.34**	.12	.26**	.03	.12	-									
FES- Fb. Avail. (8)	-.09	.79**	.62**	.57**	.48**	.66**	.20**	-								
FES- Prmt. Fb. (9)	-.11	.85**	.70**	.64**	.65**	.68**	.16*	.70**	-							
FD (10)	.04	-.67**	-.62**	-.56**	-.59**	-.60**	-.05	-.58**	-.59**	-						
CS (11)	.05	-.40**	-.35**	-.39**	-.34**	-.41**	-.10	-.27**	-.30**	.46**	-					
Solo/token (12)	-.04	-.12	-.12	-.02	-.05	-.16*	.05	-.22**	-.13	.19*	.04	-				
Education (13)	-.06	.07	.13	.06	.09	.06	-.01	-.01	.06	-.08	.03	-.13*	-			
Age (14)	.05	-.09	-.08	-.08	-.02	-.10	-.02	-.10	-.09	.12	.10	.11	-.10	-		
Gender (15)	.06	-.11	-.08	-.01	-.02	-.12	-.04	-.20**	-.15*	.15*	.01	.36**	-.06	-.01	-	
Job Tenure (16)	.10	-.15*	-.13	-.17*	-.13*	-.11	-.05	-.13	-.10	-.10	.02	.06	-.04	.60**	-.07	-

Note. * indicates significant at p < .05; ** indicates significant at p < .01

Note. **S.T. condition**- Stereotype threat random assignment condition; **FES**- Feedback Environment Scale; **Src. Ctd.**- Source credibility subscale; **Fb. Qual.**- Feedback quality subscale; **Fb. Deliv.**- Feedback delivery subscale; **Favor**- Favorable feedback subscale; **Unfavor**- Unfavorable feedback subscale; **Fb. Avail.**- Feedback availability subscale; **Prmt. Fb.**- Promotes feedback seeking subscale; **FD**- Feedback Discounting Measure; **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no);

Education- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Table 5. Correlations between dependent variables

Variable	1	2	3	4	5	6	7	8
1. FES-Src. Crd.	-							
2. FES-Fb. Qual.	.82**	-						
3. FES-Fb. Deliv.	.80**	.75**	-					
4. FES-Favor	.68**	.61**	.66**	-				
5. FES- Unfavor	.12	.26**	.03	.12	-			
6. FES- Fb. Avail.	.62**	.57**	.48**	.66**	.20**	-		
7. FES- Prmt. Fb.	.70**	.64**	.65**	.68**	.16*	.70**	-	
8. FD	-.62**	-.56**	-.59**	-.60**	-.05	-.58**	-.59**	-

Note. * indicates significant at $p < .05$; ** indicates significant at $p < .01$

Src. Crd.- Source credibility subscale; **Fb. Qual.**- Feedback quality subscale; **Fb. Deliv.**- Feedback delivery subscale, **Favor**- Favorable feedback subscale; **Unfavor**- Unfavorable feedback subscale; **Fb. Avail.**- Feedback availability subscale; **Prmt. Fb.**- Promotes feedback seeking subscale; **FD**- Feedback Discounting Measure

Table 6. Box's Test of Equality of Covariance Matrices

Box's M	40.21
F	1.07
df1	36.00
df2	144117.33
Sig.	.35

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

Design: Intercept + S.T. condition + CS + solo/token + S.T. condition * CS + S.T. condition * solo/token + S.T. condition * CS * solo/token

KEY: **S.T. condition**- Stereotype threat random assignment condition; **CS**- Climate Scale Measure;

Solo/token- Participants endorsement of having solo status in the workplace

Table 7. MANCOVA Results

Effect	Value	F	Hyp. df	Error df.	Sig.	Partial η^2	Obs. Power ^b
S.T. cond.	.97	.85 ^a	8.00	194.00	.56	.03	.39
CS	.96	.91 ^a	8.00	194.00	.51	.04	.42
Solo/token	.97	.83 ^a	8.00	194.00	.58	.03	.38
Gender	.97	.86 ^a	8.00	194.00	.56	.03	.39
S.T. cond.* CS	.96	.90 ^a	8.00	194.00	.52	.04	.41
S.T. cond.* Solo/token	.97	.87 ^a	8.00	194.00	.55	.05	.03
S.T. cond.* Gender	.96	.97 ^a	8.00	194.00	.46	.04	.44
S.T. cond.* CS* Solo/token	.91	1.12 ^a	16.00	388.00	.34	.04	.74
S.T. cond.* CS* Gender	.92	1.06 ^a	16.00	388.00	.40	.04	.71
S.T. cond.* Solo/token* Gender	.93	.88 ^a	16.00	388.00	.59	.04	.61
S.T. cond.* CS* Solo/token* Gender	.92	1.07 ^a	16.00	388.00	.39	.04	.72

a. Exact statistic; b. Computed using alpha = .05

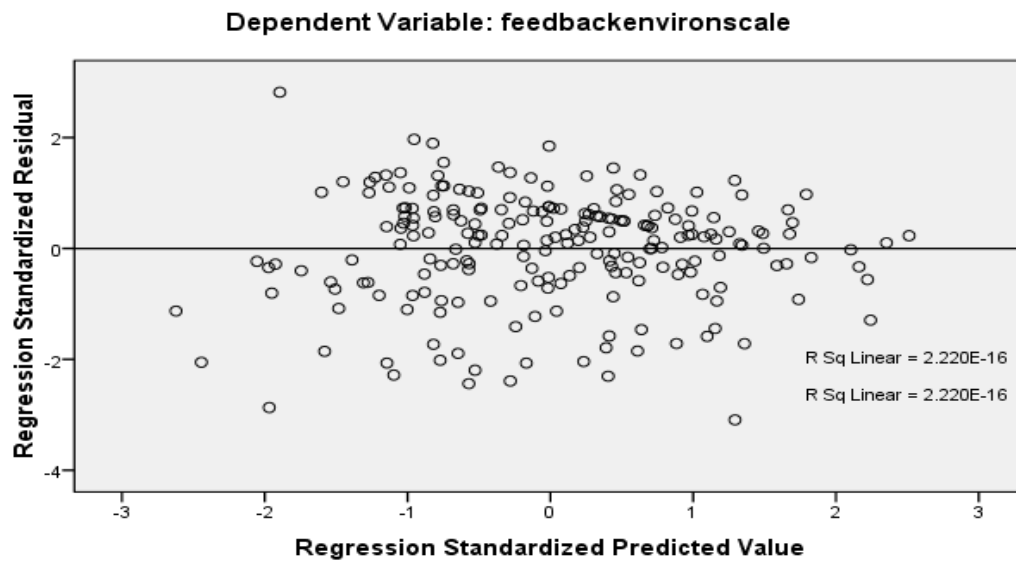
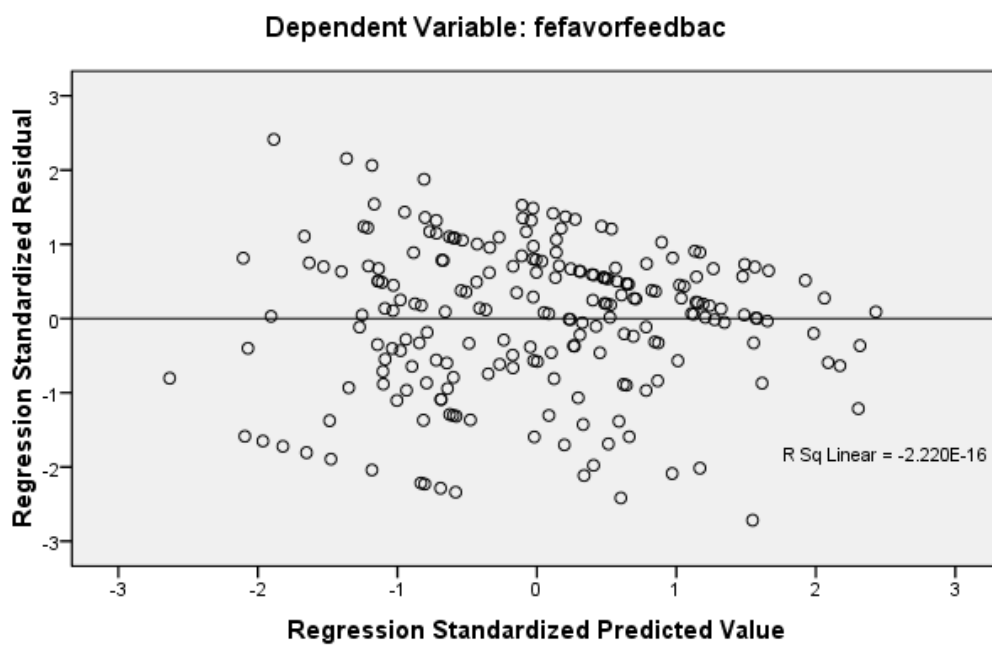
Design: Intercept + S.T. condition + CS + solo/token + CS + S.T. condition * CS + S.T. condition * solo/token + S.T. condition * CS * solo/token

KEY: **S.T. condition**- Stereotype threat random assignment condition; **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace, **Gender**- Gender of participant (1=Male, 2=Female).

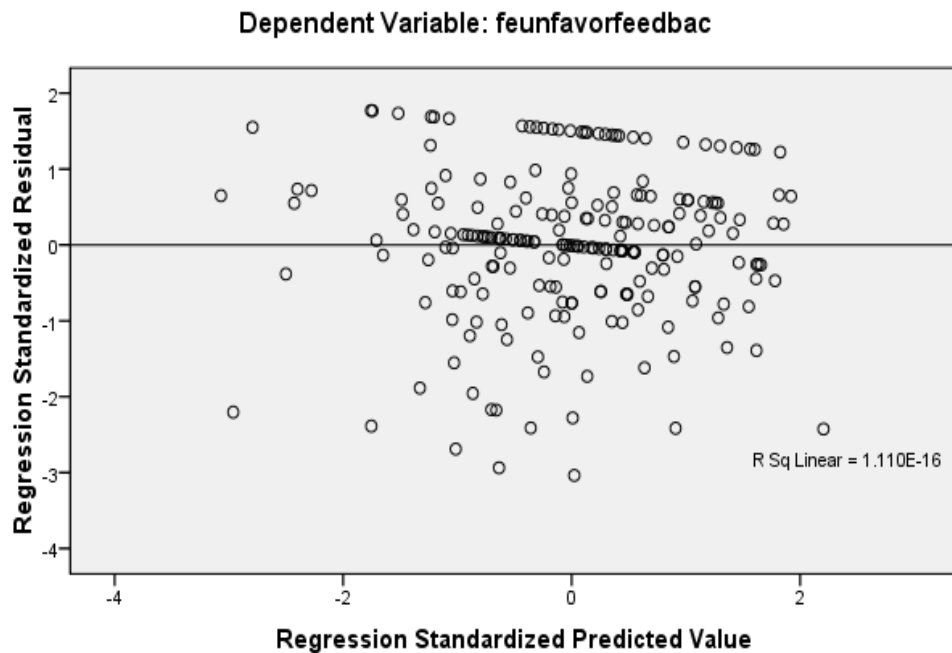
Table 8. Multivariate Normality Assumption

Variable Name	N	Min.	Max.	Mean	Std. Dev.	Skewness	Kurtosis
FES	217	1.28	7.00	5.13	1.10	-.90	.50
FES- Favor	217	1.00	7.00	4.85	1.61	-.73	-.32
FES- Unfavor	217	1.00	7.00	5.01	1.32	-.66	.68
FD	217	1.00	5.88	1.93	1.20	1.39	1.10
S.T. condition	217	1.00	2.00	1.45	.50	.20	-1.98
CS	217	1.60	4.35	3.09	.53	-.18	-.29
Solo/token	217	1.00	2.00	1.66	.47	-.70	-1.53

Note. **FES**- Feedback Environment Scale; **Favor**- Favorable feedback subscale; **Unfavor**- Unfavorable feedback subscale; **FD**- Feedback Discounting Measure; **S.T. condition**- Stereotype threat random assignment condition (1=primed, 2= not primed); **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no)

Figures 1-4. Heteroscedasticity Regression Scatterplots**Scatterplot****Scatterplot**

Scatterplot



Scatterplot

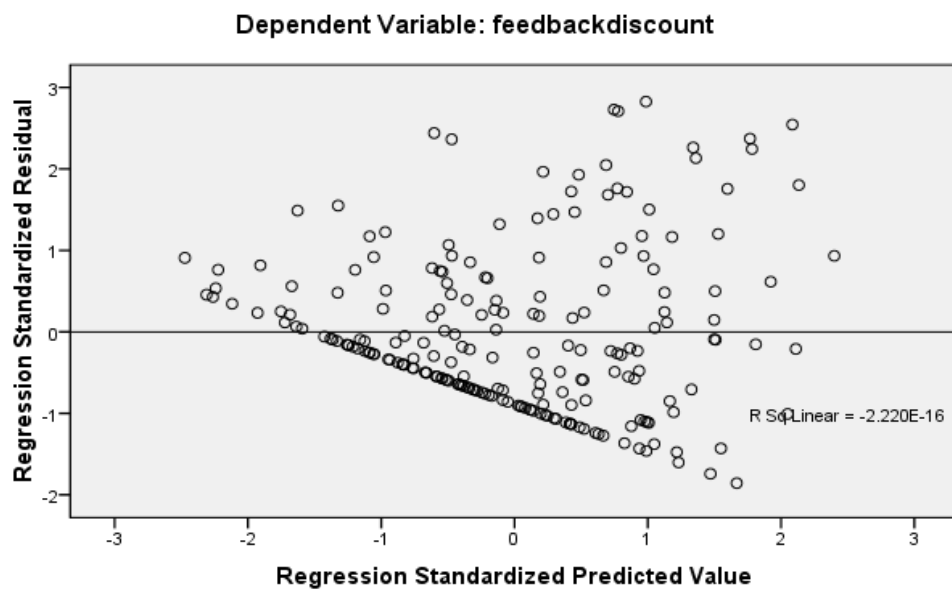


Table 9. Summary of Sequential Regression Predicting Feedback Environment Scale

Variable	R ²	Adj. R ²	ΔR ²	Sig. ΔF	B	SE of B	β	t	sr ²
Block 1	.04	.02	.04	.06					
Age					.00	.01	.02	.17	.01
Gender					-.28	.16	-.12	-1.78	-.12
Job Tenure					-.02	.01	-.17	-2.00*	-.14
Education					.06	.07	.06	.85	.06
Block 2	.21	.18	.17	.00**					
Age					.01	.01	.07	.96	.07
Gender					-.22	.15	-.10	-1.45	-.10
Job Tenure					-.03	.01	-.19	-2.42*	-.17
Education					.07	.06	.07	1.07	.07
S. T. cond.					-.02	.14	-.01	-.17	-.01
Climate Scale					-.84	.13	-.41	-6.53**	-.41
Solo/token					-.13	.16	-.06	-.85	-.06

Note. * indicates significant at $p < .05$; ** indicates significant at $p < .01$

Note. **S.T. condition**- Stereotype threat random assignment condition (1=primed, 2= not primed); **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no); **Education**- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Table 10. Summary of Sequential Regression Predicting Favorable feedback

Variable	R ²	Adj. R ²	ΔR ²	Sig. ΔF	B	SE of B	β	t	sr ²
Block 1	.03	.01	.03	.16					
Age					-.01	.01	-.04	-.41	-.03
Gender					-.41	.23	-.12	-1.78	-.12
Job Tenure					-.02	.02	-.10	-1.14	-.08
Education					.06	.10	.04	.63	.04
Block 2	.21	.18	.18	.00**					
Age					.00	.01	.03	.36	.03
Gender					-.26	.23	-.08	-1.14	-.08
Job Tenure					-.02	.02	-.11	-1.41	-.10
Education					.07	.09	.05	.72	.05
S. T. cond.					-.18	.20	-.06	-.91	-.06
Climate Scale					-1.22	.19	-.40	-6.45**	-.41
Solo/token					-.37	.23	-.11	-1.59	-.11

Note. * indicates significant at $p < .05$; ** indicates significant at $p < .01$

Note. **S.T. condition**- Stereotype threat random assignment condition (1=primed, 2= not primed); **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no); **Education**- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Table 11. Summary of Sequential Regression Predicting Unfavorable feedback

Variable	R ²	Adj. R ²	ΔR ²	Sig. ΔF	B	SE of B	β	t	sr ²
Block 1	.01	-.01	.01	.91					
Age					.00	.01	.02	.26	.02
Gender					-.11	.19	-.04	-.59	-.04
Job Tenure					-.01	.01	-.07	-.80	-.06
Education					-.02	.08	-.01	-.19	-.01
Block 2	.02	-.01	.02	.26					
Age					.00	.01	.03	.34	.02
Gender					-.21	.20	-.08	-1.03	-.07
Job Tenure					-.01	.01	-.08	-.97	-.07
Education					.00	.08	.00	.05	.00
S. T. cond.					.17	.18	.06	.90	.06
Climate Scale					-.25	.17	-.10	-1.48	-.10
Solo/token					.25	.21	.09	1.20	.08

Note. * indicates significant at $p < .05$; ** indicates significant at $p < .01$

Note. **S.T. condition**- Stereotype threat random assignment condition (1=primed, 2= not primed); **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no); **Education**- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Table 12. Summary of Sequential Regression Predicting Feedback Discounting

Variable	R ²	Adj. R ²	ΔR ²	Sig. ΔF	B	SE of B	β	t	sr ²
Block 1	.04	.02	.04	.06					
Age					.01	.01	.08	.96	.07
Gender					.38	.17	.15	2.21*	.15
Job Tenure					.01	.01	.06	.65	.05
Education					-.07	.07	-.06	-.91	-.06
Block 2	.26	.24	.22	.00**					
Age					.00	.01	.01	.11	.01
Gender					.26	.16	.10	1.60	.11
Job Tenure					.01	.01	.08	1.03	.07
Education					-.07	.07	-.07	-1.11	-.08
S. T. cond.					-.00	.15	-.00	-.02	-.00
Climate Scale					1.03	.14	.46	7.62**	.47
Solo/token					.31	.16	.12	1.88	.13

Note. * indicates significant at $p < .05$; ** indicates significant at $p < .01$

Note. **S.T. condition**- Stereotype threat random assignment condition (1=primed, 2= not primed); **CS**- Climate Scale Measure; **Solo/token**- Participants endorsement of having solo status in the workplace (1= yes, 2= no); **Education**- Participant level of education (1=High School/GED, 2= Some College, 3= Associates Degree, 4= Bachelors Degree, 5= Masters Degree, 6= Post Masters Education); **Gender**- Gender of participant (1=Male, 2=Female), **Job Tenure**- The amount of years the participant has been employed at their current position

Chapter 5

Discussion

This chapter discusses the implications of the results presented in Chapter 4. First, the findings of the analyses are discussed in reference to possible explanations of the findings and their convergence and/or divergence with the previous literature. Next, the theoretical and research implications of the study are discussed. Finally, limitations of the study are presented, and suggestions and implications for future research are delineated.

Research Question One

The first research question sought to identify whether perceptions of feedback in the workplace were influenced by stereotype threat, after controlling for gender, solo/token status, and workplace climate. It was hypothesized that the presence of stereotype threat in the priming condition would have a significant influence on participants' perception of feedback in the workplace. In particular, the priming condition was thought to have a negative influence on the perception of feedback, whereby participants' responses to feedback items would indicate a more negative perception of their feedback environment and an increase in participants' discounting of feedback, in comparison to those who did not experience stereotype threat.

This hypothesis was not supported by the results. Stereotype threat priming was not found to account for any significant variance in participants' perceptions of feedback (source credibility, feedback quality, feedback delivery, favorable feedback, unfavorable feedback, feedback availability, promotes feedback seeking and feedback discounting). The interaction effect between stereotype threat and the climate scale, gender, and solo/token status was not significant.

Taken together, these findings indicate that differences in the perceptions of feedback including the seven subscales of the Feedback Environment Scale (source credibility, feedback quality, feedback delivery, favorable feedback, unfavorable feedback, feedback availability, promotes feedback seeking) and discounting feedback between participants who were both primed with a stereotype threat task and those who were not, are negligible. In addition to the previous finding, the lack of an interaction with workplace climate, gender, or the solo/token status covariates are all inconsistent with previous research (Stangor et al., 1998). Past research has shown that when stereotype threat is activated, people tend to have more negative perceptions of their performance (Davis et al., 2006). Possible reasons for these findings may be that the stereotype threat priming task did not have the intended effect of invoking more intense thoughts of discrimination for participants. It is possible that participants were inadvertently primed as a result of reading the recruitment notice and informed consent.

Research Question Two

This research question sought to identify which variables accounted for the most variance in perceptions of feedback. Hypothesis two stated our expectation that workplace climate, stereotype threat, and solo/token status would influence perceptions of the feedback environment, feedback discounting, and both favorable and unfavorable feedback in both conditions, over and above the influence of the demographic variables age, gender, amount of years in current occupation, and level of education. In three out of the four dependent variables tested, the stated hypothesis was confirmed. For the dependent variables of the total score of the feedback environment scale, favorable feedback, and feedback discounting, the climate scale and solo/token status accounted

for a more significant portion of the variance (21%, 20% and 26% respectively) than did demographic variables alone. For the fourth dependent variable, however, this was not the case. Workplace climate, stereotype threat, and solo/token status did not account for a significant amount of the variance (i.e., 2%) in unfavorable feedback.

These findings are consistent with previous research (Hayes et al., 2002) that states that the perception of one's workplace climate can have a profound effect on job satisfaction and judgment of the overall working environment; and that having solo/token status in the workplace has a negative impact on perceptions of feedback (Neimann & Dovidio, 1998). The findings for perceptions of unfavorable feedback, while in opposition to the other dependent variables, do support the assertion that in regards to unfavorable feedback neither the climate of the environment nor solo/token status will influence how people react to negative feedback in the workplace. One reason that demographic variables likely did not account for any variance may be because this study was geared at professionals and education levels did not vary greatly for participants. With respect to age and gender it may be unlikely that these factors play a large role in how African American professionals interpret feedback because they may feel that those factors do not have as large of an impact on their status in the workplace.

Theoretical Implications

The results of this study have theoretical implications for understanding how some African American employees perceive feedback in the workplace. The following is a discussion in reference to possible ways this study clarifies, extends, or contradicts our theoretical understanding of stereotype threat and its influence on African American employees.

Stereotype Threat

One of the theoretical aims of this study was to determine how the presence of a stereotype threat priming task affected participants' perceptions of feedback. Previous research has shown that the activation of stereotypes undermines the effects of otherwise positive experiences in the mind of a stigmatized individual (Stangor et al., 1998). Furthermore, past research has shown that priming negative racial stereotypes activates the individual's self-doubts and influences their perception of their ability (Steele & Aronson, 1995). In regards to African Americans, research shows that even subtle reminders of negative stereotypes will produce significant decreases in performance and confidence (Aronson & Inzlicht, 2004). When it comes to the workplace, past research has shown that when employees experience stereotype threat, they would be less likely to try to obtain direct feedback from their supervisors because they might suspect their supervisors of having malicious intent (Roberson et al., 2003).

An important contribution that this study makes is that it extends the previous literature on stereotype threat and specifically explores whether a priming task activates stereotype threat. This study also extends the literature on stereotype threat in the workplace. Many research studies have been done on stereotype threat in regards to academic environments (Steele & Aronson, 1995, Davis et al., 2006) but there are few studies that examine stereotype threat in relation to how it manifests in work-related environments. This study sought to determine how a stereotype threat priming task that is meant to activate negative stereotypes about African Americans in the workplace, would influence how these participants responded to questions regarding how they perceive their workplace climate, feedback environment, and their tendency to discount feedback.

The findings of this study contradict the current literature on stereotype threat. Participants in this study who were exposed to the priming task did not respond any differently to their perceptions of workplace climate, feedback environment or discounting feedback than those who were not exposed to the priming task. Stereotype threat also did not have influence on how perceptions of workplace climate or the presence of having solo/token status related to feedback measures.

One of the reasons that the stereotype threat priming task may not have the intended effect is that it may be possible that the sampling technique of using only African American professionals in the study worked to negate the use of a stereotype threat priming task. In other words by making it clear that we were looking for African American professionals in the recruitment notice and by hinting at the purpose for which we needed these participants, participants may have been primed for stereotype threat by virtue of simply reading the recruitment notice and informed consent for the study. From this perspective, the stereotype priming task would not hold the significance that it has in other studies because all participants have already been primed by agreeing to participate in the study.

Another reason the priming task may not have been effective could be because the participants were aware that the researcher was an African American female. It is conceivable that having this information further heightened the extent to which participants were aware of the study's focus on race. Future research might explore how participants who are blind as to whom the researcher is, which sample of participants the research is geared at and also blind to the purpose of the study influences the outcomes of a stereotype threat priming task.

Feedback

Another aim of this study was to assess how feedback is perceived and the degree to which it is discounted in the workplace. Previous research has suggested that people are motivated to defend and protect their egos and therefore might employ mechanisms to avoid, distort, or discount feedback if they perceive that feedback to be harmful (Ashford et al., 2003. Baumeister, 1997). Past research has also shown that feedback environment has a significant impact on how employees behave at work and how much they identify with others at work (Norris-Watts & Levy, 2004).

An important contribution of this study that extends the previous literature is that it explored how feedback environment and feedback discounting relate to workplace climate and are influenced by stereotype threat. This study examined seven different factors of feedback environment. These seven subscales were, Source Credibility, Feedback Quality, Feedback Delivery, Favorable Feedback, Unfavorable Feedback, Source Availability, and Promotes Feedback Seeking (Steelman et al., 2004). Using these different subscales allowed us to get at different aspects of what makes a feedback environment positive or negative. Many of the previous variables have been examined in isolation from one another but this study combines all of these variables to assess the influence that one may have on the other. In particular, this study explores how individuals who have been primed for stereotype threat experience their feedback environments and whether they tend to discount feedback more than those who did not experience the stereotype threat priming condition. This study also examines how perceptions of workplace climate influence the participants' perceptions of the feedback environment and their tendency to discount feedback.

The findings of this study suggest that the presence of a stereotype threat priming condition does not influence how participants' perceive the feedback environment or their tendency to discount feedback. Again a possible alternative explanation might be related to what was mentioned earlier about priming participants through the recruitment notice and informed consent. Also the priming task of having participants read a paragraph is not the most overt method of priming. Perhaps a more obvious primer is needed such as the use of video taped situations where discrimination is blatantly enacted for participants by real people.

The findings of this study did demonstrate that participants' perceptions of their workplace climate did indeed have an influence on how they perceived their feedback environments and their tendency to discount feedback. This was shown through the Climate Scale having accounted for a significant amount of the variance in the second research question. This shows that when individuals perceive that their workplace climate is not supportive of diversity and does not show the possibility for upward mobility of African Americans that their perception of the feedback environment is that it is not very conducive to having open communication with their supervisors about their performance at work. It also shows that when individuals perceive the workplace climate to be more in favor of majority individuals, that their tendency to discount the feedback that they receive increases. This fits with the notion that people must protect themselves and their perceptions of their abilities when the environment that they are in is harmful. Future research should continue to explore how stereotype threat and workplace climate influence employees' perceptions of feedback in the workplace. This is especially true in the instance of negative versus positive feedback in the workplace and if workplace

climate is a mitigating factor in how these two aspects of feedback are perceived. It may very well be the case that negative feedback will be perceived the same way by African American employees regardless of workplace climate.

Workplace Climate

Another theoretical aim of this study was to see how workplace climate influenced participants' perceptions of feedback in the workplace. Previous research indicates that many organizational policies, practices, and procedures more often negatively impact members of certain minority groups (Hayes et al., 2002). Past research also shows that a negative workplace climate is correlated with negative job satisfaction and that this type of environment leads African Americans to feel stigmatized and devalued in the workplace (Holcomb-McCoy & Addison-Bradley, 2005).

An important contribution that this study makes is that it examines how workplace climate relates to feedback and how it is perceived in the workplace. There are many studies that explore workplace climate in relation to job satisfaction and perception of work organizations (Holcomb-McCoy & Addison-Bradley, 2005; Holder & Vaux, 1998; Hayes et al., 2002). This study attempts to connect workplace climate to perceptions of feedback environment and feedback discounting to see if there is any significant relationship between the workplace climate and how people internalize feedback.

The findings of this study clarify previous studies because as opposed to only looking at job satisfaction overall, this study specifically examines the domain of feedback. Results support the premise that workplace climate and how open people perceive their organizations to be to diversity impacts how they perceive their feedback

environment and their tendency to discount feedback. Another important aspect in the perception of workplace climate is having equality between minority and majority individuals. The more negatively participants perceived their workplace climate to be, the more negative were their perceptions of the feedback environment. Further, they were also more likely to discount feedback. This was shown not only in the significant correlations between these factors, but also through workplace climate accounting for a significant portion of the variance with feedback environment and feedback discounting. This is not a surprising finding, but shows that when African American professionals feel that their workplace is not supportive of equality and openness to diversity, it makes sense that they would feel less comfortable about the feedback that they receive because they would likely doubt its validity in the face of other discriminatory practices. The increase in feedback discounting also follows very naturally from a feeling that the environment is not completely safe or supportive of them because they are a non-majority employee. Future research may want to explore how the racial composition of a workplace influences the perception of the climate. It is likely that an environment in which there are many ethnic minorities would be perceived differently than that in which there are hardly any. Some of the responses to the qualitative questions indicated that this was an important factor in their perceptions of workplace climate. Future research may also want to explore which relationship is more influential, workplace climate determining perceptions of feedback, or feedback perceptions determining opinions about workplace climate.

Solo status and Tokenism

Another theoretical aim of this study was to see how having solo/token status in the workplace influences perceptions of the feedback environment and the tendency to discount feedback. Previous research shows that when an African American individual has solo status, feelings of isolation from peers and supervisors can negatively affect performance in African Americans (Holder & Vaux, 1998). When one has solo status in the workplace, he/she does not have anyone else to compare their experience to; this lack of an in-group comparison eliminates some of the self-healing of dealing with stereotypes in the workplace (Franklin & Boyd-Franklin, 2000). Having solo or token status in the workplace can produce negative consequences for individuals in stigmatized groups by making them feel further isolated and different from others because of their group membership (Neimann & Dovidio, 1998). Other research has also found that individuals with solo status in the workplace report experiencing higher levels of stereotype threat (Roberson et al., 2003).

An important contribution that this study makes is that it not only examines how solo/token status is influenced by stereotype threat, but also how those with and without solo/token status interpret feedback in the workplace. There are some studies that explore solo/token status in comparison with work performance and experiences in the workplace (Sekaquaptewa & Thompson, 2002; Neimann & Dovidio, 1998). This study sought to connect solo/token status to perceptions of the feedback environment and feedback discounting to see if there are any significant differences between those who have solo/token status and those who do not.

The findings of this study contradict previous literature in that it shows that those with solo/token status did not differ much from those who did not have solo/token status.

Because solo/token status was assessed as a demographic variable, participants either checked that they were the only African American in their department or they were not. Results indicate that males were more likely to have solo/token status in the workplace and those who have solo/token status were less likely to discount feedback than those who did not have this status. This is contrary to the theory that those with solo/token status because of their isolation might feel more threatened and tend to discount feedback more (Roberson et al., 2002). One possible reason for this finding may be that those individuals who do have solo/token status in the workplace do not feel that they have any support to make a statement that the feedback they receive is invalid in some way because of their status as an African American. More specifically, they may feel that they have no one to back up their statements and may already feel that they are in a vulnerable position being the only African American employee. Another possible explanation may be that these individuals believe that since their organization hired them, than the organization cannot be prejudiced. They may feel that if the organization was prejudiced than they would not be an employee there. This is likely due to their lack of having any in-group comparison to confirm their suspicion of the evaluators (Crocker & Major, 1989). Perhaps this lack of a comparison group makes discounting feedback a less viable option because there is no support in the assertion that the evaluator might be prejudiced.

Implications for Practice and Future Research

The findings of this study, in combination with past research, have significant implications for organizations that are committed to having a welcoming and comfortable environment for their employees of color. Discounting feedback can have harmful effects not only on African American professionals but also on supervisors and their perceptions

of this group. When one consistently discounts feedback that they are given at work, it is almost impossible for them to improve their performance or take ownership of their performance. Similarly, the feedback situation becomes difficult for the evaluator. It becomes almost impossible for the evaluator to give any genuine feedback, whether it is positive or negative, to individuals who are discounting feedback. This can result in a great deal of frustration on the part of the supervisor as well as a negative view of the individuals who are discounting their feedback. These impressions have strong implications for the job satisfaction of African Americans as well as their opportunities for advancement within a particular work environment. Practical implications include diversity training for organizations about racial climate and the negative influence of stigmatization on minority employees.

According to the results, workplace climate seems to have a significant influence on perceptions of feedback, but the degree to which stereotype threat and to some degree solo/token status influences perceptions of feedback remains unclear. Future research may want to explore how those individuals who explicitly report experiencing stereotype threat perceive feedback in comparison to those who do not endorse having experienced stereotype threat. Another finding was that overall, participants reported low amounts of feedback discounting. This raises the question of how much do people really discount feedback and do self-reports of feedback discounting correlate with reports from supervisors and coworkers. Because this study only examined the perceptions of the employees themselves, there was no cross-validation of information collected from other sources. Supervisors and coworkers have a distinct view of how we behave in the workplace that we may be unaware of as employees. Additionally, because this study

only used African American participants there was no comparison against the experiences of those with other ethnicities in the workplace. It might be beneficial to examine the perspective of Latino, Asian, and Caucasian employees to see if similar results would occur. Finally a qualitative analysis that allows individuals to express their perceptions and experiences verbally would be very helpful in obtaining a more complete picture of how African American employees feel in their work environments and the impact that these perceptions and experiences have on their performance and job satisfaction.

Methodological Implications

The purpose of this study was threefold: (1) to establish the presence of stereotype threat; (2) to examine how African American professionals interpret feedback; and (3) to assess the impact that workplace climate and solo/token status have on the perceptions of feedback. This study has several methodological implications that can be used to strengthen future research in the area of stereotype threat and feedback in the workplace.

Establishing Stereotype Threat. This study attempted to prime participants for stereotype threat by having some of them read a paragraph written to incite thoughts of relevant stereotypes and stigmas about African American professionals. As was discussed earlier, this manipulation had little effect on the participants' responses. By allowing the participants to know from the outset that the opinion of African American professionals was needed in order to assess their perceptions about the workplace, it is very likely that this primed all participants for stereotype threat. What this may have done in essence was to negate the presence of a priming paragraph and the possible impact that it was expected to have on the mindset of those individuals in that condition. Another factor

may have been that participants also knew that the researcher was also an African American aspiring professional as well, further confirming the purpose of the study. Another possible explanation for the poor effect of stereotype threat in this study might be the self-efficacy of the participants. Based on the educational and professional accomplishments of the participants, it is possible that they felt that they were not at risk for being stereotyped because they had proven themselves worthy of being judged on their merit. Future research designs may wish to carefully consider how participants are recruited so that priming does not take place by virtue of reading the recruitment notice before even taking the surveys. Future research designs may also wish to be less explicit about whom the research is going to examine.

African American's Interpretation of Feedback. This study attempted to attain African American professionals' perceptions of their feedback environment and of their propensity to discount feedback. The feedback environment was only assessed in regards to their experience with their supervisors but not with coworkers, an important aspect of the environment at work. There are often relationships that are built with coworkers that can make one feel as though they are a part of a team and are valued as a person at work. In contrast to this experience, however, is when one feels excluded and isolated from coworkers and is unable to build the meaningful relationships and contacts that make work seem valuable and worthwhile. Future research may want to consider individuals' perceptions of their coworkers and not just supervisors when assessing how employees feel about their feedback environments. Another research design flaw was that the measure used for measuring feedback discounting had not been previously utilized in this way before. While the questions do directly ask about feedback discounting, this process

may have been too direct and turned off individuals from answering affirmatively to the items. There may be a more subtle way that does not tip off participants to what is being measured but that still gets at the construct of discounting feedback. Another issue with this measure might be that it seems difficult for people to endorse on a high scale that they discount feedback from their supervisors because of what this could mean about not only their reaction but the negative behaviors of their supervisors as well. The mean for this measure was only a 1.93 on a 6-point scale, indicating that few engaged in feedback discounting. This may be a reflection of participants' unwillingness to endorse extreme negative behavior on the part of their supervisors. It raises the question of what it might mean to participants to endorse extreme negative behavior.

Impact of workplace climate and solo/token status. This study sought to determine the influence that workplace climate and the presence of solo/token status has on African American professionals' perceptions of feedback. As was discussed earlier there seemed to be a significant relationship between perceptions of workplace climate and feedback but no significance regarding solo/token status. The measure used to assess workplace climate focused primarily on the relationship between Black and White employees and the treatment of Black employees. While this was appropriate for the population used in this study, it restricts the scope of the climate that is being measured. There are many other comparisons and relationships that can be established in a work environment than simply those between Black and White employees; and it also assumes that the individual works in an environment that is dominated by White executives and employees, when this might not necessarily be the case. Future research may want to look at the composition of the workplace of an individual including aspects of gender and different

ethnicities. Another aspect of the solo/status variable is that this person may be the only African American individual in their work environment but that does not mean that they are the only person of color or minority in their work environment. These circumstances can have a profound effect on an individuals' perception of isolation and ostracism in the workplace. Future research may want to take these aspects into consideration when determining how to measure one's solo/token status in the workplace.

Limitations

As with all studies, this study has several limitations. Because one primary method of recruitment for this study was "snowballing" or having participants send out recruitment information to their personal contacts, this also limited the generalizability by limiting the range of people that were notified about participating in the study. Thus, although efforts were made to obtain participants from a wide variety of different career paths, there was heavy representation in many helping fields such as psychology, counseling, and teaching. This limits the generalizability of the findings. Further, this study was limited to African American professionals, and thus the experiences of many other minority groups were excluded.

The self-report nature of all the instruments is another limitation. The use of self-report measures tend to inflate correlations found among variables. Additionally, when self-report measures are used, researchers cannot know how truthfully respondents respond to questions. Social desirability may affect the way participants answer certain items. Although the instruments used exhibit appropriate levels of reliability, the Feedback Discounting Measure (Roberson et al., 2003) has been used infrequently, and items were added to the original measure for use in this study. Another limitation of this

study is that there were several missing values in the original data set. This was remedied by the use of mean replacement for missing values. This procedure is known for reducing the variance of analyses, because it acts as though the missing cases were not adding any variability to the data and just replaces them all as if they were just like every other case (Tabachnick & Fidell, 2007). This will naturally have an effect on the outcome of the results by reducing any effects that the actual responses may have had on the analysis.

A final limitation of this study is the inattention given to other important factors that might influence perceptions of feedback. One factor that was not assessed was whether employee-supervisor dyads were cross-cultural or not. There may have been instances where there were no racial differences between employee and supervisor and this was not accounted for in this study. This information along with other factors such as racial identity would have added to the depth of this study. Racial identity in particular would have been interesting to explore in regards to how those who are at different phases in the racial identity model (Helms & Parham, 1990) would perceive interactions with supervisors who are not of their race. For example, those who tend to be more in the “early” pre-encounter stage of the racial identity model would likely perceive discriminatory actions differently than do those who are in a later stage such as the immersion/emersion stage. These factors surely play an important role in the ways in which the feedback environment is perceived and also the willingness and propensity to discount feedback.

Summary and Conclusions

Based on the preceding discussion of the results, several conclusions were drawn from this study. First, it appears that the stereotype threat priming condition did not have

its intended effect on participants' responses. Although this in no way deters from the theory of stereotype threat as a relevant and useful concept, it may shed some light on different ways to activate stereotype threat and the concern of insinuating too much about the study before it even begins. Second, perceptions of workplace climate in regard to race are associated with perceptions of feedback environment and feedback discounting. This study provides empirical support for the assumption that a poor racial climate negatively influences other aspects of employment.

Prior to this study, feedback environment, feedback discounting, and workplace climate had been investigated and discussed exclusive of one another (Steelman et al., 2006; Roberson et al., 2002; Holder & Vaux, 1998). Further, few studies explicitly recruited Black professionals as participants. This study served as a mechanism to simultaneously examine these aspects of the workplace within the context of stereotype threat. Hopefully, these results will spawn an interest in the experience of minorities in the workplace because in an ever-changing society, the need for future theoretical and applied research studies on these individuals' experiences will become needed for the growth of organizations and individuals alike.

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Appendix A

Email via Listservs and Script for Recruitment

My name is Shenay Bridges and I am a doctoral candidate in counseling psychology at The Pennsylvania State University. I am currently doing research for my dissertation on how African American professionals experience workplace climate and interactions with supervisors. As an African American aspiring professional myself, I want to understand more about how some minorities are able to handle common occurrences in their professional work environments. There is little research on this topic and in an attempt to help bring this very important aspect of workplace experiences in the African American community to light, I am asking for your help. I am seeking research volunteers to participate in this study. Volunteers must be 18 years old and currently employed to participate. In particular, I am interested in getting the experiences of African American professionals born in the continental United States. Participation in this study will involve completing five brief questionnaires and will take about fifteen to twenty minutes.

If you have any questions, you may email me at snb153@psu.edu or call me at 309-438-7466. Also, if you know anyone else who may be interested in participating, please pass this information along. As an incentive, there will be a drawing for those who are interested to win a \$10 gift card to Starbucks. I will have one drawing for every twenty-five surveys that are completed.

This research has been approved by The Pennsylvania State University's Institutional Review Board for human participants. This study is being supervised by Dr. Kathleen Bieschke. She can be reached at (814) 865-3296 if you have questions or concerns. Dr. Bieschke's address is 327 CEDAR Building, University Park, PA, 16802.

If you are interested in participating, please begin at this website:
<https://www.psychdata.com/s.asp?SID=123327>

Appendix B

Implied Informed Consent Form for Social Science Research

The Pennsylvania State University

Title of Project: Interpreting Feedback in the Workplace: An Examination of Stereotype Threat and Stigmatization with African American Professionals

Principal Investigator: Shenay N. Bridges
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Advisor: Dr. Kathleen J. Bieschke
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1. **Purpose of the Study:** The purpose of this research study is to explore how African American professionals interpret feedback in the workplace. Four hundred fifty participants will be involved in this study.
2. **Procedures to be followed:** You will be asked to complete five brief questionnaires. The questionnaires may be completed online. At the completion of the data analysis stage of this research project, you will be invited to review the near-final results and offer your feedback, if you are interested in doing so. You may choose to end your participation at any time. If you wish to participate in a drawing for one of twenty \$10 Starbucks gift certificates, you will be asked to complete a form with your name, email, and phone number. Names and contact information will be stored in a separate file from the survey responses.
3. **Discomforts and Risks:** The potential for discomforts and risks is minimal. You will be asked to respond to statements about your experiences in your workplace. Though it is possible that the survey questions could touch upon areas that may find uncomfortable, this is not my intent or a goal of this study.
4. **Benefits:** The benefit to you is the experience to review some of your experiences in your place of business. You will have the opportunity to explore your thoughts and feelings related to workplace feedback and environment. For some persons, such an experience may be meaningful. The potential benefits to society are linked to how feedback and workplace environments are experienced by African

- Americans. If this research helps explain more about the process of the experience of discrimination and stereotypes in particular work environments, then organizations may be more inclined to understand the benefits of cultural competence in the workplace.
5. **Duration/Time:** The five questionnaires will take approximately 15-20 minutes to complete.
 6. **Statement of Confidentiality:** Your participation in this research is confidential. Your confidentiality will be kept to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet by any third parties. Code numbers and pseudonyms will be assigned to the data, and only the person in charge will know your identity. The data will be stored and secured at that person's home in a locked file cabinet, and no other person will have a key to that file cabinet. All computerized information will be password protected and only the person in charge of this study and the research advisor listed above will have access to this data. The research advisor will not have access to information about your identity. Those persons will only see code numbers and pseudonyms and should not be able to connect you to the information you provide. In the event of a publication or presentation resulting from the research, no personally identifiable information will be shared. The following may review and copy records related to this research: The Office of Human Research Protections in the U.S. Department of Health and Human Services, Penn State University's Social Science Institutional Review Board, and Penn State University's Office for Research Protections. Please know that researchers are bound by ethical obligations to report any information shared during the course of research that is related to illegal activity, potential threat to self or others, or that raises concern for human wellbeing. If this type of information were to be discovered during the course of this study, then the researcher is ethically bound to report it to the appropriate agencies or authorities.
 7. **Right to Ask Questions:** You can ask questions about this research. Contact Shenay Bridges at (309) 438-7466 or her research advisor, Kathleen Bieschke at (814) 865-3296 with questions or concerns. You can also call this number if you have concerns or feel you have been harmed by this research. If you have questions about your rights as a research participant, or you have concerns or general questions about the research, contact Penn State University's Office for Research Protections at (814) 865-1775. You may also call this number if you cannot reach the research team or wish to talk to someone else.
 8. **Voluntary Participation:** Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

You must be 18 years of age or older to consent to take part in this research study. If you

agree to take part in this research study, then completion and return of the questionnaires implies you have read the information in this form and you consent to participate in this research.

Please print this form to keep for your records.

Appendix C

Priming paragraph for stereotype threat condition.

There are widely known stereotypes about African Americans in the United States. Some of these stereotypes include having lower levels of intelligence, being lazy, and being confrontational or aggressive in nature. These negative stigmas have the potential to negatively affect the work performance of otherwise competent individuals when these stigmas are thought to permeate their interactions with others in the workplace. As African American professionals we may be particularly affected by these stigmas because often we have worked hard to overcome negative stereotypes throughout our lives and so we may likely feel minimized when we perceive that we are being treated less fairly and held up to a different standard than our Caucasian counterparts.

Appendix D

Please provide the following demographic information. This information is an important part of this study. These data will be used only to describe participants in this study as a whole.

1. Age: _____
2. Gender: (Please check one)
 - _____ female
 - _____ male
 - _____ transgender
 - _____ other (Please specify _____)
3. Race: (Please check all that apply)
 - _____ African American/Black, non Latina/o
 - _____ Native American
 - _____ Asian American
 - _____ Hispanic/Latino/Latina
 - _____ European American/White, non Latina/o
 - _____ Other (Please specify _____)
4. Highest degree earned: (Please check one)
 - _____ High School/ GED
 - _____ Some college
 - _____ Associate's degree
 - _____ Bachelor's degree
 - _____ Master's degree
 - _____ Post Master's education
 - _____ Other (Please specify _____)
5. Occupation: (Please fill in the blank)

6. Please indicate if your position is professional (i.e. salaried, no manual labor)
 - _____ Yes _____ No
7. Country of origin: _____ United States
 _____ Other (Please specify _____)
8. Amount of years in current occupation: _____
9. Please indicate if you are the only African American employee in your department.

_____ Yes _____ No

10. Current Socioeconomic Status (Please identify where you believe you currently fit in this category)

- _____ Highest Class
- _____ Upper Middle Class
- _____ Middle Class
- _____ Lower Middle Class
- _____ Lower Class

11. Family Socioeconomic Status (Please identify where you believe your family background fits in this category)

- _____ Highest Class
- _____ Upper Middle Class
- _____ Middle Class
- _____ Lower Middle Class
- _____ Lower Class

12. Please address the extent to which your supervisor's non-verbal behavior influences the degree to which you see their feedback as legitimate?

13. What conditions must be present in order for you to take feedback seriously?

Appendix E

Using the scale below answer the following questions about your work setting.

(Please refer to the scale below and circle one number for each item) * - Reverse coded

- | | |
|---|------------------------|
| 1 | Strongly Disagree (SD) |
| 2 | Disagree (D) |
| 3 | Uncertain (U) |
| 4 | Agree (A) |
| 5 | Strongly Agree (SA) |

In my job setting....	SD	D	U	A	SA
1. Blacks are discriminated against through hiring practices.....	1	2	3	4	5
2. *Blacks get the promotions they deserve.....	1	2	3	4	5
3. *There are enough Blacks in powerful positions..	1	2	3	4	5
4. *It's easier for Black women to get ahead than Black men.....	1	2	3	4	5
5. *I get respect and support from my supervisor...	1	2	3	4	5
6. Race determines who gets the most desirable work or assignment to do.....	1	2	3	4	5
7. The racism here has caused me to consider quitting or transferring.....	1	2	3	4	5
8. *I am given the respect I deserve from Whites...	1	2	3	4	5
9. Institutional racism is more of a problem here now than in the past.....	1	2	3	4	5
10. Whites have the same advantages here as they have always had.....	1	2	3	4	5
11. *The leaders of this agency are trying to end institutional racism.....	1	2	3	4	5
12. *There are Black people in positions of power here.....	1	2	3	4	5
13. In general institutional racism is a problem here...	1	2	3	4	5
14. *There is very sensitive understanding and acceptance of differences among ethnic or racial groups.....	1	2	3	4	5
15. *Extensive changes have been made to make services (resources) available to Black persons...	1	2	3	4	5
16. Few attempts have been made to alter services or organizational functioning to accommodate the cultural perspectives of Black professionals...	1	2	3	4	5
17. Black professional have little to say about decisions which affect the functioning in this work setting.....	1	2	3	4	5
18. *This organization goes out of its way to make Blacks feel at home.....	1	2	3	4	5
19. *An important function of management in this organization is to promote cooperation between Blacks and other groups.....	1	2	3	4	5
20. *Black and White employees generally have good working relationships here.....	1	2	3	4	5

Appendix F

Feedback Discounting: Please read the following questions and rate on a scale from 1 (not at all) to 6 (completely) the extent to which you agree with the following statements.

1. I believe that my supervisor's evaluations of my performance are influenced by his/her prejudice.

1 2 3 4 5 6

2. I believe that my supervisor's evaluations of my performance are influenced by his/her racism.

1 2 3 4 5 6

3. I believe that my supervisor's evaluations of my performance are influenced by his/her discrimination.

1 2 3 4 5 6

4. I believe that my supervisor's evaluations of your performance are influenced by my race.

1 2 3 4 5 6

5. I disregard my supervisor's feedback because I believe that he/she is prejudiced.

1 2 3 4 5 6

6. I believe that my supervisor's unconscious racism influences the way that he/she evaluates my performance.

1 2 3 4 5 6

7. I believe that my supervisor's desire to appear non-racist influences the way that he/she evaluates my performance.

1 2 3 4 5 6

8. I find it difficult to take my supervisor's evaluation of my performance seriously because he/she has stereotypical views of my race.

1 2 3 4 5 6

Appendix G

Dimension Supervisor source: Using the scale below rate your agreement to the following statements about your feedback environment.

(Please circle one number for each item)

*- Reverse coded

Rate from: 1- Strongly Disagree to 7- Strongly Agree

Source Credibility

1. My supervisor is generally familiar with my performance on the job.
1 2 3 4 5 6 7
2. In general, I respect my supervisor's opinions about my job performance.
1 2 3 4 5 6 7
3. *With respect to job performance feedback, I usually do not trust my supervisor.
1 2 3 4 5 6 7
4. My supervisor is fair when evaluating my job performance.
1 2 3 4 5 6 7
5. I have confidence in the feedback my supervisor gives me.
1 2 3 4 5 6 7

Feedback Quality

1. My supervisor gives me useful feedback about my job performance.
1 2 3 4 5 6 7
2. The performance feedback I receive from my supervisor is helpful.
1 2 3 4 5 6 7
3. I value the feedback I receive from my supervisor.
1 2 3 4 5 6 7
4. The feedback I receive from my supervisor helps me do my job.
1 2 3 4 5 6 7
5. *The performance information I receive from my supervisor is generally not very meaningful.
1 2 3 4 5 6 7

Feedback Delivery

1. My supervisor is supportive when giving me feedback about my job performance.
1 2 3 4 5 6 7
2. When my supervisor gives me performance feedback, he or she is considerate of my feelings.
1 2 3 4 5 6 7
3. *My supervisor generally provides feedback in a thoughtless manner.
1 2 3 4 5 6 7
4. *My supervisor does not treat people very well when providing performance feedback.
1 2 3 4 5 6 7
5. My supervisor is tactful when giving me performance feedback.
1 2 3 4 5 6 7

Favorable Feedback

1. When I do a good job at work my supervisor praises my performance.
1 2 3 4 5 6 7
2. *I seldom receive praise from my supervisor.
1 2 3 4 5 6 7
3. My supervisor generally lets me know when I do a good job at work.
1 2 3 4 5 6 7
4. I frequently receive positive feedback from my supervisor.
1 2 3 4 5 6 7

Unfavorable Feedback

1. When I don't meet deadlines, my supervisor lets me know.

1 2 3 4 5 6 7

2. My supervisor tells me when my work performance does not meet organizational standards.

1 2 3 4 5 6 7

3. On those occasions when my job performance falls below what is expected, my supervisor lets me know.

1 2 3 4 5 6 7

4. On those occasions when I make a mistake at work, my supervisor tells me.

1 2 3 4 5 6 7

Feedback Availability

1. My supervisor is usually available when I want performance information.

1 2 3 4 5 6 7

2. *My supervisor is too busy to give me feedback.

1 2 3 4 5 6 7

3. *I have little contact with my supervisor.

1 2 3 4 5 6 7

4. I interact with my supervisor on a daily basis.

1 2 3 4 5 6 7

5. *The only time I receive performance feedback from my supervisor is during my performance review.

1 2 3 4 5 6 7

Promotes Feedback Seeking

1. *My supervisor is often annoyed when I directly ask for performance feedback.

1 2 3 4 5 6 7

2. *When I ask for performance feedback, my supervisor generally does not give me the information right away.

1 2 3 4 5 6 7

3. I feel comfortable asking my supervisor for feedback about my work performance.

1 2 3 4 5 6 7

4. My supervisor encourages me to ask for feedback whenever I am uncertain about my job performance.

1 2 3 4 5 6 7

VITA
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EDUCATION

<i>The Pennsylvania State University, University Park, PA</i>	
Ph.D. Candidate in Counseling Psychology	Dec 2008
<i>Hampton University, Hampton, VA</i>	
M.A. in Community-Agency Counseling	May 2004
<i>University of Illinois @ Urbana-Champaign, Urbana, IL</i>	
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RESEARCH PRESENTATIONS

Bridges, S.N. & Kharem, K. (2005). Impediments to academic success. Invited talk at the Robert D. Lynch Student Leadership Development Institute Conference.

Bridges, S. N. (2005). Career choices of African Americans: Do their behaviors match? Invited workshop at the Pennsylvania State University, African Interdisciplinary Spring Series.

Rashad, F., Fernandez-Vilar, M. A., & *Bridges, S. N. (2005).* Effortful control and the Hispanic child: A link between temperament and personality. Poster presentation at the Society for Research in Child Development, Atlanta, GA.

Bridges, S.N. (2001). The Role of Entitativity in the Judgment of Ethnic Groups. Talk given at the Ronald E. McNair Conference at The Pennsylvania State University.

COUNSELING EMPLOYMENT

<i>Clinical Counselor</i>	Aug 2008 – present
Student Counseling Services, Illinois State University	
<i>Pre-doctoral Psychology Intern</i>	Aug 2007 – July 2008
Student Counseling Services, Illinois State University	

DISSERTATION GRANTS

ARC Dissertation Research Grant – Africana Research Center, The Pennsylvania State University, 2008

HONORS AND AWARDS

Member, Kappa Delta Pi- International Honor Society in Education, committed to recognizing excellence and fostering mutual cooperation, support, and professional growth for educational professionals.

Bunton-Waller Fellow- In honor of the first African American male and female graduates, this program seeks to enhance the diversity at the Pennsylvania State University with students who exhibit high scholastic abilities.

PROFFESIONAL AFFILIATIONS

American Psychological Association