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MASTERING ONE'S DESTINY: MASTERY GOALS PROMOTE FEELING CHALLENGED IN IDENTITY THREATENING ACHIEVEMENT CONTEXTS

A Dissertation Presented

By

JANE G. STOUT

Submitted to the Graduate School of the

University of Massachusetts Amherst in partial fulfillment

Of the requirements for the degree of

DOCTOR OF PHILOSOPHY

September 2011

Department of Psychology

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A Dissertation Presented

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JANE G. STOUT

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ABSTRACT

MASTERING ONE'S DESTINY: MASTERY GOALS PROMOTE FEELING CHALLENGED IN IDENTITY THREATENING ACHIEVEMENT CONTEXTS

SEPTEMBER 2011

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Three experiments integrated insights from achievement goal theory, social identity threat, and stress and coping research, to develop a theory-based strategy individuals can use to navigate social identity threat in high stakes achievement settings. In all experiments women were asked to adopt a mastery goal (focus on learning and building skills) or a performance goal (perform well; avoid errors) before a mock job interview. In Experiment 1, women expected their interviewer to be either sexist (creating identity threatening situation) or not sexist (a non-threatening situation). Women who focused on mastery rather than performance goals felt more challenged and less threatened while anticipating a job interview in an identity threatening situation; goals did not affect their appraisals of a non-threatening interview. Moreover, women who focused on mastery rather than performance intended to be more assertive (Experiment 2) and ultimately performed better in the interview (Experiment 3). Mediational analyses showed that a focus on mastery led women to appraise the identity threatening situation as a challenge they could overcome rather than a threat they were helpless to combat; challenge, in turn, enhanced performance.

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CHAPTER 1

INTRODUCTION

> Turn your wounds into wisdom. You will be wounded many times in your life. You'll make mistakes. Some people will call them failures but I have learned that failure is really God's way of saying, "Excuse me, you're moving in the wrong direction." It's just an experience, just an experience. –Winfrey (1997)

Oprah Winfrey's statement succinctly captures how adversity and obstacles may be interpreted in very different ways: as a personal failure, a wrong decision, or a learning experience. The same objective reality can look very different depending on how people appraise or make meaning of the situation. These appraisals then affect how people decide to act, which in turn have important downstream consequences, both short-term and long-term. Consider situations in which professionals face work-related difficulty, students struggle with classes important to their major, or musicians stumble over new repertoires. The way in which individuals handle these difficulties is shaped by their mindset as they approach the situation (i.e., their goal orientation). Having a goal of being successful or having a goal of avoiding failure are likely to be demoralizing if the goals are blocked by unexpected obstacles or one's mediocre performance. However, having a goal to learn and grow in a difficult situation casts the same obstacles in a new light; now poor performance and adversity become opportunities to acquire new skills. In this case, regardless of performance, individuals can remain engaged and confident in the fact that, whatever difficulty they are faced with, they can invariably learn something from it.

One type of adversity that many individuals face in professional and achievement contexts is social identity threat. This is the phenomenon where individuals become aware that their social group does not fit easily into a particular professional or academic

environment because others doubt their group's ability to succeed (see Steele, Spencer & Aronson, 2002). Typically, social identity threat arises in situations that activate a negative stereotype about an individual's group. For example, African American and Latino students experience it in high-level academic settings that raise the specter of their group's lagging achievement and activate concerns that they might inadvertently confirm that expectancy (Gonzales, Blanton, & Williams, 2002; Steele & Aronson, 1995; Walton & Cohen, 2007; 2011). Women experience such threat in advanced math and science classes (Cheryan, Plaut, Davies, & Steele, 2009; Logel, Walton, Spencer, Iserman, von Hippel & Bell, 2009; Spencer, Steele & Quinn, 1999; Steele, James, & Barnett, 2002) and in professions where women are typically solos or tokens (e.g., business, the military, the police force: Kanter, 1977; Ott, 1989; Yoder, Adams, Grove & Priest, 1985; Turco, 2010). Men experience it in situations involving verbal achievement (Keller, 2007) and social sensitivity (Koenig & Eagly, 2005), two domains in which men are stereotyped to perform poorly relative to women. Social identity threat makes individuals question their ability and feel alienated, and if these feelings persist, they are likely to want to leave or at least disengage psychologically if they can't exit.

Social identity threat occurs mostly in high performance contexts where individuals' primary goal is to demonstrate their ability and avoid mistakes. Paradoxically, this performance orientation may be part of the reason why they feel demotivated and alienated when social identity threat undermines performance and obstructs their goal. I propose that if individuals approach high performance contexts with a different goal in mind—*the goal to learn and master new skills*—they may be better equipped to handle situationally activated identity threat. A focus on learning and

growing may lead individuals to appraise an identity threatening situation as a positive challenge they can overcome rather than as a threat they are helpless to combat; feeling challenged may, in turn, enhance performance.

The overarching goal of this research is to empirically test whether changing individuals' goal orientation or mindset as they approach identity threatening situations can change their experience and performance. I predict that focusing attention on learning and growth in the face of adversity will enhance motivation, confidence, and challenge appraisals among members of negatively stereotyped groups, allowing them to perform better than if they had focused on performing well in the first place. My predictions are derived from integrating achievement goal theories with research on social identity threat to develop a theoretically informed strategy to convert adversity into challenge and, in turn, enhance positive behavioral intentions and performance.

Achievement Goals

A large body of research indicates that when individuals are in achievement-oriented contexts such as classes or professional settings, their goals or mindset influence their thoughts, feelings, and actions (see Elliot, 2005; Hulleman, Schrager, Bodmann & Harackiewicz, 2011). People tend to enter achievement contexts with a goal of *demonstrating* competence and focusing on being evaluated (a *performance goal*) or with a goal of *developing* competence and learning new skills (a *mastery goal*[1]; Dweck, 1986; Elliot & Dweck, 1983).

[1] Several terms have been used in the past to describe these two types of goals such as learning versus performance goals (Dweck, 1986) and task versus ego involvement (Nicholls, 1984). I use the terms *mastery* versus *performance* goals to describe these goals because these terms are most commonly used in the contemporary research on achievement goals (Hulleman et al., 2011; Poortvliet & Darnon, 2010).

Mastery goals have substantial benefits compared to performance goals that have been observed across various psychological and behavioral domains. For example, compared to performance goals, mastery goals predict more positive emotions, intrinsic motivation, better performance, more cooperation with others, adaptive conflict resolution styles, better rapport between employees and supervisors, and less tendency to cheat or be disruptive in school among children (Agbuga, Xiang & McBride, 2010; Anderman, Griesinger Westerfield, 1998; Darnon, Muller, Schrager, Pannuzzo, & Butera, 2006; Elliott & Dweck, 1988; Grant & Dweck, 2003; Janssen & Van Yperen, 2004; Pekrun, Elliot, & Maier, 2009; Poortvliet, Janssen, Van Yperen & Van de Fliert, 2007). These benefits have been observed in numerous contexts including academic classrooms (Elliot & McGregor, 1999; Grant & Dweck, 2003; Witkow & Fuligni, 2007), in the workplace (e.g., Janssen & Van Yperen, 2004; Van Yperen & Jannsen, 2002) and in athletic and physical education settings (Adie, Dude & Ntoumanis, 2010; Kouli & Papaioannou, 2009; Papaioannou, Ampatzoglou, Kalogiannis, & Sagovits, 2007). Finally, mastery goals are known to benefit people of all ages including children (Agbuga, Xiang & McBride, 2010; Elliott & Dweck, 1988), adolescents (Ames & Archer, 1988; Anderman, Griesinger, & Westerfield, 1998; Witkow & Fuglini, 2007), college students (Cianci, Schaubroeck & McGill, 2010; Grant & Dweck, 2003; Jagacinski & Nicholls, 1987), adults in the workplace (Janssen & Van Yperen, 2004; Van Yperen & Jannsen, 2002), and individuals of various racial and ethnic backgrounds (e.g., Kouli & Papaionnou, 2009; Witkow & Fuligni, 2007).

Of particular relevance to the current research is the fact that achievement goals have differential effects on how people react to performance failure or poor evaluations.

Mastery goals tend to make individuals feel less discouraged and perform better after a setback than performance goals, especially if they have fragile confidence in their ability in the first place (Ames & Archer, 1988; Cianci, Mchaubroeck, & Mcgill 2010; Elliott & Dweck, 1988; Grant & Dweck, 2003; Jagacinski & Nicholls, 1987). For example, college students who receive negative feedback on a class assignment continue to feel motivated, plan for future assignments, and show improved performance over time when they focus on a mastery goal, but feel bad about themselves and expend less effort in the course when they focus on a performance goal (Grant & Dweck, 2003). Because poor performance signals an inability to *demonstrate* competence, but does not impair one's ability to *develop* competence, low performance evaluation hinders performance goals, but does not hinder mastery goals. Although extant research has shown that mastery goals (compared to performance goals) promote sustained motivation and performance after failure, research has not yet articulated *why* this might be the case. What is the underlying process?

Mastery Goals Change Stress Appraisals

I predict that a focus on mastery changes the subjective construal of adversity; it allows individuals to view adversity in a positive light as a challenge, thereby facilitating subsequent performance. This prediction is informed by stress and coping research which shows that the same adverse situation may be appraised as a *threat* or a *challenge*, which have very different implications for subsequent coping behavior. Threat appraisals are associated with anxiety often resulting in avoidance behaviors whereas challenge appraisals are associated with confidence often resulting in approach behaviors (Folkman, 1984; Folkman, & Lazarus, 1985; Lazarus, 1966; 2007; Tomaka, Blascovich,

Kelsey & Leitten, 1993). In the current research I predict that mastery goals will lead individuals to appraise adverse situations as a challenge rather than a threat, which in turn will motivate approach-oriented behavioral intentions and better performance. In contrast, performance goals will lead individuals to appraise such situations as a threat rather than a challenge, leading to avoidance-oriented behavioral intentions and impaired performance.

Most of the achievement goal research has focused on one type of adversity in achievement-oriented environments: receiving negative performance evaluations. Of course people face adversity in other ways as well while they are trying to achieve, such as experiencing subtle forms of discrimination due to one's social identity. In the current work, I focus on social identity threat in achievement contexts as a type of adversity and examine whether mastery goals allow individuals to feel challenged rather than threatened when confronted with others' subtle bias against one's group. Further, I investigate whether feeling challenged allows individuals to subsequently thrive and succeed in such situations.

The Aversive Nature of Social Identity Threat

Individuals who belong to societally devalued groups are especially attentive to cues in achievement settings that signal whether or not their ingroup belongs there (Walton & Cohen, 2007). These cues may be transmitted explicitly, through overt discrimination (Logel et al., 2009; Steele, James, & Barnett, 2002), or implicitly through the virtual absence of ingroup members (Murphy, Steele & Gross, 2007) or the use gendered language that excludes one's group (Gaucher, Friesen, & Kay, 2011; Stout & Dasgupta, 2011). Once people pick up on identity threat in an achievement setting, they

are likely to feel a deflated sense of belonging (Cheryan et al, 2009; Murphy, Steele & Gross, 2007), less positive attitudes and domain identification (Steele & Ambady, 2006; Stout, Dasgupta, Hunsinger & McManus, 2011), less self-efficacy (Davies, Spencer, Quinn & Gerhardstein, 2002; Walton & Cohen, 2007), perform poorly (Kray, Thompson & Galinsky, 2001, Experiment 1; Logel et al, 2009; Spencer, Steele & Quinn, 1999), and avoid or drop out of those settings (Kiefer & Sekaquaptewa, 2007; Steele, James, & Barnett, 2002). Thus, social identity threat can create a formidable barrier to success. This raises the question--are there any effective evidence-based strategies to alleviate these adverse effects? A few programs of research have addressed this question in a variety of ways.

Some research shows that individuals' confidence and performance in identity threatening contexts is enhanced if they focus on their ingroup's strengths rather than weaknesses (Derks, Scheepers, Van Laar & Ellemers, 2011; Derks, Van Laar & Ellemers, 2007, 2009); view the ingroup's talent as improving with experience (Aronson, Fried & Good, 2002; Good, Aronson & Inzlicht, 2003; Kray, Locke & Haselhuhn, 2010); view the ingroup's status as mutable (Scheepers, 2008); recognize that the ingroup shares common characteristics with a higher status outgroup (Rosenthal & Crisp, 2006; Walton & Cohen, 2011); or come in contact with successful ingroup members in identity threatening contexts (Marx & Roman, 2002; McIntyre et al, 2003; Stout, Dasgupta, McManus & Hunsinger, 2011). Collectively, these strategies attenuate social identity threat by reframing the way individuals construe their ingroup.

Other work suggests that social identity threat may also be alleviated by reframing the way individuals construe the self—for example, by affirming self-relevant values

unrelated to the achievement domain (Cohen et al, 2006, 2009; Martens et al, 2006; Miyake et al, 2010), by disidentifying with ingroup characteristics that signal negative stereotypes (Pronin, Steele & Ross, 2003; Kray, Thompson & Galinsky , 2001, Experiment 3), or by emphasizing a non-stigmatized social identity while, at the same time, de-emphasizing a stigmatized social identity (Shih, Pittinsky & Ambady, 1999). Together, the above-mentioned strategies offer ways to buffer social identity threat by changing individuals' construals of their group or their self-concept.

The goal of this dissertation is to complement the above described existing research in two ways. First, whereas most existing strategies involve reconfiguring one's construal of the ingroup or the self, the current work sought to leave these intact and instead change people's *mindset* or *goal orientations* as they approached social contexts that activate identity threat. Second, I sought to determine whether altering individuals' goals can convert adversity into opportunity so that threat is reappraised as a challenge.

The Current Research

My work integrates three theoretical literatures in social psychology—achievement goals, social identity threat, and stress and coping—to develop a strategy that allows individuals to feel challenged and succeed in achievement settings that are typically identity threatening. An important lesson from achievement goal research is that adopting a specific mindset of learning and growing (mastery goals) tends to be more beneficial than adopting a mindset of performing well or avoiding mistakes (performance goals). Applying this insight to social identity threat, I propose that if members of marginalized groups pursue identity threatening situations with a focus on learning new skills and mastering obstacles rather than performing well or avoiding failure, they are

likely to (a) appraise the situation as a challenge rather than a threat; (b) feel more motivated to approach and be assertive in the threatening situation and (c) be more successful in performance.

Three experiments tested these hypotheses. Across all experiments female college students participated in a mock job interview – a professional situation that is highly relevant to college students as they prepare for the job market after college. They were told to enter the job interview with either a mastery goal or a performance goal in mind. The interview was made identity threatening when women discovered that the interviewer consistently used gender-exclusive language as he spoke to them, which tacitly ignored women by referring to all people as "he" and "him". Conversely, the interview was non-threatening when the interviewer consistently used gender-neutral language (e.g. "one"; "them") as he spoke to women.

I tested participants' stress appraisals (how challenged versus threatened they felt) in the job interview context (Experiments 1-3), their behavioral intentions to be assertive (Experiment 2), and actual behavior, both verbal and nonverbal (Experiment 3). I then examined whether behavioral intentions and actual behaviors in the job interview were mediated by increased challenge or decreased threat (Experiments 2-3). Importantly, I also disaggregated two different types of performance goals--striving for success (performance-approach goal) versus avoiding failure (performance-avoid avoid)—and compared each type of performance goal with a mastery goal to determine whether they have differential effects on women's stress appraisals and actions in the achievement context. In all three experiments, I predicted that compared to both performance goals, women who adopted a mastery goal would feel more challenged and less threatened.

Greater challenge, in turn, would elicit more assertive behavioral intentions and better performance.

CHAPTER 2

EXPERIMENT 1

Method

Participants

One hundred seventy five undergraduate women participated in exchange for extra course credit. Of them, 76% identified as Caucasian, 7% as Asian or Pacific Islander, 6% as African American, 5% as Hispanic/Latina, 3% as belonging to multiple ethnic groups, 1% as Native American, and 2% as some other ethnic group. The median age of participants was 20.

Manipulations and Measures

Achievement Goal Manipulation. At the beginning of the experiment, participants were given either a mastery goal or a performance goal to keep in mind during an upcoming mock job interview. Mastery goal instructions were as follows:

> During the interview, try to focus on how this experience will help you build your interviewing skills. Throughout this experience, think about what you can learn instead of how well you're doing. Being the best interviewee is not important right now -- what is important is that you use this experience to figure out what skills you still need to learn. If you focus on learning throughout this interview, it will be helpful later on when you apply for jobs.

Performance goal instructions were as follows:

> During the interview, try to focus on performing as well as you can as a job applicant. Being the best interviewee is important right now. Try to do as well as you can and also try not to make mistakes during this job interview. If you focus

on performing well, demonstrating your ability, and avoiding mistakes during this interview, it will be helpful later on when you apply for jobs.

Social Identity Threat Manipulation. Social identity threat was manipulated during a "pre-interview" meeting with the interviewer where he offered a brief overview of the type of job for which participants were interviewing. In the identity threatening condition, the interviewer always used gender-exclusive language (e.g., he, him, guys) in describing the job. For example, the interviewer said "…we usually know a good employee when we see *him*"; "We expect our *guys* to help us become a leading player in our field" and "When we come across an outstanding person, we feel that rewarding *him* will boost our overall productivity." In contrast, in the non-threatening situation the interviewer always used gender-neutral language; for example "…we usually known a good employee when we see *one*"; "We expect our *employees* to help us become a leading player in our field" and "When we come across an outstanding person, we feel that rewarding *them* will boost our overall productivity." My prior research indicates that women perceive gender-exclusive language to be sexist and identity threatening compared to gender-neutral language (Stout & Dasgupta, 2011). The specifics of the job were left vague so that participants' own career interests could easily fit into the hypothetical job description. The job overview described an entry-level position that encouraged creativity and individual expression in a fast-paced and competitive work environment; the organization also distributed employees' workload fairly and utilized a reward system for superior work performance. See Appendix A for both versions of the job description.

Threat and Challenge Measures. Perceived threat in anticipation of the job interview was assessed by asking participants to rate the extent to which they felt "anxious" and "worried" as they thought about the upcoming interview using a scale ranging from (1) *Not at all* to (7) *Very much* (α = .85). Challenge in anticipation of the job interview was assessed by asking participants to rate the extent to which they felt "confident" and "determined", using a scale ranging from (1) *Not at all* to (7) *Very much* (α = .86). Appraisal theory has argued that emotions play a diagnostic role in determining how people appraise stressors (Folkman, 1984; Folkman, & Lazarus, 1985; Lazarus, 1991; 2007). Thus, emotion-related items have often been used to assess threat and challenge (see Chalabeav, Major, Cury & Sarrazin, 2009; Derks, Van Laar & Ellemers, 2009; Folkman & Lazarus, 1985; Koriat, Melkman, Averill & Lazarus, 1972; McGregor & Elliot, 2002). As such, I measured participants' emotions as they anticipated the upcoming interview to capture perceptions of threat and challenge.

Manipulation Check. Three items assessed the extent to which the interviewer was perceived as sexist in the social identity threat condition compared to the non-threat condition: "Was the way in which the interviewer described the work environment sexist?", (1) N*ot at all sexist* to (7) *Very sexist*; "Was the way in which the interviewer described the work environment gender-neutral, or did it favor one gender over the other?", (1) *Favored women,* (4) *Neutral,* (7) *Favored men*; and "Based on the way in which the representative described the work environment, how macho would you estimate the work environment at this organization to be?", (1) *Not at all macho* to (7) *Very macho* (α = .82). The aggregate of these items served as a manipulation check to

assess whether women perceived gender-exclusive language to be more sexist and identity threatening than gender-neutral language.

Procedure

Upon arrival, participants met a female experimenter who informed them that the study was in collaboration with a career development program at the university. The mission of this alleged program was to prepare students to enter the workforce by offering practice job interviews. The current study was purportedly designed to assess which, among a variety of interviewing formats, was most helpful to prepare students for the job market. Participants were then given either a mastery goal or a performance goal to keep in mind during the job interview. Next, they were taken to a separate room for a "pre-interview" where they met individually with a male interviewer who gave them an overview of the job for which they would interview. The interviewer was played by two male confederates who were dressed in business casual attire and trained to maintain a friendly yet professional demeanor throughout the interview.[2] The confederate interviewer recited a scripted job overview verbatim in a way that sounded natural (his script was the social identity threat manipulation). If participants requested details about the job, interviewers were trained to deflect questions by saying "You will have a chance to ask questions in the next portion of the interview."

The interviewer then told participants that they would complete a questionnaire relevant to the interviewing process before the actual interview. He then escorted participants to a separate room to complete a computerized questionnaire that included

[2] My previous work indicates that individuals believe that men are more likely to use gender-exclusive language than women (see Stout &Dasgupta, 2011). For this reason, I opted to use men in the interviewer role throughout the current work and not to introduce interviewer gender as a third independent variable.

the dependent variables: perceived threat and challenge (counterbalanced), followed by the perceived sexism manipulation check. Once they were done, participants were informed that there would be no interview; they were debriefed, probed for suspicion, and thanked for participating.

Results and Discussion

Manipulation Check: Perceptions of Sexism

An Achievement Goal (Mastery versus Performance) x Social Identity Threat (Threat versus No Threat) between subjects ANOVA indicated that women found the interviewer to be more sexist in the identity threatening condition (M = 5.94, SD = .79) than the non-threating condition (M = 3.39, SD = .86), F (1, 171) = 408.65, $p < .001$, η_p^2 = .71. Neither achievement goals alone nor the interaction of achievement goals by social identity threat affected women's perceptions of sexism ($Fs < 1$).

Threat

I next assessed the degree of threat women experienced as they anticipated the interview with an interviewer who created social identity threat by the way he spoke, and, more importantly, if their feelings of threat depended on the type of achievement goal they had in mind. An Achievement Goal x Social Identity Threat interaction, $F(1,171)$ = 4.20, $p < .05$, η_p^2 = .02, indicated that in the identity threatening condition women felt less threatened if they had a mastery goal in mind (M = 3.02, SD = 1.62) rather than a performance goal (M = 3.78, SD = 1.62) , $t(78)$ = -2.07, $p < .05$, d = .49 However, in the no identity threat condition, women felt similarly regardless of mastery versus performance goals (M = 3.55, SD = 1.77 and M = 3.28, SD = 1.54, respectively), $t(93)$ =

.80, $p = .53$, $d = .17$ (see Figure 1). Main effects of achievement goals and social identity threat were not significant ($Fs < 1$).

Challenge

Similarly, achievement goals changed the degree to which women felt challenged as they anticipated a job interview with an interviewer who created an identity threatening situation, as indicated by an Achievement Goal x Social Identity Threat interaction, $F(1,171) = 5.44$, $p < .05$, $\eta_p^2 = .02$. Women felt more challenged prior to their interview if they were focused on a mastery goal ($M = 5.01$, $SD = 1.30$) than a performance goal ($M = 4.39$, $SD = 1.48$) in the identity threat condition, $t(78) = 2.00$, $p < .05$, $d = .45$. But, women felt equally challenged regardless of their achievement goal in the no identity threat condition ($M = 4.80$, $SD = 1.61$ in learning goal condition; $M = 5.19$, $SD = 1.31$ in performance goal condition), $t(93) = -1.29$, $p = .20$, $d = .27$ (see Figure 2). Again, main effects of achievement goals and social identity threat were not significant ($ps > .15$).

In sum, Experiment 1 showed that achievement goals altered women's appraisals of an upcoming job interview with an interviewer who created an identity threatening environment. They felt significantly less threatened and more challenged when they pursued the job interview with a mastery goal rather than a performance goal. However, as expected, achievement goals did not alter their appraisals of a non-identity threatening interview. These findings provide initial evidence that a mastery goal is more beneficial than a performance goal for women approaching professional situations that raise the specter of identity threat.

CHAPTER 3

EXPERIMENT 2

Are all types of performance goals equally detrimental under identity threat? This question is important because past research shows that not all performance goals are the same. One type of performance goal emphasizes the importance of demonstrating one's competence and has an approach orientation (performance-approach goal) whereas another type emphasizes the importance of preventing failure and has an avoidance orientation (performance-avoid goal; see Elliot, 1999; Elliot & Church, 1997). Past research suggests that these two types of performance goals have different effects on how individuals think, feel and perform in achievement settings. Performance-avoidance goals tend to be more detrimental than mastery goals as well as performance-approach goals. Specifically, performance-avoidance goals predict higher anxiety, lower intrinsic motivation and greater self-doubt compared to the other two goal types (Dickhauser, Buch & Dickhauser, 2011; Elliot & Harackiewicz, 1996; Elliot, McGregor & Gable, 1999; McGregor & Elliot, 2002; Pekrun, Elliot, & Maier, 2009). Performance-approach goals, although somewhat better, also produce worse outcomes than mastery goals, such as a fear of failure (Elliot, 1997; Elliot & McGregor, 1999), deflated motivation, lower self-worth and impaired performance after negative feedback (Grant & Dweck, 2003), cheating (Anderman, Griesinger, & Westerfield, 1998) and non-collaborative professional behavior (Poortvliet, Janssen, Van Yperen & Van de Vliert, 2007). In sum, both types of performance goals tend to be less beneficial than mastery goals, but among the former, performance-approach goals are better than performance-avoid goals.

The first purpose of Experiment 2 was to compare the impact of all three types of achievement goals on women's stress appraisals as well as their behavioral intentions in an identity threatening job interview. I predicted that a mastery goal would lead women to feel the least threatened and most challenged; a performance avoidance goal would lead to the most threat and least challenge; and a performance approach goal would fall in between. Second, I assessed women's intentions to confront the identity threatening situation rather than shy away from it by assessing the degree to which they intended to be assertive during their interview. Third, I investigated whether appraisals of challenge or threat would mediate the impact of mastery goals on women's behavioral intentions in the job interview.[3] Based on previous research showing that challenge is associated with activating emotions, physiological responses, and the motivation to overcome obstacles whereas threat is associated with inhibiting emotions, physiological responses, and the motivation to avoid harm (Folkman, 1984; Lazarus, 1966, 2007; Tomaka, Blascovich, Kelsey & Leitten, 1993), I predicted that increased challenge, but not decreased threat, would significantly mediate and strengthen women's intentions to be assertive in an identity threatening context.

Method

Participants

One hundred twenty eight undergraduate women participated in exchange for extra course credit. Two women's data were not collected due to computer malfunction,

[3] Although feeling threatened and feeling challenged were correlated in across all three experiments (Experiment 1: $r = -.50$, $p < 001$; Experiment 1: $r = -.51$, $p < .001$; Experiment 3: $r = -.71$, $p < .001$), there was also a large amount of unexplained variance, suggesting that they are related but distinct phenomena.

leaving an $N = 126$. Within the sample, 85% identified as Caucasian, 6% as African American, 6% as Asian or Pacific Islander, 2% as multiracial, and 1% as Hispanic/Latina. The median age of participants was 20.

Manipulations and Measures

Achievement Goal Manipulations. Participants were randomly assigned to one of four achievement goals conditions: mastery goal (identical to the previous experiment), performance-approach goal, performance-avoid goal, or no goal (control condition). Instructions for the performance-approach goal condition were as follows:

> During the interview, try to focus on performing as well as you can. Being the best interviewee is important right now. If you focus on demonstrating your ability and performing well during this interview it will be helpful later on when you apply for jobs.

Instructions for the performance-avoid goal condition were as follows:

> During the interview, try to avoid making mistakes. It is also important that you downplay any weaknesses you have. If you focus on avoiding mistakes and not showing your weak points during this interview, it will be helpful later on when you apply for jobs.

Mastery goal instructions in Experiment 2 were identical to those used in Experiment 1. Participants in the No Goal condition did not receive goal instructions before meeting the job interviewer.

Social Identity Threat. All participants underwent a pre-interview meeting with a male interviewer whose gender-exclusive language created social identity threat; this was held constant for all participants and not manipulated in Experiment 2 because the

previous experiment had already shown that women's reactions in the non-identity threat condition did not vary by goal type.

Threat and Challenge Measures. The threat and challenge measures were enhanced by including two new items based on prior research on cognitive appraisals (Folkman, 1984; Lazarus, 1966). These two new items gauged participants' motivation to avoid or retreat, which is part of feeling threatened: "I just want to finish the interview quickly and leave" and "I want to get the interview over with." These two items were added to the previous items: "I feel anxious" and "I feel worried." Response scales ranged from (1) *Not at all* to (7) *Very much* ($\alpha = .75$).

Two new items were added to assess challenge appraisals; these gauged participants' eagerness and interest in approaching a difficult task, which are part of feeling *challenged*: "I am really looking forward to the interview"; "I am glad that I will get to the do upcoming interview." These two items were added to the previous items: "I feel confident" and "I feel determined." Response scales ranged from (1) *Not at all* to (7) *Very much* ($\alpha = .79$).

Assertive Behavioral Intention Measures. Two items assessed participants' intention to be assertive during the upcoming interview: "I will make my views known during the interview"; and "I want the interviewer to understand my perspective", (1) *Not at all* to (7) *Very much*. ($\alpha = .82$)

Procedure

The procedure used in Experiment 2 was very similar to that of Experiment 1 with three modifications. First, I used four achievement goal conditions (mastery, performance-approach, performance-avoid, no goal) instead of two, varied between-

subjects. Second, all participants met an interviewer whose gender-exclusive language created an identity threatening situation (the no identity threat condition was eliminated). Third, after completing the threat and challenge measures (counterbalanced), participants reported their behavioral intentions for the upcoming interview: the degree to which they intended to be assertive with the interviewer. After completing the questionnaires, participants were debriefed and thanked for participating.

Results and Discussion

Threat

I predicted that the type of achievement goal women had in mind would change their perceptions of threat as they anticipated the interview, and in fact it did, $F(3,122) = 4.20$, $p < .01$, $\eta_p^2 = .09$. Follow-up Dunnett t-tests revealed that as predicted, women felt least threatened when they held a mastery goal ($M = 3.07$, $SD = 1.43$) and significantly more threatened when they held a performance-avoid goal ($M = 4.01$, $SD = 1.30$, $p < .05$) or no goal ($M = 4.13$, $SD = .88$, $p < .01$). The performance-approach goal ($M = 3.79$, $SD = 1.33$) fell in the middle and elicited marginally more threat than the mastery goal ($p = .07$; see Figure 3). Thus, having a mastery goal in mind was best for women as they anticipated an identity threatening interview compared to the other three conditions.

Challenge

I also found that achievement goals significantly affected the degree to which women felt challenged about the interview, $F\ (3,122) = 3.95$, $p < .05$, $\eta_p^2 = .09$. Specifically, Dunnett t tests revealed that women felt most challenged when they held a mastery goal ($M = 4.64$, $SD = .82$) and least challenged when the held a performance-avoid goal ($M = 3.70$, $SD = .89$, $p < .01$); the performance-approach goal condition ($M =$

4.17, *SD* = 1.32) and no goal condition (*M* = 4.07, *SD* = 1.23) fell in between and were nonsignificantly different from mastery ($p = .22$ and $p = .11$, respectively). Women therefore felt most challenged when they adopted a mastery goal in an identity threatening situation, which decreased in the performance-approach, no goal, and performance-avoid conditions (see Figure 4).

Assertive Behavioral Intentions

Achievement goals also significantly influenced women's intentions to be assertive during their interview, $F(3,122) = 6.39$, $p < .001$, $\eta_p^2 = .14$. Again, Dunnett t tests revealed that women intended to be most assertive when they held a mastery goal (*M* = 5.55, *SD* = 1.24) compared to a performance-avoid goal (*M* = 4.47, *SD* = 1.11, $p < .01$) and a performance-approach goal (*M* = 4.47, *SD* = 1.18, $p < .01$). However, the no goal condition produced assertive intentions (*M* = 5.18, *SD* = 1.20) similar to the mastery condition (*M* = 5.55, *SD* = 1.24, $p = .46$). Thus, orienting women toward mastery rather than performance enhanced their intention to be assertive (see Figure 5).

Challenge Mediates Assertiveness

I expected that one reason why women intended to be more assertive when they adopted a mastery goal rather a performance goal was because concentrating on mastery made them feel more challenged. To test this, I ran a series of regression analyses to test whether challenge appraisals mediated the relation between mastery goals and assertive behavioral intentions (see Baron and Kenny, 1986). The mediational test compared the mastery goal versus performance-avoid goal conditions. We did not compare mastery versus performance-approach goals because challenge reported in these two conditions were nonsignificantly different ($p = .22$).

The first regression showed that adopting a mastery goal rather than a performance-avoid goal produced more assertive behavioral intentions (outcome variable), $B = 1.08$, $SE = .30$, $p < .01$. A second regression showed that a mastery goal rather than a performance-avoid goal made women feel more challenged (predicted mediator), $B = .94$, $SE = .22$, $p < .001$. A third regression showed that once challenge appraisals were controlled, a mastery goal no longer predicted assertive behavioral intentions compared to a performance-avoid goal, $B = .57$, $SE = .16$, $p = .08$, Sobel Z = 3.25, $p < .001$ (see Figure 6). This indicates that thinking about mastery (rather than performance) enhanced feelings of challenge, which in turn elicited more assertive intentions.

Of interest, a second mediational test indicated that the fact that women felt less threatened when they held a mastery goal versus performance-avoid goal did *not* mediate assertive intentions. Thus, feeling more challenged (rather than less threatened) was responsible for the effect of mastery goals on assertive behavioral intentions. This distinction fits nicely with past research indicating that challenge appraisals, but not threat appraisals are the mechanism by which stigmatized individuals feel motivated in identity threatening situations (see Derks, van Laar & Ellemers, 2007; 2009).

Experiment 2 accomplished four important goals. First, it replicated Experiment 1 by showing that women who were asked to focus on mastery felt less threatened and more challenged than their peers who focused on performance in an identity threatening professional situation. Second, Experiment 2 explored the difference between two performance goals by separately comparing the effect of performance-approach and performance-avoid goals with mastery goals. I found that women felt most challenged

when they adopted a mastery goal compared to a performance-avoidance goal, with the other two conditions falling in between. They also felt least threatened when they adopted a mastery goal compared to any other type of goal. Third, having a mastery goal also enhanced women's intentions to behave assertively toward a job interviewer who created an identity threatening environment. This benefit was mediated by increased feelings of challenge (not reduced threat).

CHAPTER 4

EXPERIMENT 3

In this experiment I moved my attention to women's actual performance in an identity threatening interview, which had not been investigated in the previous two experiments. I predicted that focusing women on mastery rather than performance would enhance actual performance during an identity threatening job interview and this behavioral effect would be mediated by increased challenge. To that end, participants were given a particular achievement goal to keep in mind as they approached a mock job interview after which they were interviewed by a male interviewer who created an identity threatening environment. The entire interview was covertly video recorded. Later, trained coders evaluated women's positive affect during the interview indicated by their nonverbal behavior as well as how hireable they seemed based on their verbal and nonverbal responses to interview questions.

I focused on participants' positive and negative affect during the interview because, not surprisingly, having a positive demeanor is very important to creating good first impressions especially during job interviews (Gilmore & Ferris, 1989; Keenan, 1977). In terms of positive affect coders were trained to notice and code expressions of genuine smiling during participants' interviews. Research indicates that people are generally good at differentiating genuine from fake smiles (Frank & Ekman, 1993; Frank, Ekman & Friesen, 1993). Coders were also trained to notice and code signs of negative affect in participants' nonverbal behavior based on their facial expression (e.g., frowning, furrowed brows) and closed body posture.

Past research has shown that people's thoughts and feelings can leak out through their nonverbal behavior during social interactions (Ambady & Rosenthal, 1992; Carney, Hall, & Smith, 2005; Hall, Coats & Smith-LeBeau, 2005; Knapp & Hall, 2005), and people are relatively unaware of it (Barr & Kleck, 1995; Ekman, Davidson & Friesen, 1990; Hall, Murphy, & Mschmid-Mast, 2007). Thus, I predicted that women's goal state would influence their nonverbal and verbal behavior during the job interview, both of which were observed and recorded by coders blind to experimental hypotheses.

Method

Participants

One hundred twenty five women participated in exchange for $5 plus course credit. Of these, nine women's interviews were not recorded due to camera malfunction and eight women did not consent to having their video data analyzed; these 17 women's data were excluded from data analysis resulting in a final $N = 108$. Within the final sample, 80% identified as Caucasian, 7% as multiracial, 5% as Asian or Pacific Islander, 3% as African American, 3% as Native American, 2% as Hispanic/Latina, and 2% as some other ethnic group. The median age of participants was 20.

Manipulations and Measures

Achievement Goal Manipulation. The achievement goal manipulations used in this experiment were identical to Experiment 2.

Social Identity Threat. All participants underwent the same pre-interview meeting with an interviewer whose gender-exclusive language created an identity threatening situation. This situation was held constant across all participants.

Interviewer Questions. All women underwent a brief job interview where the interviewer asked a set of open-ended questions similar to many real job interviews. These are listed in Appendix B.

Threat and Challenge Measures. These measures were identical to Experiment 2.

Behavioral coding. Two independent coders who were unaware of participants' achievement goal condition watched each video twice and evaluated participants' nonverbal affect during the interview and how hireable they seemed. Interrater reliability was satisfactory ($\alpha = .73$), so I averaged the two coders' ratings for each item that follows. Coders first watched each video with no sound and evaluated: (1) how much positive affect they displayed based on their genuine smiles and (2) how much negative affect participants displayed during the interview based on their facial expressions ($\alpha = .73$). Ratings were done using scales ranging from (1) *Not at all* to (7) *Very much.* Coders then watched each video a second time, this time with sound, and were instructed to make a global assessment of how hireable each participant seemed based on her verbal and nonverbal performance ("How likely would you be to hire the participant?") using a scale ranging from (1) *Not at all likely* to (7) *Very likely.*

Procedure

Participants arrived at the lab where an experimenter instructed them to adopt one of three achievement goals (mastery, performance-approach, performance-avoid) or no goal for an upcoming mock job interview. Participants then met with a second male experimenter posing as a job interviewer who described the job using gender-exclusive language, which created an identity threatening situation. Before the actual interview, participants were taken to private cubicles where they completed a questionnaire

assessing how threatened or challenged they felt as they thought about the upcoming interview. Finally, participants completed the interview during which the male interviewer asked a series of scripted questions. These interviews were covertly recorded using a small camera hidden inside computer equipment in the room. No participants expressed any suspicion that they were being video recorded. After the interview, participants were debriefed about the purpose of the study and were told that their interviews had been recorded. They were offered the opportunity to either have their video recording analyzed or to have it erased immediately. After debriefing, participants were paid and thanked for participating.

Results and Discussion

Threat

The degree to which women felt threatened in anticipation of the identity threatening job interview depended on the achievement goal that they adopted, $F(3,104) = 3.08$, $p < .05$, $\eta_p^2 = .08$. Specifically, Dunnett t tests revealed that women felt least threatened when they held a mastery goal ($M = 3.18$, $SD = 1.11$) and comparatively most threatened when they held a performance-avoid goal ($M = 4.24$, $SD = 1.49$, $p < .05$). Compared to the mastery goal, the no goal condition also produced more threat ($M = 4.02$, $SD = 1.28$, $p < .05$), as did the performance-approach goal condition, although this comparison was not statistically significant ($M = 3.91$, $SD = 1.37$, $p = .14$; see Figure 7).

Challenge

Achievement goals also altered challenge appraisals, $F\ (3,104) = 5.08$, $p < .01$, $\eta_p^2 = .13$; Dunnett t-tests showed that a mastery goal led women to feel significantly more challenged ($M = 4.89$, $SD = 1.18$) than a performance-avoid goal, which elicited lowest

feelings of challenge (M = 3.64, SD = 1.30, $p < .05$). Mastery also produced more challenge than a performance-approach goal (M = 3.79, SD = 1.21, $p < .05$) or no goal (M = 4.04, SD = 1.26, $p < .05$; see Figure 8).

Nonverbal Behavior

Did achievement goals change women's behavior during their interview? Women's nonverbal behavior suggested that their nonverbal affectivity varied systematically as a function of their achievement goal, F (3,104) = 2.66, p = .05, η_p^2 = .07. In specific, women who held a mastery goal appeared significantly more positive in their nonverbal behavior (M = 5.35, SD = .76) than others who held a performance-approach goal (M = 4.51, SD = 1.26, $p < .05$), a performance-avoid goal (M = 4.58, SD = 1.26, p = .05) or no goal (M = 4.73, SD = 1.37, though this difference was not significant, p = .13; see Figure 9). Thus, women who focused on mastery during their job interview seemed most positive in their nonverbals even when faced with identity threat. This difference in positive behavior was evident to observers even though they were unaware of participants' goal orientations.

Hireability

Observers' ratings of hireability also varied as a function of participants' achievement goals, F (3,104) = 2.65 p = .05, η_p^2 = .07. This pattern of results was somewhat different than expected but nevertheless sensible: Women who focused on avoiding poor performance were judged as least hireable (M = 3.63, SD = 1.55) compared to others who focused on mastery (M = 4.70, SD = 1.88, p = .065), and those without any goal in mind (M = 4.77, SD = 1.62, $p < .05$). Participants' hireability was not significantly different in the two performance goal conditions (performance approach M = 4.48, SD =

1.65, performance avoid $M = 3.63$, $SD = 1.55$, $p = .18$; see Figure 10). In other words, women who were attempting to avoid poor performance when confronted with identity threat were seen as less desirable job candidates compared to others who were attempting to gain mastery or others who didn't have a specific goal.

Challenge Mediates Interview Behavior

I expected that focusing on mastery rather than performance during the identity threatening interview would lead women to feel more challenged, which would, in turn, lead to optimal behavior and better performance during the interview. I tested this prediction using mediational analyses.

Nonverbal Behavior. Recall that women's nonverbal behavior was more positive when they held a mastery goal versus either type of performance goal. Did challenge appraisals induced by mastery mediate and produce such positive behavior? To test this, I ran a mediational analysis comparing women with a mastery goal to women with a performance goal (performance-approach and performance-avoid goals were combined). I found that women who focused on mastery versus performance were perceived to be more positive in their behavior (outcome variable), $B = .81$, $SE = .26$, $p < .01$; they also reported feeling more challenged before the interview (proposed mediator), $B = 1.18$, $SE = .30$, $p < .001$. When controlling for challenge appraisals, mastery goals (compared to performance goals) no longer predicted more positive behavior, $B = .48$, $SE = .28$, $p = .08$, Sobel $Z = 2.61$, $p < .01$ (see Figure 11). The same pattern of results was obtained when each type of performance goal was separately compared to the mastery goal condition: performance-approach versus mastery goal (Sobel $Z = 2.42$, $p < .05$) and performance-avoid versus mastery goal (Sobel $Z = 2.25$, $p < .05$). Importantly, lower

threat appraisals did not produce similar mediational effects; it was increased challenge that was the driving force behind mastery-oriented women's successful behavior during the job interview.

Hireability. Recall that outside observers who watched the videos were more likely to want to hire women who had focused on mastery compared to others focused on avoiding errors, $B = 1.07$, $SE = .48$, $p < .05$. Also recall that women in the mastery goal condition felt more challenged than women in the performance-avoid condition, $B = 1.25$, $SE = .35$, $p < .01$. However, challenge did not mediate the effect of a mastery goal on hireability (Sobel $Z = 1.55$, $p = .12$).

In sum, Experiment 3 extended the previous experiments by examining women's *actual performance* in an identity threatening interview. I predicted and found that focusing women on mastery rather than performance increased their positive behavior during a job interview and this effect was driven by increased feelings of challenge. Thus, women's internal challenge state was experienced subjectively, which then transmitted into their professional behavior in a way that was perceived positively by others. Moreover, as predicted, focusing women on avoiding performance errors backfired, making these participants seem less hireable on the basis of their verbal and nonverbal behavior relative to holding a mastery goal or no goal.[4] However, challenge appraisals did not mediate this latter effect.

[4] Although I did not find that women who focused on mastery were perceived as *most* hireable relative to their peers, I did find that, in general, women's positive nonverbal behavior was positively correlated with their hireability, $r = .26$, $p < .01$. Thus, women's tendency to show more positive nonverbal behavior when they focus on mastery versus persformance may also be associated with greater perceptions of hireability.

CHAPTER 5

GENERAL DISCUSSION

People sometimes feel they do not belong in certain situations or are just not good at certain things because societal beliefs about their group rattle their confidence and undercut their performance in high stakes achievement settings. However, as Winfrey's quote at the beginning of this paper suggests, what some call threatening, others call an opportunity to learn and grow. My dissertation suggests that individuals can reappraise identity threatening situations in more positive ways, which can affect how they feel and act. Specifically, when individuals actively change their mindset to construe identity threat as a learning experience (rather than a time to perform at one's best or avoid errors), it allows them to feel challenged, engaged and ultimately perform well.

The Benefit of a Mastery Goal

The current work supports the argument made by achievement goal theory about the beneficial nature of mastery goals and, more importantly, sheds light on the underlying mechanism driving its benefits. Although prior studies have shown that mastery goals protect individuals' intrinsic motivation and facilitate performance following negative performance feedback (e.g., Cianci, Schaubroeck & McGill, 2010; Elliott & Dweck, 1988; Grant & Dweck, 2003), it has not been clear *why* mastery goals produced these benefits. My work provides an answer using insights from the stress and coping literature (Folkman, 1984; Folkman, & Lazarus, 1985; Lazarus, 1966; 2007; Tomaka, Blascovich, Kelsey & Leitten, 1993). I found empirical evidence that adopting a mastery goal (rather than performance goals) leads individuals to appraise a difficult situation as more of a challenge, which in turn mediates and enhances their approach

motivation and successful performance. Although a mastery goal was also associated with feeling less threatened, threat reduction did not mediate approach-oriented action tendencies and performance. Thus, consistent with past research (Derks, Van Laar & Ellemers, 2007, 2009), the current work illustrates that threat and challenge responses to adversity are different psychological processes, and the latter does a better job explaining why mastery goals promote assertiveness and optimal performance in difficult achievement settings.

At a practical level, my work also provides a simple and effective means by which individuals might feel confident, engaged and do well in identity threatening contexts by changing the way they think about the *situation* such that identity threat is reframed as an opportunity for learning and mastery. Such an approach is rooted in theories of emotion regulation whereby individuals learn to reappraise aversive situations to change their subjective meaning in order to promote positive emotional reactions, which influence behavior later on (see Gross, 2008; Lazarus, 1966). In other words, although one cannot control occurrences of identity threat, one can control the way it is perceived and, subsequently, one's emotional and behavioral responses to it. What was a source of anxiety can now be reframed as an opportunity to acquire knowledge and skills from that situation.

Performance Approach Versus Performance Avoidance Goals

The current research also contributes to continued efforts to understand what differential impact, if any, approach versus avoidance orientations have when people are focused on performance. It is generally the case that focusing on avoiding failure rather than demonstrating ability is associated with greater anxiety, lower intrinsic motivation

and worse performance, particularly when one has previously received negative performance feedback (Dickhauser, Buch & Dickhauser, 2011; Elliot & Harackiewicz, 1996; McGregor & Elliot, 2002). However, by and large, my findings tell a somewhat different story: women's appraisals, assertive intentions and performance during an identity threatening interview did not differ as a function of whether they sought to avoid failure or demonstrate ability. Both types of performance goals were less effective than adopting a mastery goal. Although in some cases a performance-approach goal was slightly more beneficial than a performance-avoid goal (e.g., hireability), such benefits were not different to a statistically significant degree.

Why was it the case that approach versus avoidance orientation did not matter in the current research? One reason may be that when it comes to high stakes identity threatening situations that cast doubt on one's group's capacity to perform well, focusing on performance in any way is aversive when compared to focusing on mastery. This suggests that the differential impact of performance-approach versus performance-avoid orientations might depend on the specific type of obstacle and the specific type of situation. Whereas some obstacles might be daunting when one focuses on performance in general, as was true in our research, other obstacles might only be daunting if one is oriented to avoiding failure. This hypothesis, differentiating different types of situational obstacles and "matching" them with the most adaptive type of goal orientation warrants, further exploration in future research.

Caveats and Future Directions

The current work did not assess the degree to which cultural and other life experiences might influence the current findings. For example, might women from

various racial and ethnic groups vary in the degree to which they are affronted by sexism, and how achievement goals, in turn, shape their reactions to it? The samples in the current work did not allow for comparisons between women of multiple ethnic and racial groups. However, I did find that White versus non-White women as a group did not respond differently to sexism as a function of achievement goals. It is also feasible that women in various stages of their academic career would differ in their responses to an identity threatening practice job interview. For example, women who are early versus late in their college careers may find a practice interview less relevant to their current goals, rendering the former group of women less invested in the interview, less affronted by identity threat therein and less responsive to the achievement goal intervention. However, I did not find that women's academic year in school changed any of the current findings. Importantly, my samples had not been stratified by either ethnicity/race or academic year in school resulting in rather small subgroup sample sizes. As such, the null findings reported above may have resulted from low statistical power to detect significant effects. Future research should focus specifically on individual-level variables that may moderate the effects observed in the current research and sample accordingly.

I also recognize that not all achievement situations allow for the adoption of a mastery goal rather than performance goal in order to deal with identity threat. There are some situations in which high performance is critical (e.g., standardized exams; presentations during a job interview); it may not be appropriate or even possible for individuals to focus on building their skills in these situations. However, our work suggests that, if identity threatened individuals *are* able change their mindset even when high performance is critical, adopting a mastery goal might actually improve

performance. Future research might measure individual differences in achievement goals in high stakes achievement settings to see if individuals who have a propensity to hold a mastery goal in such situations experience more challenge and perform better than others who more generally hold a performance goal. Such evidence would be consistent with our experimental results. It would also be useful to assess whether adopting mastery goals in practice situations might later spill over and benefit the actual high stakes achievement settings later on. In other words, can repeatedly adopting a mastery goal in many practice "dry runs" eventually become an automatic response in a later high stakes achievement situation? Such a metamorphosis would not only make identity threatening settings easier to navigate, but would also present an opportunity for growth in situations that individuals may have otherwise avoided.

Figure 1. Experiment 1: Effect of Achievement Goal x Social Identity Threat on threat appraisals before a job interview.

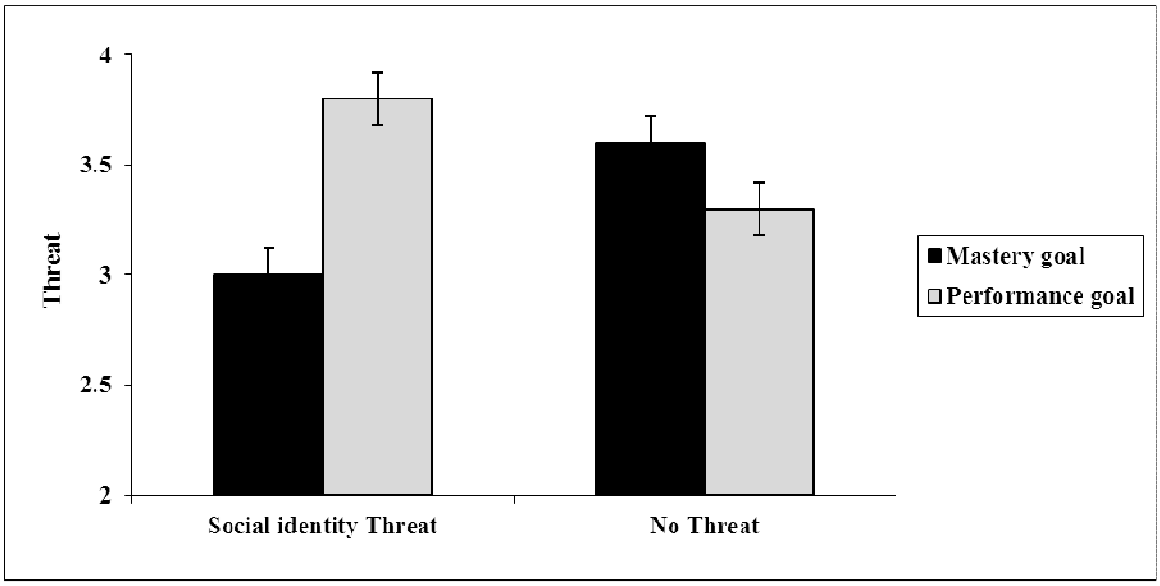


Figure 2. Experiment 1: Effect of Achievement Goal x Social Identity Threat on challenge appraisals before a job interview.

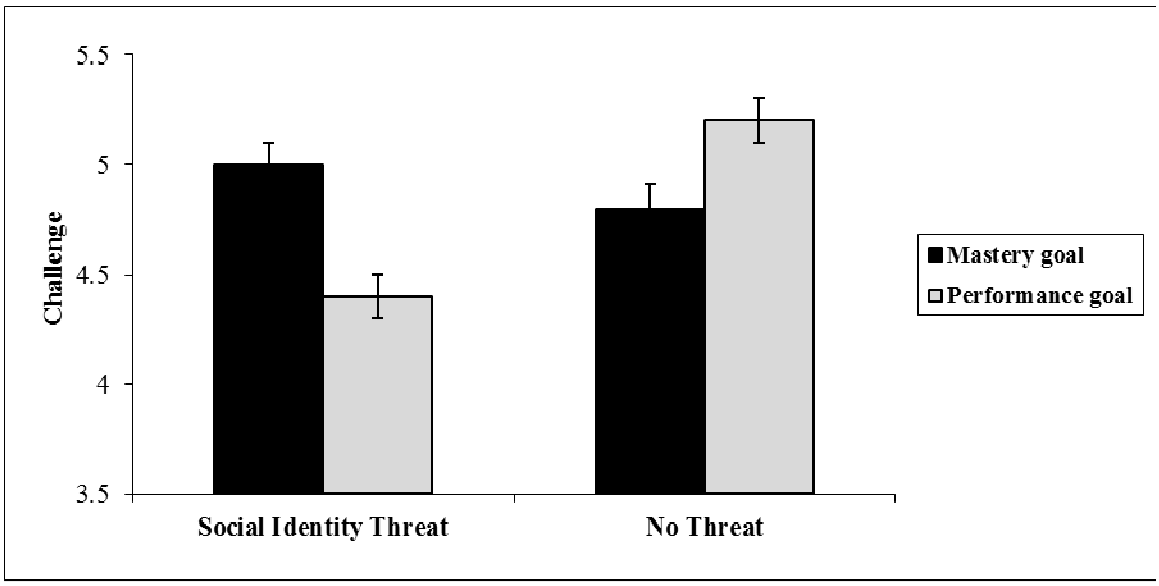


Figure 3. Experiment 2: Effect of achievement goals on feeling threatened.

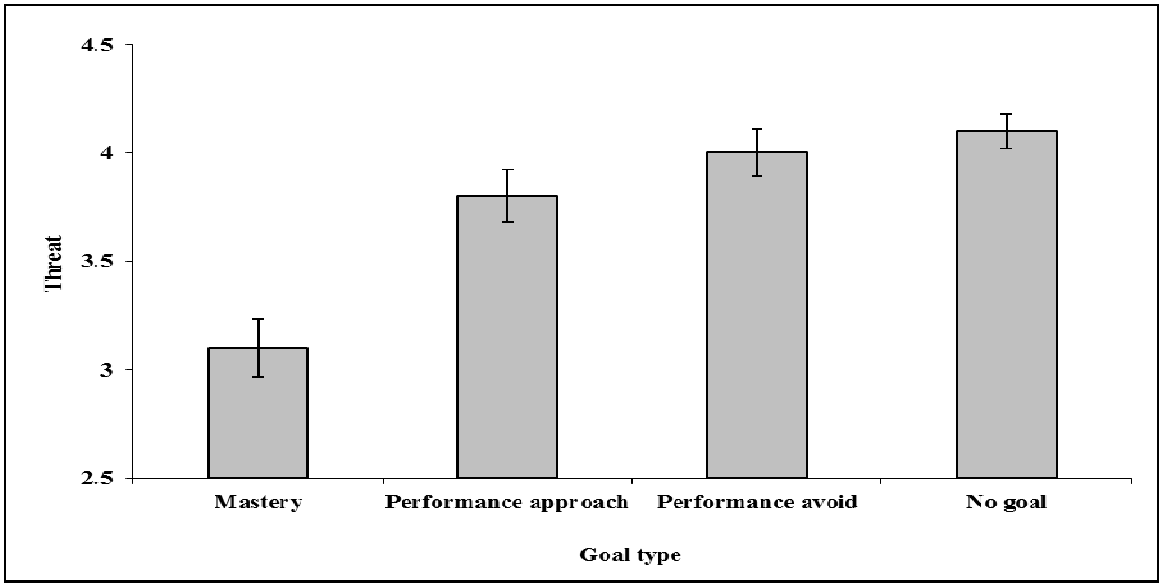


Figure 4. Experiment 2: Effect of achievement goals on feeling challenged.

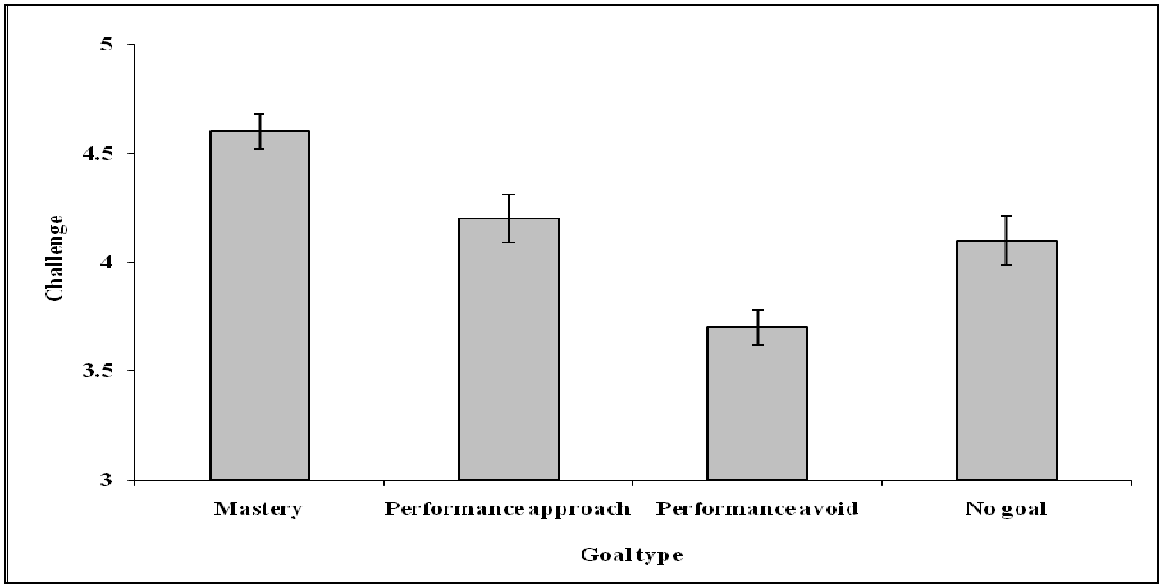


Figure 5. Experiment 2: Effect of achievement goals on intentions to be assertive.

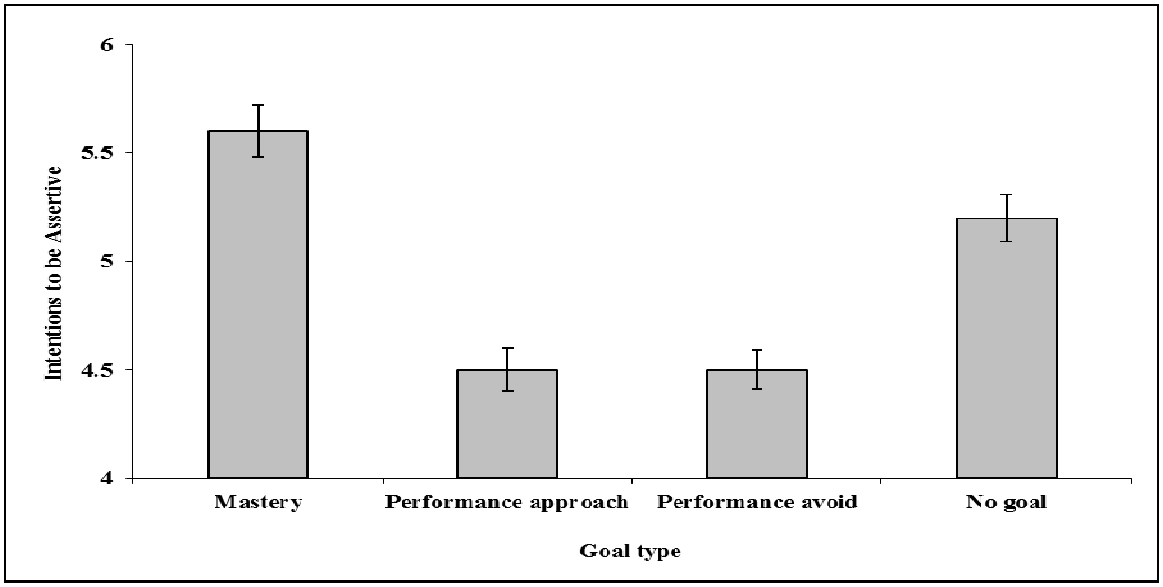


Figure 6. Experiment 2: Feeling challenged mediates the effect of achievement goals (mastery versus performance-avoid) on assertive intentions. The values are unstandardized beta weights; the numbers inside parentheses indicate that the relationship between the predictor variable and the outcome variable becomes nonsignificant after controlling for the mediator.

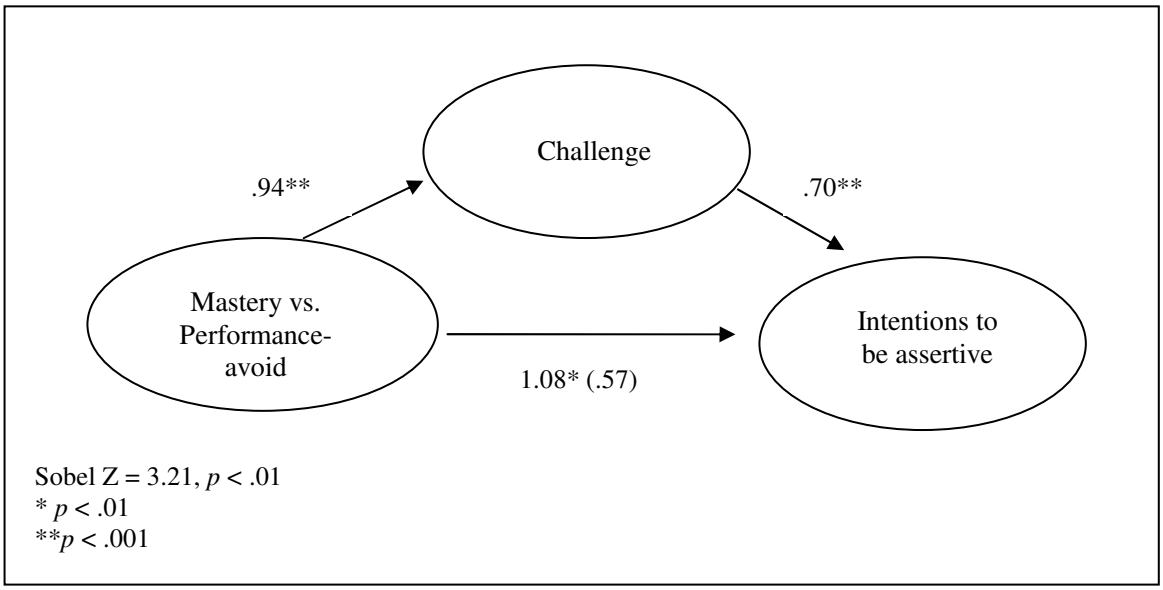


Figure 7. Experiment 3: Effect of achievement goals on feeling threatened.

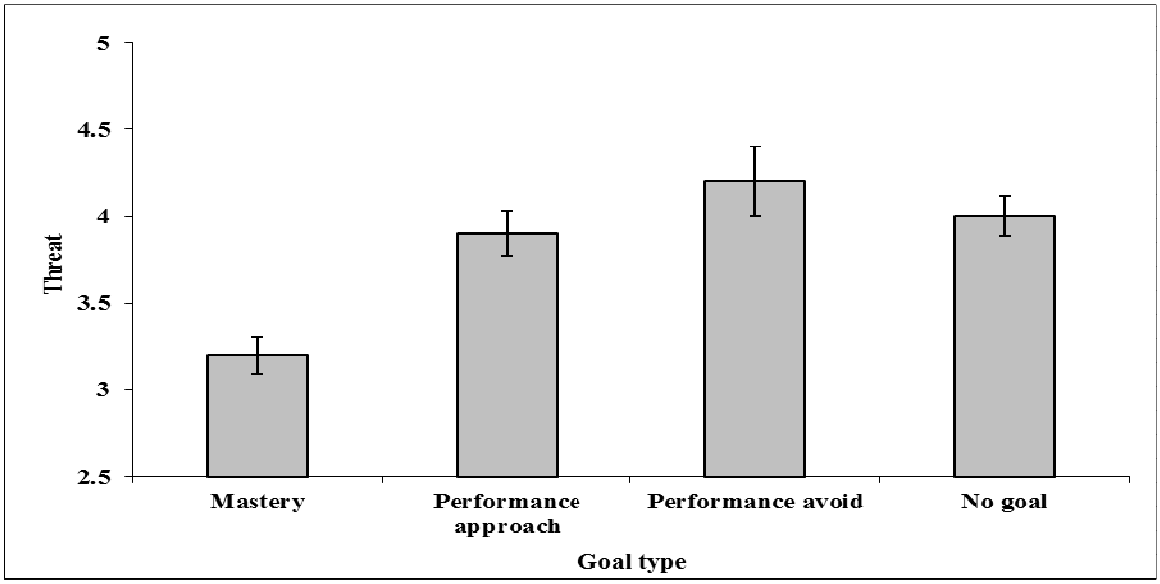


Figure 8. Experiment 3: Effect of achievement goals on feeling challenged.

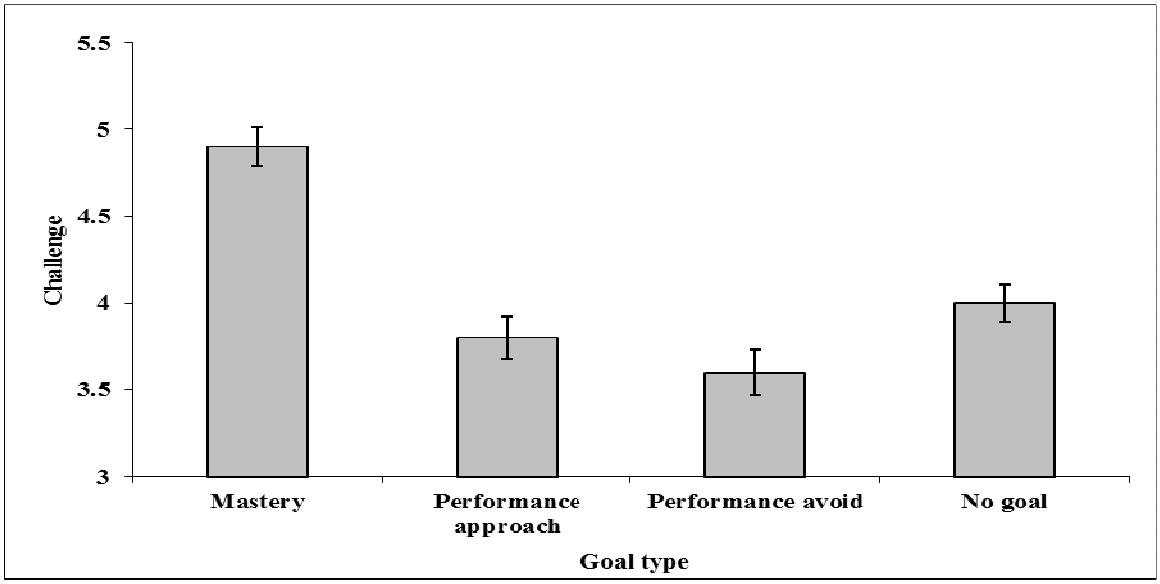


Figure 9. Experiment 3: Effect of achievement goals on nonverbal positive affect.

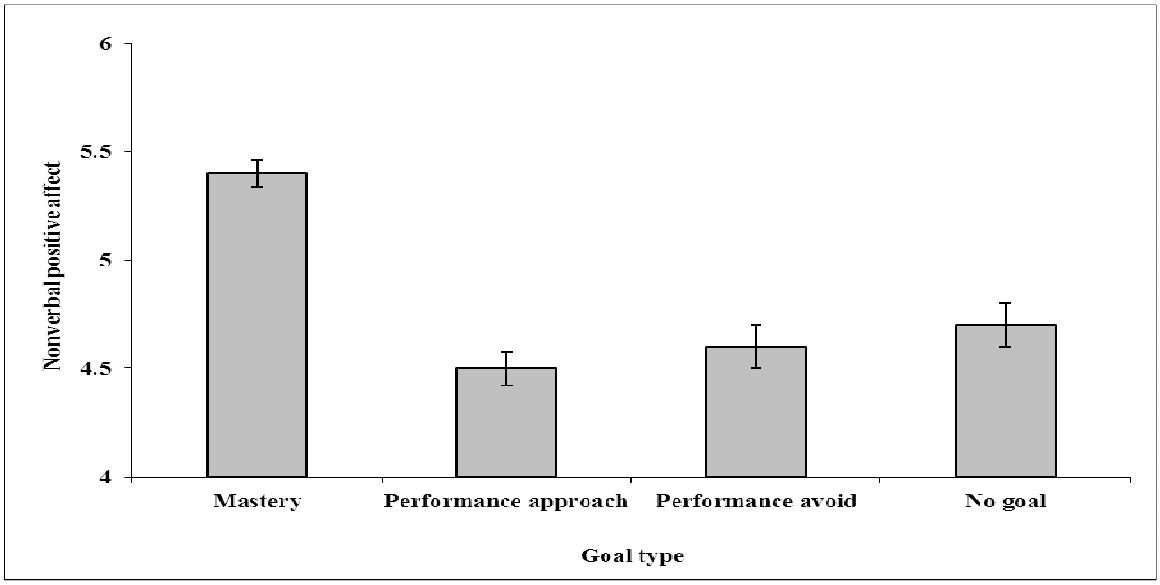


Figure 10. Experiment 3: Effect of achievement goals on hireability.

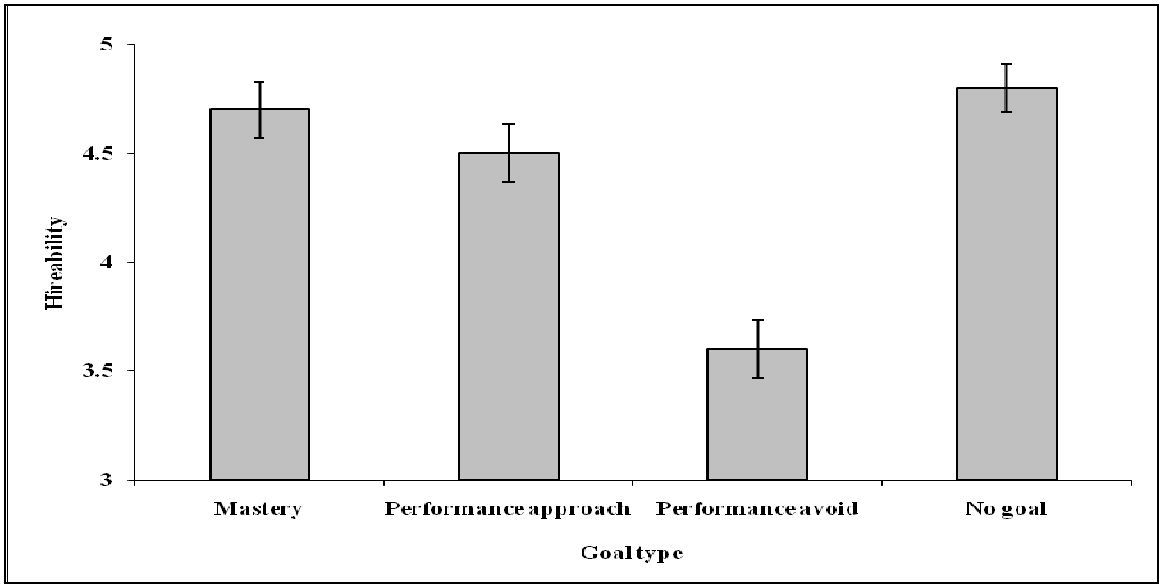
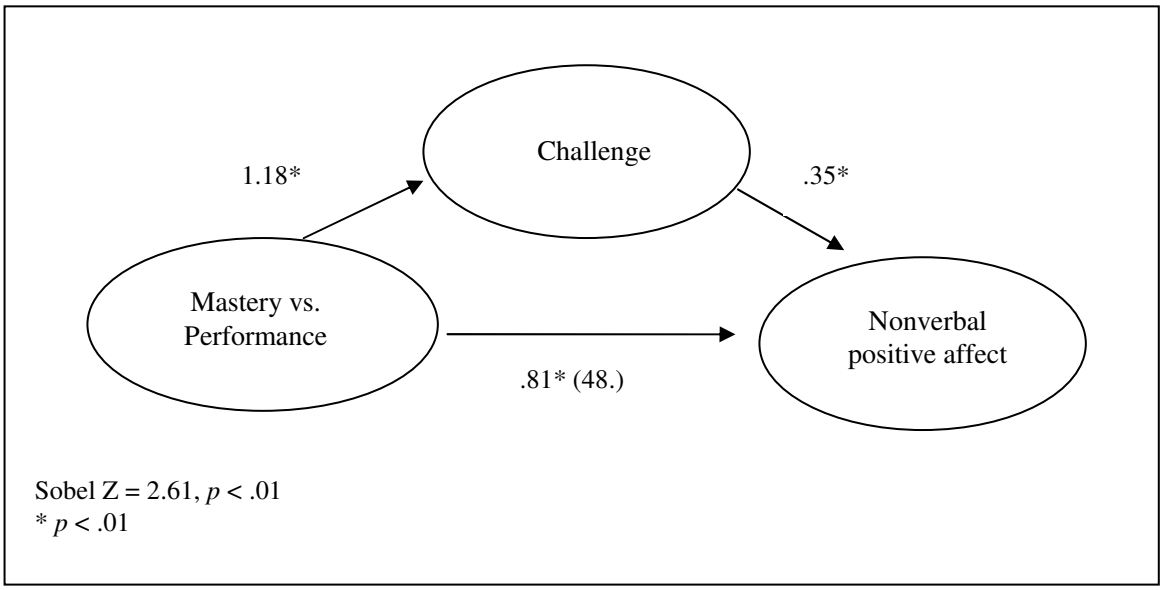


Figure 11. Experiment 3: Feeling challenged mediates the effect of achievement goals (mastery versus performance) on nonverbal positive affect. The values are unstandardized beta weights; the numbers inside parentheses indicate that the relationship between the predictor variable and the outcome variable becomes nonsignificant after controlling for the mediator



APPENDIX A

JOB DESCRIPTION

Our organization is continually growing and thriving. We're looking to hire enthusiastic and bright college graduates -- we usually know a good employee when we see **him** (one).

Our ideal employee is a smart and ambitious **guy** (person). **He is** (They are) someone who can work in a fast-paced and energetic environment- we certainly wouldn't want an employee's workload to catch **him** (them) unprepared.

We expect our **guys** (employees) to help us become a leading player in our field, so when a new employee joins us, **he** (they) may be asked to stay after work hours from time to time. Naturally, **he** (they) would be compensated for the extra time that **he puts** (they put) in.

Finally, we believe in rewarding excellent employees. When we come across an outstanding person, we feel that rewarding **him** (them) will boost our overall productivity. Some examples of our reward system are extended paid-vacation and monetary bonuses. Our **guys** (employees) are very pleased with our current reward system; the harder an employee works, the more money **he makes** (they make)!

If you are smart, ambitious, and creative, and this work environment sounds like a good fit for you, we encourage you to apply.

APPENDIX B

INTERVIEW QUESTIONS USED IN EXPERIMENT 3

Tell me a little bit about yourself.

As I said earlier, in our organization, there is a fast-paced work environment. How well do you work under pressure?

My next question is a simple one: why should we hire you?

Starting salary for this job ranges from $25,000 to $45,000. Based on your abilities, what salary would you request if you were to be offered this job?

Do you have any questions for me? Questions about the interview today? About our hiring policy?

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