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The effects of stereotype threat on job anxiety, job satisfaction, work specific self-efficacy, and turnover intent

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THE EFFECTS OF STEREOTYPE THREAT ON JOB ANXIETY,

JOB SATISFACTION, WORK SPECIFIC SELF-EFFICACY,

AND TURNOVER INTENT

A Thesis

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by

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ABSTRACT

More than 300 articles have examined the construct of stereotype threat and have provided evidence of its impact upon individual performance. However, adequate empirical research regarding the impact of stereotype threat on overall organizational performance has yet to be conducted. The present study argued that stereotype threat perceptions could have an effect upon working women and influence their intent to leave the organization. A hypothesized model that connected the possible relations among stereotype threat, gender identification, job identification, job anxiety, work specific self-efficacy, job satisfaction, and turnover intent was tested using data from 267 working women. Partial support was found for the initial hypothesized model (χ^2 (246, N = 267) = 743.22, p < .05, Robust CFI = .82, RMSEA = .087), and modifications were made resulting in a better fitting model to test in future research (χ^2 (162, N = 267) = 368.04, p < .05, Robust CFI = .92, RMSEA = .069). Results suggested that job identification predicted job satisfaction and turnover intent. Stereotype perceptions significantly impacted female employees' job anxiety. Work specific self-efficacy predicted job satisfaction, and job satisfaction predicted turnover intent. Theoretical implications pertained to expanding the

definition of the stereotype threat construct and studying it within an organizational context. Practical implications included methods by which organizational leaders could buffer the effects of stereotype threat perceptions. Testing the revised model was suggested for future research.

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CHAPTER ONE

INTRODUCTION

The fictional organizational leaders at Malibu Inc.,
a company known for its workforce diversity, are
experiencing a high rate of female employee turnover. Like
many other managers at organizations facing high turnover,
leaders at Malibu Inc. allocate significant resources
towards recruiting, hiring, and benefits in order to
retain their employees; however, in reference to their
female employees, these efforts appear to be in vain.
Additionally, there are no discrimination or sexual
harassment cases that exist to explain why the women are
leaving. Overall, employee interactions appear
uncomplicated. So, why are the women leaving in
disproportionate numbers?

This scenario is more common in organizations than
one may think (Thomas & Plaut, 2008). Diversity is a huge
buzzword today in American organizations; however,
management strategies are often ineffective. This may be
due to the lack of knowledge of how an individual
employees' perspective can affect their job satisfaction,
work specific self-efficacy, and intent to search for a
job at another organization. Rather than dedicate efforts

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to improve employee attitudes and perspectives about their work environment, typical concerns of organizational leaders consist of keeping costs down and maximizing employee performance in order to bring in revenue and increase overall organizational performance and productivity.

Organizational leaders, as well as scientific researchers, often overlook employee response to stereotypes. Stereotypes are very common and often unintentionally made (Agars, 2004). The most common existing stereotypes are usually in reference to major social groups such as race or ethnicity, gender, sex, and age -- all of which are present in all aspects of our lives, including our work environment (Cocchiara & Quick, 2004; Weiss, 2001). For example, gender stereotypes that often exist in the workplace pertain to sex role stereotypes with regards to management qualities, communal or agentic qualities (e.g. levels of aggressiveness), and work-family management (Bergeron, Block, & Echtenkamp, 2006; Davies, Spencer, Quinn, & Gerhardstein, 2002; Agars, 2004; Powell, Butterfield, & Parent, 2001).

Some studies have actually analyzed the relationship between stereotypes at work and employee turnover. In 2003, the results from the Corporate Leavers Survey

indicated that respondents reported experiencing more stereotyping at work than any other bad experience (Klein, Mendoza, & Allers, 2008). Another survey conducted by the Level Playing Field Institute (LPFI) and Knowledge Works (2006) evaluated how unfairness affected an employees' choice to leave an organization. Of 19 unfair behaviors that respondents reported to have experienced at work during the past year at a previous employer, 23.5% of the 1700 respondents reported being stereotyped. This response ranked sixth among the 19 unfair behaviors (Klein et al., 2008; LPFI, 2006). This suggests that employees are exposed to stereotypes and may be threatened by them.

Research regarding stigma consciousness provides additional support to suggest that stereotypes, in general, were associated with employee turnover (Pinel & Paulin, 2005). Specifically, the researchers analyzed the extent to which women were stigma conscious with regards to their gender and their status as a staff worker, and how this stigma consciousness impacted their subsequent intent to leave. The researchers found evidence that stigma consciousness with regards to being a staff worker directly predicted intent to leave. Furthermore, feeling respected indirectly mediated this relationship.

Voluntary Turnover and its Costs

Perhaps one way to get an organization's attention about fostering a positive work environment for diverse employees is to focus its attention on the resulting voluntary turnover. Different from involuntary, voluntary turnover is when an employee quits an organization of his or her own accord. This could sometimes be functional turnover because the individual may not have fit well with or performed adequately for the organization. However, when an organization is unable to retain its good employees because a high rate of voluntarily turnover, this is dysfunctional. The organization does not want to lose motivated and talented workers due to a negative work environment (Shaw, Gupta, & Delery, 2005). Voluntary turnover of employees can be quite devastating to organizational productivity and performance due to the time and costs involved when an employee decides to quit (Shaw et al., 2005; Glebbeek & Bax, 2004).

Most organizational leaders understand the costs involved when an employee leaves. Factors contributing to these costs include separation costs (e.g., termination related administrative functions such as exit interviews, closing out the payroll and benefits accounts), replacement costs (e.g., job postings, reference checking,

interviews), and training costs for the replacement employee (Cascio, 1998). Estimating the time and hourly pay of all of the individuals involved in the above processes yields the most accurate estimate of turnover costs for an individual employee leaving the organization. Also, for large organizations, the people and resources (e.g. human resources, recruiters, budgeters, and supervisors) involved with turning over an employee are costly.

There also are immeasurable indirect costs. For example, decreased employee morale, new employee socialization, and proficiency at the job add to turnover costs. Often when one employee leaves, others who value that employee may become dissatisfied or even perceive that an injustice has occurred (Klein et al., 2008). Their morale and attachment may decrease, and those employees may leave as well. This will add to the turnover rate along with its costs. Additionally, new employees that are hired as replacements must undergo a socialization process which is crucial to their work performance (Abelson & Baysinger, 1984). They must learn the norms or "ropes" of the organization. This is a learning process in which major mistakes may occur.

Job Satisfaction as a Predictor of Turnover

Voluntary turnover might be reduced if organizational leaders were more aware of why their employees were leaving. There are many well-known predictors of turnover such as, available job opportunities, organizational commitment, organizational withdrawal, and job embeddedness -- all of which are negatively correlated with employee turnover (Maertz & Griffeth, 2004; Tett & Meyer; 1993). According to research, one of the most prevalent predictors of voluntary turnover is job satisfaction, which can be defined as an employees' sense of affective contentment about their job or workplace (Tett & Meyer, 1993). Employees who have high job satisfaction tend to be more committed to their organization, have less absenteeism, be embedded in their job, and remain with the organization.

Job satisfaction has been shown to have a consistent negative relationship with voluntary turnover (Maertz & Campion, 1998; Tett & Meyer, 1993; Griffeth, Hom, & Gaertner, 2000; Friedman & Holtom, 2002) and a positive correlation with job performance across 312 studies (Judge, Thoresen, Bono, & Patton, 2001). Additional variance may be explained by other predictors of both job satisfaction and turnover, such as the effects of

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stereotypes on anxiety and self-efficacy (Maertz &

Griffeth, 2004; Judge & Bono, 2001).

The Present Study

While an abundance of literature on stereotypes

exists with regards to the workplace, less research exists

that assesses how stereotypes could affect an employee and

motivate him or her to leave the organization. A

particular construct that analyzes the negative effects of

stereotypes upon targeted individuals and assists in

providing an excellent framework to show how stereotypes

could predict voluntary turnover is stereotype threat. The

stereotype threat literature enables one to understand how

this phenomenon could exist in the workplace and be

detrimental to organizations.

The present study addressed the relationship among

job identification, gender identification, stereotype

threat perceptions at work, anxiety, work specific

efficacy, job satisfaction, and turnover intent. A

comprehensive yet parsimonious model (see Figure 1) is

tested to show how these constructs are expected to relate

to each other and operate in the workplace to negatively

impact both individual employees and overall

organizational outcomes. The stereotype threat construct

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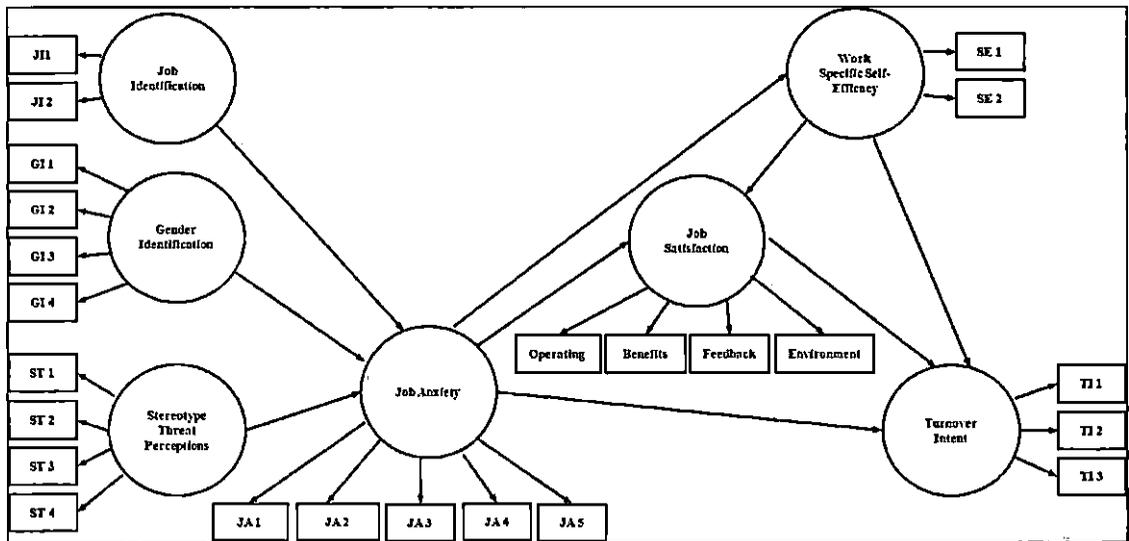
Figure 1. Hypothesized Model: Relationship Between Job

Identification, Gender Identification, Stereotype Threat

Perceptions, Job Anxiety, Job satisfaction, Work Specific

Self-efficacy, and Turnover Intent

is used as a basis for this model. But, the

conceptualization of stereotype threat is reviewed and

expanded to emphasize its potential practical application

to work place settings.

Stereotype Threat Defined

Stereotype threat is defined as a situation in which

one either fears being perceived as behaving negatively

stereotypical or a situation where there is a risk of

confirming a negative stereotype. As a result of these

perceptions, performance decreases. In work settings,

these perceptions could be related to the complete

termination of work performance or voluntary turnover.
Steele and Aronson (1995) coined the term in their
landmark study that investigated the potential reasons
behind the deficiency in the performance of African
American university students. Specifically, the
performance of African American students on a test when
compared to their white counterparts was analyzed.
Findings indicated that performance of African Americans
significantly decreased from their white counterparts when
the African American students were threatened by the
stereotype that African Americans were not intelligent.

Hundreds of replications of this original study were
done using performance as an outcome variable. Some
studies used different social groups, domains, and
situations. Most studies used similar outcome measures of
stereotype threat most of which were applicable to
academic contexts (Shapiro & Neuberg, 2007). However, some
researchers have been focusing more so on how stereotype
threat affects workplace dynamics (Chung, Ehrhart,
Ehrhard, Hattrup, & Solamon, 2009). These studies have
shown that stereotype threat can affect how African
American managers respond to feedback from their managers
(Roberson, Deitch, Brief, & Block, 2003), the career
choices of women when viewing stereotypical

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occupational-related media (Davies et al., 2002), women's

performance -- specifically on a work-related task

(Bergeron et al., 2006), and the performance of employees

on promotional-related testing (Chung et al., 2009).

Stereotype threat also could contribute to negative

perceptions of the validity of a cognitive ability test

for employee selection purposes, decreased motivation to

take the test, and increased anxiety (Ployhart, Ziegert, &

McFarland, 2003). These studies not only made the

connections between feedback at work, career decisions,

work performance, promotions, and applicant reactions to

the selection process on a work-related task, but they

also provide support that stereotype threat does exist in

the work environment. Moreover, these studies indicate

that stereotype threat could negatively impact employees

and the retention efforts of organizational leaders.

Defining stereotype threat as a situational construct

implies that personality, trait, or any inherent

attributes are not key factors involved with this

phenomenon. In fact, anybody could be susceptible to

stereotype threat when their social identity group is

negatively compared to another social group (Steele, 1997;

Roberson & Kulik, 2007). However, there are four distinct

boundary conditions most of which must be present in order

for stereotype threat to affect performance. These conditions actually support the idea of stereotype threat as a function of the individual rather than the situation (Chung et al., 2009).

The first condition is task relevance, which pertains to whether or not the task is related in some manner to the invoked stereotype. For example, the stereotype that African Americans were not intelligent was relevant to the task which was an exam that measured intelligence on a particular subject (Steele & Aronson, 1995). The present study targeted an employee's change in attitudes about work in general as a result of stereotype threat. Consequently, for this study, the focus was on general job relevance rather than the specific task relevance of any invoked stereotypes. Studies analyzing turnover intent and general job performance tend to focus on the general job attitudes rather than attitudes about specific job tasks (Maertz & Campion, 1998; Tett & Meyer, 1993; Griffeth, Hom, & Gaertner, 2000; Judge, Thoresen, Bono, & Patton, 2001; Friedman & Holtom, 2002). Focusing on general job relevance as a condition of stereotype threat is consistent with previous turnover research.

Along with performing a task relevant to the stereotype, the task should be difficult (Roberson &

Kulik, 2007; Smith, 2004). Many stereotype threat studies pertain to intellectual abilities and performance in the English and Math domains. The participants in stereotype threat studies often were either given a relevant section of Graduate Record Exam (GRE) (e.g. Steele & Aronson, 1995) or the SAT exam (e.g. Spencer, Steele, & Quinn, 1999), which are commonly known for their difficulty because they are specifically designed to aid in selecting the top students for universities and graduate programs. Many factors could contribute to job difficulty. A particular task may be difficult or the work environment alone could make the job difficult. An employee that is threatened by a stereotype threat may find working in that organization too unbearable and decide to leave.

The third condition is that the participants in stereotype threat studies should identify with the targeted stereotyped domain, (Steele, 1997; Chung et al., 2009). For example, research has found that African American participants who identified with the academic domain were more likely to withdraw from school when in a stereotyped threat condition than their white counterparts (Osbourne & Walker, 2006). This suggests that in order for stereotype threat outcomes (e.g. anxiety, decreased efficacy, decreased job satisfaction, and turnover intent)

to occur, the employee must strongly identify with the work domain.

The final condition of stereotype threat is that the individual must identify with the targeted group. This condition is crucial. Not only does it serve to make an individual more sensitive to stereotype threat, but it also suggests an expansion to the definition of stereotype threat, particularly for the present study. This condition is an application of social identity theory, which suggests that when an individual strongly identifies with a the targeted group, that individual is inclined to sustain a positive identity of this group as he or she would do with his or her personal identity (Schmander, 2001; Tajfel, 1981). This implies that individuals care about whether or not their social group has a positive image. Additionally, any threat to that group will be like threatening that individual's personal identity, thus making him or her more vulnerable to stereotype threat.

Various stereotype threat studies manipulated group identity such that participants were either directed to refer to current stereotypes that exists about the group with whom the participants identified with (e.g. Aronson, Justina, Good, Keough, Steele, & Brown, 1999; Spencer et al., 1999), researchers created token or solo status

conditions for participants (e.g. Roberson et al., 2003;
Inzlicht & Ben-Zeev, 2000), or participants specifically
identified with the targeted group by their confirming
responses to a task in which they had to list group-based
pronouns (e.g. Marx, Stapel, & Mueller, 2005). These
manipulations emphasized the participants' identification
to the stereotyped group so that the vulnerability to
stereotype threat would increase. According to this
condition, employees that are part of a social group in
which a stereotype threat targets should respond as if the
stereotype is a threat to their personal identity by
exhibiting turnover intent.

Both the boundary conditions and the definition of
stereotype threat support the notion that stereotype
threat is also a function of the individual (Chung et al.,
2009). The boundary conditions infer that individual
differences lie in the predisposition to stereotype
threat. Specifically, these conditions infer that
individuals who do not meet any of the boundary conditions
would not be as susceptible to the effects of stereotype
threat, whereas individuals who do will be very
susceptible to stereotype threat. Also, previous research
often analyzed stereotype threat perceptions as part of
the manipulation check rather than a key variable in the

study (Ployhart et al., 2003). As aforementioned, stereotype threat is conceptualized as a fear of stereotype confirmation. In order for an individual to fear confirming a stereotype, that individual would also have to perceive that the stereotype threat exists before any negative responses or outcomes could occur (Chung et al., 2009). Thus, stereotype threat perceptions are a function of the individual and not the situation. Accordingly, stereotype threat perception is used as a primary variable for analysis in this study.

Other research supports stereotype threat as a function of the individual when it comes to analyzing differences in individual responses to the threat. Ryan Brown and Elizabeth Pinel (2003) tested the effect of individual differences in stigma consciousness upon stereotype threat performance outcomes. They found that when faced with a stereotype threat, women with high stigma consciousness performed significantly worse on a math test than women with low stigma consciousness. Hence, the present study focused on stereotype threat perception as a function of the individual rather than the situation.

Stereotype Threat Perception as
a Predictor of Anxiety

Additional stereotype threat research posits that individual differences could also exist in anxiety responses to stereotype threat (Osborne, 2006). Anxiety is a factor that is considered to be integral to the stereotype threat construct. Original stereotype threat theorization indicated that stereotype threat outcomes may be due to the anxiety the participants experience when they fear confirming a negative stereotype (Steele, 1997). This suggests that anxiety is an important mediator or underlying mechanism of stereotype threat and negative performance outcomes. Establishing anxiety an underlying mechanism of stereotype threat enhances the understanding of how stereotype threat operates in organizational settings, as well as explains why it negatively affects organizational outcomes.

Past research suggests that there is a strong relationship between stereotype threat and anxiety (Steele, 1997; Cadinu, Maas, Rosabianca, & Kiersner, 2005). Studies that focused on anxiety tended to concentrate on physiological arousal or non-verbal responses as an indicator of anxiety showed a significant relation to stereotype threat (Bosson, Haymovitz, & Pinel,

2004). Researchers have shown that participants threatened by a stereotype had higher skin conductance (Osborne, 2007), and that blood pressure in African Americans was significantly higher than their white counterparts in the stereotype threat condition (Blascovich, Spencer, & Quinn, 2001). Other research suggests that increased effort (e.g. Oswald & Harvey, 2000), sense of dejection (e.g. Cadinu et al., 2005), diminished performance expectations (e.g. Rosenthal, Crisp, & Suen, 2007), reduced effort (e.g. Stone, 2002), decreased self-control (e.g. Inzlicht, McKay, & Aronson, 2006), and lowered working memory capacity (Osborne, 2006) all are possible mechanisms of stereotype threat. However, these all could be inferred as indicators of emotional and cognitive anxiety. While these studies provide support for the correlation between stereotype threat and anxiety, they do not adequately support anxiety as a mechanism of stereotype threat. This is due to the lack of clearly distinguishing between an anxiety response and underperformance on a task. Performance is typically an outcome measure in stereotype threat studies in which underperformance on a task would indicate an effect of stereotype threat. Whereas, the above studies use anxiety measure as an indicator of

performance which only provides support for stereotype threat having an effect upon participants anxiety levels.

Recent research that specifically associated stereotype threat with anxiety at work, also clearly distinguished between anxiety and performance outcomes in a stereotype threat study. Chung et al. (2009) provided support for a model that related group identification to stereotype threat perceptions, anxiety, self-efficacy, and performance on promotional related testing. This study indicated that both anxiety and self-efficacy mediated the relationship between stereotype threat perceptions and self-efficacy.

Thus, indicating that anxiety may be an underlying mechanism of stereotype threat. As a result, the following is hypothesis was tested:

Hypothesis 1: Stereotype threat perceptions will predict anxiety.

Due to the critical function of group and job identification to stereotype threat effects as well as to replicate the results of previous research, the following hypotheses are tested:

Hypothesis 2: Group identification will predict high levels of anxiety.

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Hypothesis 3: Job identification will predict high levels

of anxiety.

Anxiety as a Predictor of Self-efficacy and Job Satisfaction

High levels of anxiety in the workplace could also

negatively impact an organization by how it affects

individual employees' sense of self-efficacy and job

satisfaction. Self-efficacy is referred to as a direct

personal human agency function of the social cognitive

theory, in which, one is confident in his or her ability

to achieve a particular goal or excel at a particular task

(Bandura, 2001; 1994). Maintaining employees'

self-efficacy in their work is critical for management

because self-efficacy assist with determining the effort,

perseverance, and resilience of the employee when faced

with a challenging task or situation (Pajares, 2002).

Additionally, self-efficacy is highly predictive of

performance especially job-related performance (Girasoli &

Hannafin, 2008; Stajkovic & Luthans, 1998; Judge & Bono,

2001; Judge et al., 2007). Due to this relationship with

performance, self-efficacy is used as a proxy of

performance in order to replicate previous results of

stereotype threats' relation to decreased performance.

In addition to previously discussed research (e.g. Chung et al., 2009), another study analyzed the impact of anxiety upon self-efficacy at work. Research by Martocchio (1994) analyzed the effects of employee conceptions of computer abilities as being either an acquirable skill or a fixed entity upon computer related anxiety and self-efficacy. The results indicated that employees in the fixed entity condition did not experience any significant changes in anxiety levels. However, they did experience a significant decrease in computer self-efficacy. The employees in the acquirable skill condition experienced a decrease in anxiety and an increase in computer efficacy. This suggests that that anxiety at work may negatively impact an employees' self-efficacy.

Additional theory and previous empirical results indicate that self-efficacy could also be a predictor of job satisfaction (Girasoli & Hannafin, 2008; Judge & Bono, 2001; Riggs & Knight, 1994; Multon, Brown, & Lent, 1991). The model proposed by Riggs and Knight (1994) provided good support for a strong relationship between work specific self-efficacy and job satisfaction. Based upon the proposed associations between anxiety and self-efficacy, as well as the previously shown

relationship between self-efficacy and job satisfaction, the following hypotheses were tested:

Hypothesis 4: Anxiety will predict self-efficacy.

Hypothesis 5: Anxiety will predict job satisfaction.

Hypothesis 6: Self-efficacy will predict job satisfaction.

Anxiety and Self-efficacy as Predictors of Turnover Intent

Other research suggests that anxiety could be directly correlated with turnover intent. Glazer and Kruse (2008) analyzed whether or not two distinctive types of organizational commitment would moderate the relationship between job-related anxiety and turnover intentions of nurses. While the results of their study did not show any significant moderation effect, it did show a strong direct relationship between job-related anxiety and turnover intent.

Furthermore and as previously discussed, job satisfaction has been shown to have a consistent negative relationship with voluntary turnover (Maertz & Campion, 1998; Tett & Meyer, 1993; Griffeth et al., 2000; Friedman & Holtom, 2002). Based upon these studies, the following logically inferred hypotheses were tested:

Hypothesis 7: Anxiety will predict turnover intent.

Hypothesis 8: Self-efficacy will predict turnover intent.

Hypothesis 9: Job satisfaction will predict turnover

intent.

CHAPTER TWO

METHODS

Participants

Participants consisted of 270 women between the ages of 18 and 66 (Mean = 35.56, SD = 11.08) who were employed at the time of the study. The primary race/ethnicity of participants' was white at 76.4%, followed by Latino and African American (5.6%), Asian (3.7%), American Indian (2.7%), and Native Hawaiian (0.7%). Only 3.4% selected "other" for race/ethnicity. Most of the participants had a college level education. 30.7% of the participants had a Bachelors degree, followed by a Masters degree (28.1%), some college experience (15.7%), doctoral degree (15%), Associate's degree (6.0%), post-doctoral education (1.5%), high school degree (1.1%), and some high school education (0.4%). Only 26.2% were students when they participated in the study. The reported marital/relationship status of the participants were varied. Most participants indicated that they were married (43.8%), followed by single (22.8%), boyfriend/girlfriend (19.5%), divorced (10.1%), separated (1.5%), and widowed (0.7%). Most of the participants were employed full-time at 73.7% and only 26.3% were employed part-time. Average reported hours worked per week were 40

hours (SD = 11.57). Most participants indicated that they were neither a manager nor a supervisor (70.8%), but 14.2% were managers and 13.5% were supervisors. Average position tenure was 3.6 years (SD = 4.71) and 5.16 months (SD = 3.39). Average tenure at their present organization was 4.82 years (SD = 5.69) and 5.08 months (SD = 3.47). Of the 17 job categories, most of the participants selected other (27.7%) followed by research at 18.4%. Appendix A provides more details pertaining to the job category variable as well as the entire demographic variables.

Measures

Job Identification

According to the domain identification condition for stereotype threat, the participants in this study should identify with their job. Participants' were assessed to see how strongly they identify with their work using the 10-item Job Involvement Questionnaire (Kanugo, 1982). This questionnaire is designed to measure the extent of an employee's identification with his or her work. This measure has been shown to be internally consistent with an alpha coefficient of .87 (Kanugo, 1982). These items are included in Appendix E.

Gender Identification

Gender identification was measured using four items used in research that analyzed the relationship between gender identification and stereotype threat (Schmander, 2001). Those items are: "Being a woman is an important part of my self-image," Being a woman is unimportant to my sense of what kind of person I am," Being a woman is an important reflection of who I am," and "Being a woman has very little to do with how I feel about myself." These were adjusted measurement items derived from the Collective Self-Esteem Scale (Schmander, 2001; Luhtanen & Crocker, 1992). They were shown to be reliable with a coefficient alpha of .70 (Schmander, 2001).

Perceptions of Stereotype Threat at Work

The four-item scale created by Chung et al. (2009) to measure perceptions of stereotype threat were adjusted and used for this study. The researchers found the scale to be reliable with a coefficient alpha reliability of .80. For this study, the four items will be slightly adjusted to focus on the workplace and women (See Appendix E).

Job Anxiety

The Job-Related Feelings of Anxiety (JRFA) subscale was used to measure anxiety at work (Parker & DeCotus, 1983). This five-item subscale is part of a 15-item

measure of job stress. The JRFA has been used in recent research analyzing organizational commitment and occupational stress (Glazer & Kruse, 2008). It has a reported alpha reliability of .74, respectively (Parker & DeCotus, 1983; Glazer & Kruse, 2008). This measure can be viewed in Appendix E.

Job Satisfaction

Job satisfaction was evaluated using the Job Satisfaction Survey (JSS) (Spector, 1994). This 36-item scale was chosen because it has multiple-facets rather than a global facet, and it is not confounded with items related to organizational commitment (Tett & Meyer, 1993). This was used to capture the relationship satisfaction between co-workers and supervisors, as well as items that capture pay, benefits, communication, contingent rewards, operating procedures, promotion, and nature of satisfaction. The JSS measure can be viewed in Appendix E.

Work Specific Self-efficacy

The Work Specific Self-Efficacy Beliefs Scale (Riggs, Warka, Babasa, Betancourt, & Hooker, 1994) was used to evaluate work efficacy beliefs and performance for study replication purposes. The scale was designed to measure self-efficacy with regards to abilities to do tasks required at work. Furthermore, it has a reported alpha

reliability coefficient range of .85 to .88. This scale has been shown to be positively correlated with job satisfaction (r = .30) and organizational commitment (r = .25), which makes this scale appropriate for the study (See Appendix E).

Turnover Intent

Research has shown that using a multi-item measure of turnover intentions is better than single-item measures (Tett & Meyer, 1993). For this study, a three item measure of turnover intent was used. This measure has been used in previous stereotype related research and had an reported alpha reliability coefficient of .83 (Pinel, 2005). These items include: "I intend to remain with this job indefinitely," "I intend to leave this job at the end of the year," and "I would leave this job if I could."

Demographic Items

In addition to the study qualifier items, demographic related items were used to assess the demographic composition of the sample for descriptive statistical analysis for study generalization purposes. Participants were asked to disclose their age, race, marital status, job category, time at current job, position in the organizational hierarchy, and educational level (See Appendix E).

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Procedure

Participants were invited to complete the questionnaires via flyer postings in local café's as well as online through various networking websites such as Twitter.com, LinkedIn.com and Facebook.com. Participants completed the set of questionnaires online at the Surveymonkey.com website. This is a popular website used in psychological research in which measures are uploaded on the site and a web address is provided so that participants may have access to them. There was no way to identify participants. Additionally, the CSUSB Psychology Department has a system called SONA that links with Surveymonkey.com so the department can monitor student participant extra credit units. The Surveymonkey.com account for this study was organized so that the participants first had to read and verify that they understood the informed consent. Then, they responded to three questions that verified that they met the study requirements. They were first asked to identify their gender. They must have identified as being a woman in order to participate. Second, they had to indicate whether or not they were employed. They had to indicate that they were employed in order to participate. They also had to specify whether or not they worked physically within the

location at least part-time each week. They must have indicated that they physically worked at least part-time at the work location.

According to the literature review, stereotype threat effects were strong when the individual identifies with the stereotype relevant domain. The participants were provided with instructions for completing the gender identification items before they began to fill out the measures. This same procedure applied to the other measures in the following order: job identification, gender identification, perceptions of stereotype threat at work, job satisfaction, work specific self-efficacy, turnover intent, and demographic items. Upon completion of the demographic items, the participants were thanked for their participation and presented with a debriefing statement.

CHAPTER THREE

RESULTS

Data Screening

Prior to analysis, data from 270 participants were screened for missing values, univariate and multivariate outliers, normality of sample distributions among each variable, and multicollinearity/singularity using various SPSS functions. 43 out of the 80-item-level measures contained missing values. None of the measure variables had more than 5% missing values. Also, no significant missing value patterns were found. This suggested that the values were missing completely at random. EM algorithm imputation was computed using SPSS for all of the missing values. Upon completion of the imputation, no cases contained missing data. Hence, the imputed data was utilized for all subsequent analyses. Variable means and standard deviations are listed in Table 1.

Table 1. Means, Standard Deviations, and Missing Values of Item-level Measures

Construct Variables	Mean	SD
1. Gender Identification	15.46	3.25
2. Job Identification	30.02	8.05
3. Stereotype Threat Perceptions	9.90	4.28
4. Job Anxiety	11.86	3.51
5. Work Specific Self-Efficacy	56.01	8.72
6. Job Satisfaction	140.58	29.10
7. Turnover Intent	12.90	5.56

Using z-scores within +/- 3.29 as a standard for univariate outliers, two outliers were found on the work specific self-efficacy variable. One outlier had a value of 5 (-3.48) and the other has a value of 14 (-3.84) both of which indicated a low efficacy score. These two cases were deleted. Multivariate outliers were identified using Mahalonobis distance with p < .001 as a criterion. Only one multivariate outlier was identified and that case was deleted. The final sample size was 267 after all three outliers were deleted, which is an adequate sample size for structural equation modeling analyses (Kline, 2005).

All variables were analyzed for the normality of their sample distribution by reviewing histograms depicting the distribution of each the scores of each of

the seven variables. Scores on gender identification, job identification, stereotype threat perceptions, and job anxiety were only slightly negatively skewed. Scores on work specific self-efficacy were slightly positively skewed. Scores on job satisfaction and turnover intent were normally distributed. None of the distribution of scores on each variable was skewed enough to violate the assumption of normality. Furthermore, there was no multicollinearity among the variables. None of the variables were highly correlated above the recommended criterion of $r = .90$ (Tabachnick & Fidell, 2007). The highest correlation was $r = .606$ (see Table 2 for the correlation matrix).

Table 2. Correlations among Construct Variables

Construct Variables	1	2	3	4	5	6	7
1. Job Identification	**.71**						
2. Gender Identification	.08	**.80**					
3. Stereotype Threat Perceptions	.18**	.00	**.87**				
4. Job Anxiety	.24**	-.05	.29	**.82**			
5. Work Specific Self-Efficacy	.05	.11	-.13	-.18**	**.73**		
6. Job Satisfaction	.19**	.09	-.30	-.48**	.06	**.73**	
7. Turnover Intent	.34**	.04	-.11	-.32**	.08	.61**	**.81**

Coefficient Alphas are shown in bold on the diagonal.
* p < .05, ** p < .01

Reliability

Reliability analysis was conducted for the purpose of evaluating the internal consistency reliability for each of the seven measures using SPSS. All of the measures were reliable with stereotype threat perceptions as the highest internally consistent measure with a Cronbach's Alpha reliability coefficient of .87, followed by turnover intent (α = .81), gender identification (α = .80), job anxiety (α = .74), work specific self-efficacy and job satisfaction (α = .73), and job identification (α = .70). These reliability coefficient values are listed in Table 2.

Evaluation of Hypotheses

A structural equation modeling analysis (SEM) was performed through EQS based upon the obtained data. The hypothesized model is presented in Figure 1 where circles represent latent variables and rectangles represent measured variables. Absence of a line connecting two variables implies no direct effect. A seven-factor model is hypothesized with job identification, gender identification, stereotype threat perceptions, job anxiety, work specific self-efficacy, job satisfaction, and turnover intent as the factors. The hypothesized model

is shown in Figure 1. Support for the hypothesized model was determined by analyzing the extent of which the model fits the covariance matrix. If the proposed model did not fit, an adjusted model is recommended and discussed.

Parcel Determination

Due to the length of job identification, job satisfaction, and work specific self-efficacy measures, aggregates of their measurement items and subscales called parcels were used to increase the accuracy of the parameter estimates as well as to decrease the complexity of the model (Bandalos, 2002; Bandalos & Finney, 2001; Hall, Snell, & Foust, 1999). Different ideas exist concerning how to parcel measurement items. While using a theoretical rationale for parceling measurement items is preferred, random parcels may be used instead when no theoretical rationale exist (Hall, Snell, & Foust, 1999). A Exploratory Factor Analysis (EFA) using principle axis factors extraction with direct oblimin (delta = 0) was performed through SPSS FACTOR on 10 items from Job ID, 10 items from work specific self-efficacy, and 9 subscales from job satisfaction to determine how these items were parceled for SEM analysis. Factors that were extracted from each of the measures were used as parcels for the SEM

analysis. The maximum iterations for convergence were 25

for the factor analysis of each measure and the absolute

values displayed to less than .10 was suppressed.

Exploratory Factor Analysis Assumptions and Factorability of Measures

Prior to the factor analysis, the factorability of

the items for each measure was examined. Most of the 10

items of job identification were correlated with at least

one other item by a minimum Pearson r of .30 and a

determinant value of .015. Most of the items of work

specific self-efficacy were correlated with at least one

other item by a minimum Pearson r of .30 and a determinant

value of .044. Most of the nine subscales (pay, fringe

benefits, contingent rewards, supervision, coworkers,

promotion, operating conditions, nature of work, and

communication) of job satisfaction were mostly correlated

with at least one other item by a minimum Pearson r of .30

and determinant value of .024. This suggests that there is

no violation of multicollinearity and singularity as well

as there a reasonable factorability for each measure. The

Kaiser-Meyer-Olkin measure of sampling adequacy was .857

for work specific self-efficacy, .869 for job

satisfaction, and .905 for job identification which is

above the recommended value of .60. The Bartlett's Test of

Sphericity was significant (χ^2 (45) = 1100.889, p < .05)

for job identification, (χ^2 (45) = 818.795, p < .05) for

work specific self-efficacy, and for job satisfaction

(χ^2 (36) = 972.887, p < .05). Additionally, most of the

communalities for each item on the job identification and

work specific self-efficacy measures as well as the job

satisfaction subscales were above .30 further confirming

that most of the items on each scale shared some common

variance with other items (see Table 1). Given these

indicators, all items and subscales for each of the three

measures was used for factor analysis.

Job Identification Parcels

Only two factors were extracted from the factor

analysis of job identification. The initial eigenvalues

showed that the first factor explained 48.90% of the

variance and that the second factor explained 11.75% of

the variance (see Table 1). Due to the similarities of the

items that load on each factor, a theoretical label

distinction is unable to be created for each factor. So,

the first factor, which consists of items 1-7, is labeled

as JI 1. The second factor, which consists of items 8-10,

is labeled as JI 2.

Work Specific Self-efficacy Parcels

Like job identification, only two factors were extracted from the factor analysis of work specific self-efficacy. The initial eigenvalues showed that the first factor explained 41.77% of the variance. The second factor explained 11.43% of the variance. No theoretical explanations of why the items loaded on each factor as they did could be discerned. So, the first factor, which consists of items 1-6, is labeled as SE 1. The second factor consists of items 7-10 and is labeled as SE 2.

Job Satisfaction Survey Parcels

From the nine job satisfaction subscales, four factors were extracted. Initial eigenvalues showed that the first factor, which consisted of the nature of work and communication subscales, explained 47.80% of the variance. Both of these variables relate to the work environment. Therefore, this factor was labeled as environment. The second factor consisted of the pay, promotion, and fringe benefits subscales and it explained 13.23% of the variance. All three of these factors are a type of employee benefit. Due to this relationship, this factor was labeled as benefits. The third factor only consisted of the four-item operation subscale and it explained 9.39% of the variance. Finally, the fourth

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factor, which consisted of three subscales (supervisor, contingent rewards, and coworkers), explained 7.42% of the variance. This parcel was labeled a feedback due the fact that employees would need to have some kind of feedback from that other in order for their job satisfaction to be affected. Detailed results of the EFA analyses can be viewed in Appendix B.

Test of Structural Equation Modeling Assumptions

As previously indicated, the data was analyzed for missing values, univariate, and multivariate outliers, normality of sample distribution, and multicollinearity/singularity. All initial assumptions were met and only complete cases were used for this analysis ($N = 267$). Specific to SEM analysis, the data was additionally screened for multivariate normality using EQS. Mardia's normalized coefficient = 11.83, $p < .05$ indicated a violation of multivariate normality. Therefore, the Robust independent model chi-square was employed for model estimation. Furthermore, the EQS determinant value was greater than zero (.84) which provided additional evidence that multicollinearity was not violated.

Model Estimation

The independence model that tests the hypothesis that all variables are uncorrelated was rejected, Robust χ^2 (276, N = 267) = 2984.11, p < .05. The hypothesized model was tested next and marginal support was found for it, χ^2 (246, N = 267) = 743.22, p < .05, Robust CFI = .82, RMSEA = .087 (refer to Figure 1 for the hypothesized model).

Post hoc model modifications were performed to develop an improved hypothesized model to recommend for future research. The Lagrange Multiplier (LM) Test's with theoretical considerations were used as justification for adding four paths to the model. The path from job identification to job satisfaction as well as a path from job identification to turnover intent was added. Two cross loading paths were added. One was from job satisfaction to TI 3 of turnover intent. The other cross loading path was from the environment parcel of job satisfaction to turnover intent. The errors of TI 1 and TI 2 of turnover intent were allowed to covary. Additionally, two constraints were also added. A constraint on the errors of the two work specific self-efficacy parcels was added because EQS reported both of these error variables as

being constrained at the lower bound. The same was done for the errors of the two job identification parcels.

On the basis of the Wald's Test with theoretical consideration, three paths were removed from the model one at a time. The path from gender identification to job anxiety was dropped causing the gender identification factor to be removed from the model. The paths from job anxiety to turnover intent and from work specific self-efficacy to turnover intent were dropped as well.

After all the above changes were made, the model was re-estimated. The model significantly improved, χ^2 (84, N = 267) = 375.20, P < .001. The final estimated model fit the data well, χ^2 (162, N = 267) = 368.04, p < .05, Robust CFI = .92, RMSEA = .069. This estimated model and its coefficients can be viewed in Figure 2.
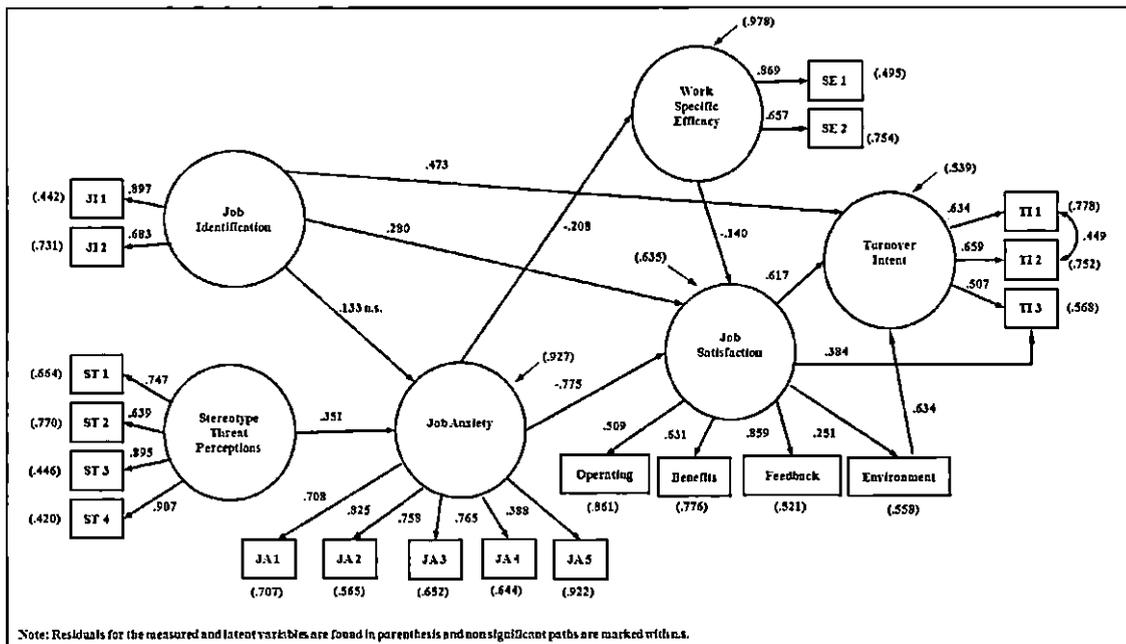
Figure 2. Estimated Model: Relationship between Job
Identification, Gender Identification, Stereotype Threat
Perceptions, Job Anxiety, Job Satisfaction, Work Specific
Self-efficacy, and Turnover Intent

Structural Paths

The SEM results provided support for Hypothesis1.
Stereotype threat perceptions significantly predicted job
anxiety (β = .35, p < .05). However, Hypothesis 2 and 3
were not supported. Job identification did not
significantly predict job anxiety (β = .13, p > .05), but
it did have a small effect so it was left in the model to
further test in future research (Cohen, 1994). However,
job identification did significantly predict job
satisfaction (β = .28, p < .05) and turnover intent

(β = .473, p < .05). Details about these unhypothesized relationships are reviewed later. As aforementioned, the Wald's Test suggested that the path from gender identification and job anxiety be dropped; thus, indicating that the model did not support Hypothesis 3.

As suggested, job anxiety significantly predicted work specific self-efficacy (β = -.21, p < .05) and job satisfaction (β = -.78, p < .05) providing support for Hypotheses 4 and 5. Yet, job anxiety did not have a direct effect on turnover intent as this path was dropped due to the suggestion of the Wald Test. So, Hypothesis 7 was not supported. Hypothesis 6 was supported. Work specific self-efficacy significantly predicted job satisfaction (β = -.14, p < .05). As suggested by the Wald Test, the path leading from work specific self-efficacy to turnover intent was removed from the model indicating that Hypothesis 8 was not supported. Furthermore, Hypothesis 9 was supported. Job satisfaction significantly predicted turnover intent (β = .62, p < .05).

The significance of the intervening variables was evaluated using tests of indirect effects in EQS in order to better understand the relationships that predicted the ultimate outcome of turnover intent. Job anxiety indirectly predicted turnover intent with job satisfaction

fully intervening in this relationship (β = -.46, p < .05). This provides partial support for Hypothesis 7 which posited that job anxiety would directly predict turnover intent. With a small effect, yet statistically significant, stereotype threat perceptions also indirectly predicted turnover intent with both job anxiety and job satisfaction serving as intervening variables (β = -.16, p < .05). However, job identification (β = .11, p > .05) and work specific self-efficacy (β = -.09, p > .05) did not indirectly predict turnover intent. A detailed table depicting these results can be viewed in Appendix C.

Supplemental Analysis

Since gender identification was removed from the model at the suggestion of the Wald's Test, it was analyzed as a moderator of stereotype threat perceptions and job anxiety as conceptually indicated by the stereotype threat literature (Roberson & Kulik, 2007). The moderation of job identification on stereotype threat perceptions and job anxiety was also tested. A sequential linear regression analysis was performed to test if stereotype threat had impacted job anxiety depending on how strongly participants identified with their gender.

Test of Regression Assumptions

As previously discussed, the assumptions form missing values, outliers, and normality of sample distributions were met. The residual scatterplot was assessed for violations of normality, linearity, and homoscedasticity. These assumptions were all met. Data from all 267 participants was used for this analysis.

Regression Results

The regression was run using SPSS. Results from the analysis indicated that gender identification did not significantly moderate the relationship between stereotype threat perceptions and job anxiety (β = .02, t (265) = .37, p > .05). Also, job identification did not significantly moderate the relationship between stereotype threat perceptions and job anxiety (β = -.08, p > .05). Detailed results of these supplemental analyses can be viewed in Appendix D.

CHAPTER FOUR

DISCUSSION

The purpose of this study was to test a model that outlines how stereotype threat perceptions may operate in the workplace to facilitate turnover intentions. A hypothesized model showing the relationship between stereotype threat perceptions, job identification, gender identification, job anxiety, work specific self-efficacy, job satisfaction, and turnover intent was tested. Partial support was found for the hypothesized model. Modifications based on statistical tests and theoretical relevance was made, and a better fitting model was presented for future research.

Hypothesis 1, which proposed that stereotype threat perceptions would significantly predict job anxiety, was supported. This model indicated a direct relationship between stereotype threat and job anxiety where stereotype threat perceptions increased job anxiety. This result was consistent with the conceptual understanding of stereotype threat and how it operates to decrease performance. Stereotype threat studies that attempted to test this relationship often yielded mixed results where researchers found either that there was no meditational effect of

anxiety (Spencer, Steele, & Quinn, 1999), partial mediation of anxiety (Osborne, 2001), or that stereotype threat effects only occurred when individuals had high anxiety (Delgado & Prieto, 2008). These mixed results may be due to various issues. One may pertain to the theorization of how anxiety affects performance. Some research suggested that anxiety has an effect on performance because it hinders the working memory capacity of individuals (Osborne, 2006). Other research suggested that anxiety affected performance because it triggered the biological stress response where cortisol floods the body (Ben-Zeev, 2010). The study design may also be a reason behind these mixed results. For example, one study measured anxiety levels after performing a task in a stereotype threat condition rather than before (Stone et al., 1999). The various measures used to test for anxiety could also be a reason why stereotype threat did not always predict anxiety. Some studies used self-reported measures (Chung et al., 2009; Spencer et al., 1999) while others used physiological indicators of anxiety (Osborne, 2006). However, the present study directly supported anxiety as an underlying mechanism of stereotype threat and negative performance outcomes, hence adding to the

literature by providing additional theoretical support to
the construct.

As previously reviewed, stereotype threat literature
suggested that there were individual conditions that would
make a person more sensitive to stereotype threat. Two of
those conditions were domain and group identification. The
job was the domain and women were the targeted group for
this study. In order to be consistent with the literature
and replicate previous study outcomes, Hypothesis 2
proposed that job identification would predict job anxiety
and Hypothesis 3 proposed that gender identification would
also predict job anxiety. Neither hypotheses were
supported. There were three possible reasons why these
variables did not work in the model as predicted. The
first and primary reason concerns the change in study
design. An experimental design, which is typical of
stereotype threat studies, would have permitted better
control of the gender and job identification variables;
whereas, a correlational study would not. A second reason
for these results pertains to having an educated sample.
Approximately 80% of the participants had a college degree
with 43% of them with graduate degrees. This could have
made the participants less salient to gender and job
identification.

While the results of gender and job identification are not consistent with past study outcomes, it is consistent with the conceptualization of these boundary conditions. As previously stated, these conditions primarily serve to make an individual more sensitive to stereotype threat. These results suggest that a female employee does not have to strongly identify with her job nor her gender to be more vulnerable to stereotype threat perceptions and the resulting negative outcomes. They are vulnerable to stereotype threat regardless of whether or not they strongly identified with their job and gender. This also suggests that there may be certain contexts where having high group and domain identification does not have an impact on stereotype vulnerability, which is the third reason why these two variables did not work in the model (Ben-Zeev, 2010).

Job identification directly predicted job satisfaction suggesting that employees who were strongly identified with their job tended to exhibit more contentment with their work. Job identification also strongly predicted turnover intent. This implied that an employees' identification with her job influences her desire to remain with the organization. Not much research theorization was available to further explain this

relationship. However, logical inference suggests that an employee that is highly identified with the job may lead to a strong organizational identification, which research has shown to be predictive of employee retention (Van Knippenberg, Van Dick, & Tavares, 2007). Future research should further analyze this relationship within the context of stereotype threat perceptions.

Stereotype threat effects typically have been measured using performance outcomes (Shapiro & Neuberg, 2007). Due to its strong correlation with performance, self-efficacy was used as a performance indicator in this study in order to replicate the results of past studies. As proposed in Hypothesis 4, job anxiety significantly predicted decreased work specific self-efficacy. This relationship implies that when an employee experiences job anxiety as a direct effect of stereotype threat perceptions, her confidence in her ability to perform at work decreases. Hence, work performance decreases. This was consistent with stereotype threat research which adds to construct validity (Chung et al., 2009).

Work specific self-efficacy directly predicted job satisfaction. In addition, job anxiety directly predicted job satisfaction. This supports both Hypothesis 5 and Hypothesis 6, respectively. This illustrates that an

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employee that displays high job anxiety may elicit
decreased job satisfaction as well as decreased work
specific self-efficacy. An employee with decreased work
specific self-efficacy may also experience decreased job
satisfaction. The relationship found between work specific
self-efficacy and job satisfaction was consistent with
previous research outcomes (Riggs et al., 1994). The
outcomes stemming from job anxiety provides a lead for
future research. Not much literature existed that analyzes
job related anxiety. Organizational literature that
focuses on an employee's work-related emotional distress
tends to focus on occupational stress rather than job
anxiety. While there may be a strong correlation between
stress and anxiety, they are still different constructs,
and future research should fully distinguish between the
two.

A direct relationship between work specific
self-efficacy and turnover intent was not supported as
suggested for Hypothesis 8. However, Hypothesis 7, which
predicted a direct relationship, was partially supported.
Job anxiety indirectly predicted turnover intent with job
satisfaction fully intervening this relationship.
Moreover, job satisfaction also predicted turnover intent
as proposed in Hypothesis 9. These results added more

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validity to the research supported relationship between job satisfaction and turnover intent (Tett & Meyer, 1993).

Study Strengths/Limitations

The primary limitation to the present study is that it was a correlational study and not a true experiment. The participants were not randomly assigned to a condition and their work environment was neither manipulated nor controlled to produce cause and affect outcomes (Coolican, 2004). Most stereotype threat studies are true experiments in which participants are randomly assigned to either a stereotype threat condition or a no threat condition. However, this is also a strength of the study. One of the goals of this study was to apply stereotype threat to the workplace by applying it to a realistic environment. A correlational study is better suited for this purpose rather than an experiment.

Also, stereotype threat studies typically compare the performance outcomes of participants that are both part of the stereotype targeted group as well as a group in which the stereotype does not target. This was another limitation to the present study. Only participants that were part of the group which the stereotype targeted were used.

Another potential limitation involves sample representation of the population. Only women who worked at the time that they participated in the study were selected, but results from the demographic data suggest that the participants for this study could be more representative of the working women population. As aforementioned, approximately 80% of the participants had a college degree with 43% of them with graduate degrees. This suggests that these participants may be primarily professionals in their area of work. Future studies should have a sample in which fewer participants have advanced degrees. This may yield slightly different results or it may just add to the validity of the estimated model.

Recommendations for Practice and Future Research

The overall study reinforced the notion that stereotype threat perceptions could operate in the workplace and influence an employees' decision to leave the organization. When faced with high turnover rates and typical retention efforts are not effective, management should look closer at the attitudes and perceptions of their employees about the workplace. As indicated by this study, management should focus retention efforts toward designing interventions to mitigate stereotype threat

perceptions. Two strategies supported by stereotype threat research suggest that interventions to reduce the stereotype threat effects at work should be centered on self-affirmation and the use of role models. The first strategy implies that management should ensure that employees' are aware of their value to the organization. This serves to re-affirm their self worth to the organization and increase their confidence at work which buffers the negative outcomes associated with stereotype threat (Schimel, Arndt, Bonko, & Cook, 2004). Another suggestion for management is to provide exemplary role models that are representative of the various social groups within the organization, especially for minority social groups. This has been shown to reduce the effects of stereotype threat (Marx et al., 2005).

As previously discussed in detail, a hypothesized model was tested and partial support was found (See Figure 1). Post hoc modifications were made and a better fitting model was estimated (See Figure 2). This estimated model suggested that job and gender identification did not have a strong relationship with job anxiety. Specifically, gender identification did not fit in the model. Job identification was shown to have a main effect on job satisfaction as well as turnover intent. Additionally, the

results from the estimated model suggested that there were no direct effect of job anxiety and work specific self-efficacy on turnover intent, but rather these two relationships were fully mediated by job satisfaction. A primary recommendation for future research is to re-test the estimated model using a different and more representative sample to confirm its validity. Furthermore, potential theoretical basis for the relationship between job identification, job satisfaction, and turnover intent should be reviewed. This will aid in developing a better understanding of how job identification works within the context of stereotype threat, add to the small existing literature on this construct, and further aide management in developing better interventions to mitigate the stereotype threat effects.

APPENDIX A

SUMMARY OF DEMOGRAPHIC VARIABLES

Summary of Demographic Variables

		Frequency	Percent	Mean	SD
Gender					
Female		100	100		
Male		0	0		
Age	18-66			35.56	11.08
Ethnicity					
American Indian		7	2.6		
African American		15	5.6		
Latino		15	5.6		
White		204	76.4		
Native Hawaiian		2	0.7		
Asian		10	3.7		
Other		9	3.4		
Education					
Some High school		1	0.4		
High school		3	1.1		
Some college		42	15.7		
AA		16	6		
BA		82	30.7		
MA/MS		75	28.1		
Doctorate		40	15		
Post Doctorate		4	1.5		
Position Tenure					
Years	0-30			3.76	4.71
Months	0-11			5.16	3.39
Organizational Tenure					
Years	0-30			4.82	5.69
Months	0-11			5.08	3.47
Marital Status					
Boyfriend/Girlfriend		52	19.5		
Single		61	22.8		
Married		117	43.8		
Divorced		27	10.1		
Separated		4	1.5		
Widow		2	0.7		
Position					
Manager		38	14.2		
Supervisor		36	13.5		
Neither		189	70.8		
Weekly Hours	8-80			39.88	11.05

Summary of Demographic Variables (Continued)

	Frequency	Percent	Mean	SD
Job Category				
Marketing	4	1.5		
Communications	4	1.5		
Retail/Sales	9	3.4		
Labor Relations	3	1.1		
IT	4	1.5		
Manufacturing/Operations	1	0.4		
Product/Design	16	6		
Software Engineering	1	0.4		
HealthCare	36	13.5		
Finance	6	2.2		
Supply/Chain	3	1.1		
Research	49	18.4		
Human Resources	7	2.6		
Legal	6	2.2		
Education	42	15.7		
Other	74	27.7		
Student				
Yes	70	26.2		
No	194	72.7		

APPENDIX B

EXPLORATORY FACTOR ANALYSIS TABLES

Factor Loadings, Communalities (h2), and Percents of Variance for Principal Factor Extractions and Oblimin Rotation on measurement items and subscales.

Job Satisfaction

Subscale	F1	F2	F3	F4	h2	Determinant	KMO	Bartletts
Supervisor	-0.03	0.03	-0.03	-0.83	0.95	0.024	0.869	x2(36) = 972.887 p < .05
Contingent Rewards	0.37	0.03	0.19	-0.51	0.68			
Coworkers	0.04	0.24	0.23	-0.40	0.49			
Pay	0.81	0.15	0.11	0.11	0.54			
Promotion	0.51	0.28	0.03	-0.10	0.50			
Fringe	0.65	-0.10	-0.06	-0.06	0.30			
Operating	-0.01	-0.03	0.76	-0.01	0.24			
Nature	0.02	0.67	-0.06	-0.03	0.30			
Communication	0.02	0.55	0.21	-0.12	0.50			

Job Identification

Item	F1	F2	F3	F4	h2	Determinant	KMO	Bartletts
Item 1	0.38	0.37			0.40	0.015	0.905	x2 (45) = 1100.889 p < .05
Item 2	0.40	0.36			0.40			
Item 3	0.79	-0.04			0.51			
Item 4	0.64	0.23			0.59			
Item 5	0.51	0.34			0.55			
Item 6	0.72	-0.06			0.42			
Item 7	-0.80	0.10			0.43			
Item 8	-0.14	0.73			0.29			
Item 9	0.25	0.60			0.50			
Item 10	0.28	0.46			0.39			

Work Specific Self-Efficacy

Item	F1	F2	F3	F4	h2	Determinant	KMO	Bartletts
Item 1	0.50	0.31			0.47	0.044	0.857	x2(45) = 818.795 p < .05
Item 2	0.68	-0.03			0.36			
Item 3	0.62	-0.14			0.23			
Item 4	0.57	0.19			0.45			
Item 5	0.63	0.19			0.50			
Item 6	0.46	0.27			0.39			
Item 7	0.31	0.39			0.46			
Item 8	0.14	0.41			0.26			
Item 9	-0.01	0.72			0.35			
Item 10	-0.05	0.57			0.24			

APPENDIX C

INDIRECT EFFECTS TABLE

Unstandardized, Standardized Coefficients of Indirect Effects of Model 2
Found in Figure 2

Parameter Estimate (N = 267)	B	β	t-Statistic	SE B
JI ⇒ TO	.03	.11	1.82	.02
STP ⇒ TO	-.27	-.16	-3.63*	.07
JA ⇒ TO	-.98	-.46	-6.45*	.15
SE ⇒ TO	-.05	-.09	-2.42	.02

* p < .05

APPENDIX D

TABLES FOR SUPPLEMENTAL ANALYSES

Sequential Multiple Regression of Stereotype Threat Perceptions (STP) and Gender Identification (GI) on Job Anxiety (JA): Statistics for Final Model

Variable (N = 267)	STP	GI	JA (DV)	B	SE B	β	ΔF	P-value
STP		.00	.30**	.29	.06	.30	26.09	.00
GI			-.05	-.03	.06	-.03	.25	.62
GI X ST				.02	.06	.02	.14	.71
Means	9.90	15.46	11.86			$R^2 = .09$ Adjusted $R^2 = .08$		
Standard deviations	4.28	3.25	3.51			R = .30 GI X STP R square change = .00		

Sequential Multiple Regression of Stereotype Threat Perceptions (STP) and Job Identification (JI) on Job Anxiety (JA): Statistics for Final Model

Variable (N = 267)	STP	JI	JA (DV)	B	SE B	β	ΔF	P-value
STP		.18**	.29**	.29	.06	.30	26.09	.00
JI			.24**	.06	.06	.06	1.07	.30
JI X STP				-.08	.06	-.08	1.93	.17
Means	9.90	30.02	11.86			$R^2 = .10$ Adjusted $R^2 = .09$		
Standard deviations	4.28	8.15	3.51			R = .32 JI X STP R square change = .01		

APPENDIX E

MEASURES USED

Job Involvement Questionnaire

Rating Scale: 1 (Strongly disagree) to 6 (strongly agree)

1. The most important things that happen to me involve my present job.

2. To me, my job is only a small part of who I am. (R)

3. I am very much involved personally in my job.

4. I live, eat, and breathe my job.

5. Most of my interests are centered around my job.

6. I have very strong ties with my present job that would be difficult to break.

7. Usually I feel detached from my job. (R)

8. Most of my personal life goals are job-oriented.

9. I consider my job to be very central to my existence.

10. I like to be absorbed in my job most of the time.

Kanungo, R. (1982). Measurement of job and work involvement. *Journal of Applied Psychology, 67*, 341-349.

Gender Identification Items

Rating Scale: 1(strongly disagree) to 5 (strongly agree)

1. Being a woman is an important part of my self-image.

2. Being a woman is unimportant to my sense of what kind of person I am.

3. Being a woman is an important reflection of who I am.

4. Being a woman has very little to do with how I feel about myself.

Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology, 38*, 194-201.

Perceptions of Stereotype Threat at Work

Rating Scale: 1 (strongly disagree) to 5 (strongly agree)

	Chung et al. (2009) Original Items	Adjusted Items
1	In testing situations, I worry that people will draw conclusions about my ethnic group based on my performance.	At work, I worry that people will draw conclusions about my gender based on my performance.
2	I often think about issues concerning ethnicity.	I often think about work issues concerning women.
3	I often feel that people's evaluations of my behavior are based on the ethnic group to which I belong.	I often feel that people's evaluations of my behavior are based upon the gender group to which I belong.
4	In testing situations, I worry that people will draw conclusions about me based on what they think about my ethnic group.	At work, I worry that people will draw conclusions about me based upon what they think about my gender group.

Chung, B., Ehrhart, M., Ehrhart, K., Hattrup, K., & Solamon, J. (2009).

Stereotype threat, state anxiety, and specific self-efficacy as predictors

of promotion exam performance. *Group Organization Management, 35,*

77-107.

Job-Related Feelings of Anxiety (JRFA) Subscale

Rating Scale: 1(strongly disagree) to 4 (strongly agree)

1. I have felt fidgety or nervous as a result of my job.
2. My job gets to me more than it should.
3. There are lots of times when my job drives me right up the wall.
4. Sometimes when I think about my job, I get a tight feeling in my chest
5. I feel guilty when I take time off from job.

Parker, D, & Decotus, T. (1983). Organizational determinants of job stress.

Orgnaizational Behavior and Human Performance, 32, 160-177.

Job Satisfaction Survey

	JOB SATISFACTION SURVEY Paul E. Spector Department of Psychology University of South Florida 	
	PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.	Disagree very much / Disagree moderately / Disagree slightly / Agree slightly / Agree moderately / Agree very much
1	I feel I am being paid a fair amount for the work I do.	1 2 3 4 5 6
2	There is really too little chance for promotion on my job.	1 2 3 4 5 6
3	My supervisor is quite competent in doing his/her job.	1 2 3 4 5 6
4	I am not satisfied with the benefits I receive.	1 2 3 4 5 6
5	When I do a good job, I receive the recognition for it that I should receive.	1 2 3 4 5 6
6	Many of our rules and procedures make doing a good job difficult.	1 2 3 4 5 6
7	I like the people I work with.	1 2 3 4 5 6
8	I sometimes feel my job is meaningless.	1 2 3 4 5 6
9	Communications seem good within this organization.	1 2 3 4 5 6
10	Raises are too few and far between.	1 2 3 4 5 6
11	Those who do well on the job stand a fair chance of being promoted.	1 2 3 4 5 6
12	My supervisor is unfair to me.	1 2 3 4 5 6
13	The benefits we receive are as good as most other organizations offer.	1 2 3 4 5 6
14	I do not feel that the work I do is appreciated.	1 2 3 4 5 6
15	My efforts to do a good job are seldom blocked by red tape.	1 2 3 4 5 6
16	I find I have to work harder at my job because of the incompetence of people I work with.	1 2 3 4 5 6
17	I like doing the things I do at work.	1 2 3 4 5 6
18	The goals of this organization are not clear to me.	1 2 3 4 5 6

19	I feel unappreciated by the organization when I think about what they pay me.	1 2 3 4 5 6
20	People get ahead as fast here as they do in other places.	1 2 3 4 5 6
21	My supervisor shows too little interest in the feelings of subordinates.	1 2 3 4 5 6
22	The benefit package we have is equitable.	1 2 3 4 5 6
23	There are few rewards for those who work here.	1 2 3 4 5 6
24	I have too much to do at work.	1 2 3 4 5 6
25	I enjoy my coworkers.	1 2 3 4 5 6
26	I often feel that I do not know what is going on with the organization.	1 2 3 4 5 6
27	I feel a sense of pride in doing my job.	1 2 3 4 5 6
28	I feel satisfied with my chances for salary increases.	1 2 3 4 5 6
29	There are benefits we do not have which we should have.	1 2 3 4 5 6
30	I like my supervisor.	1 2 3 4 5 6
31	I have too much paperwork.	1 2 3 4 5 6
32	I don't feel my efforts are rewarded the way they should be.	1 2 3 4 5 6
33	I am satisfied with my chances for promotion.	1 2 3 4 5 6
34	There is too much bickering and fighting at work.	1 2 3 4 5 6
35	My job is enjoyable.	1 2 3 4 5 6
36	Work assignments are not fully explained.	1 2 3 4 5 6

Spector, P. (2001, October). *Job satisfaction survey*. In The University of

South Florida Web site. Retrieved January 25, 2009, from

http://chuma.cas.usf.edu/~spector/scales/jssovr.html

Work-Specific Efficacy Beliefs Scale

Rating Scale: 1 (strongly disagree) to 7 (strongly agree)

1. I have confidence in my ability to do my job.

2. There are some tasks required by my job that I cannot do well.

3. When my performance is poor, it is due to my lack of ability.

4. I doubt my ability to do my job.

5. I have all the skills needed to perform m job very well.

6. Most people in my line of work can do this job better than I can.

7. I am an expert at my job.

8. My future in this job is limited because of my lack of skills.

9. I am very proud of my job skills and abilities.

10. I feel threatened when others watch me at work.

Riggs, M., Warka, J., Babasa, B., & Betancourt, R. (1994) Development and validation of self-efficacy and outcome expectancy scales for job-related applications. *Educational and Psychological Measurement, 54*, 793-802.

Turnover Intent Items

Rating Scale: 0 (strongly disagree) to 6 (strongly agree)

1. I intend to remain with this job indefinitely.

2. I intend to leave this job at the end of the year.   .

3. I would leave this job if I could.

Pinel, E., & Paulin, N. (2005). Stigma consciousness at work. *Basic and*

Applied Social Psychology, 27, 345-352.

Demographic Items

1. How old are you?
2. What is your race/ethnicity?
   a. American Indian or Alaskan Native
   b. Non-Latino Black or African American
   c. Hispanic or Latino
   d. Non-Latino White
   e. Native Hawaiian or Pacific Islander
   f. Asian
   g. Other _____
3. What is your relationship/marital status?
   a. Boyfriend/Girlfriend
   b. Single
   c. Married
   d. Divorced
   e. Separated
4. Are you currently a student?
5. Please select your highest level of education
   a. Some high school
   b. High school diploma
   c. Some college
   d. Associates degree
   e. Undergraduate degree
   f. Masters degree
   g. Doctorate degree
   h. Post-Doctoral degree
   i. Other
6. At work, are you a manager or supervisor?
   a. Yes.
   b. No, I'm a staff worker.
7. On average, how many hours do you work per week? _____
8. Approximately how long have you worked at the current organization?
   _____(years) _____ (months)
9. Approximately how long have you worked in your current position?
   _____(years) _____(months)

10. Please select the best category that describes your current organization?
    a) Marketing
    b) Communications
    c) Retail/Sales
    d) Labor Relations
    e) Information Technology/Systems
    f) Manufacturing/ Operations. Mfg./Operating Engineering
    g) Product/Design Engineering
    h) Customer Service
    i) Software Engineering
    j) Health care
    k) Finance
    l) Supply/Chain Purchasing
    m) Research
    n) Human Resources
    o) Legal
    p) Education
    q) Other

REFERENCES

Abelson, M., & Baysinger, B. (1983). Optimal and
   dysfunctional turnover: Toward an organizational
   level model. *The Academy of Management Review, 9,*
   331-341.

Agars, M (2004). Reconsidering the impact of gender
   stereotypes on the advancement of women in
   organizations. *Psychology of Women Quarterly, 28,*
   103-111.

Aronson, J., Justina, M., Good, C., Keough, K., Steele,
   C., & Brown, J. (1999). When White men can't do math:
   Necessary and sufficient factors in stereotype
   threat. *Journal of Experimental Social Psychology,*
   35, 29-46.

Bandalos, D. (2002). The effects of item parceling on
   goodness-of-fit and parameter estimate bias in
   structural equation modeling. *Structural Equation*
   Modeling, 9(1), 78-102.

Bandalos, D. L., & Finney, S. J. (2001). Item parceling
   issues in structural equation modeling. In G. A.
   Marcoulides & R. E. Schumacker (Eds.), *Advanced*
   structural equation modeling: New developments and
   techniques. Mahwah, NJ: Lawrence Erlbaum Associates,
   Inc.

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran

    (Ed.), *Encyclopedia of human behavior* (Vol. 4,

    pp. 71-81). New York: Academic Press. (Reprinted in

    H. Friedman [Ed.], *Encyclopedia of mental health*. San

    Diego: Academic Press, 1998). Retrieved February 20,

    2009, from http://www.des.emory.edu/mfp/BanEncy.html

Bandura, A. (2001). Social cognitive theory: An agentic

    perspective. *Annual Review of Psychology, 52,* 1-26.

Ben-Zeev, A. (2010, November 15). Blinded by science: Are

    women intrinsically inferior to men in quantitative

    reasoning? California State University San

    Bernardino, San Bernardino, California.

Bergeron, D., Block, C., & Echtenkamp, B. (2006).

    Disabling the able: Stereotype threat and women's

    work performance. *Human Performance, 19,* 133-158.

Blascovich, J., Spencer, S., Quinn, D., & Steele, C.

    (2001). African-Americans and high blood pressure:

    The Role of stereotype threat. *Psychological Science,*

    12, 225-229.

Bosson, J., Haymovitz, E., & Pinel, E. (2004). When saying

    and doing diverge: The effects of stereotype threat

    on self-reported versus non-verbal anxiety. *Journal*

    of Experimental Social Psychology, 40, 247-255.

Brown, R., & Pinel, E. (2003). Stigma on my mind: Individual differences in the experience of stereotype threat. *Journal of Experimental Social Psychology, 39,* 626-633.

Cadinu, M., Maass, A., Rosabianca, A., & Kiesner, J. (2005). Why do women underperform under stereotype threat? *Psychological Science, 16,* 572-578.

Cascio, W. (1998). *Managing human resources: Productivity, quality of work life, profits* (5th ed.). New York: McGraw-Hill.

Chung, B., Ehrhart, M., Ehrhart, K., Hattrup, K., & Solamon, J. (2009). Stereotype threat, state anxiety, and specific self-efficacy as predictors of promotion exam performance. *Group Organization Management, 35,* 77-107.

Cocchiara, F., & Quick, J. (2004). The negative effects of positive stereotypes: ethnicity□related stressors and implications on organizational health. *Journal of Organizational Behavior, 25,* 781-785.

Cohen, J. (1994). The earth is round (p < .05). *American Psychologist, 49,* 997-1003.

Coolican, H. (2004). *Research methods and statistics in psychology,* (4th ed.), London: Hodder & Stoughton.

Davies, P., Spencer, S., Quinn, D., & Gerhardstein, R.

    (2002). Consuming images: How television commercials

    that elicit stereotype threat can restrain women

    academically and professionally. *Personality and*

    Social Psychology Bulletin, 28, 1615-1628.

Delgado, A., & Prieto, G. (2008). Stereotype threat as

    validity threat: The anxiety-sex-threat interaction.

    Intelligence, 36, 635-640.

Friedman, R., & Holtom, B. (2002). The effects of network

    groups on minority employee turnover intentions.

    Human Resource Management, 41, 405-421.

Girasoli, A., & Hannafin, R. (2008). Using asynchronous AV

    communication tools to increase academic

    self-efficacy. *Computers & Education, 51,* 1676-1682.

Glebbeek, A., & Bax, E. (2004). Is high turnover really

    harmful? An empirical test using company records.

    Academy of Management Journal, 47, 277-286.

Griffeth, R., Hom, P., & Gaertner, S. (2000). A

    meta-analysis of antecedents and correlates of

    employee turnover: Update, moderator tests, and

    research implications for the next millennium.

    Journal of Management, *26,* 463-488.

Hall, R., Snell, A., & Foust, M. (1999). Item parceling strategies in SEM: Investigating the subtle effects of unmodeled secondary constructs. *Organizational Research Methods, 2,* 233-256.

Inzlicht, M., & Ben-Zeev, T. (2000). A threatening intellectual environment: Why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychological Science, 11,* 365-371.

Inzlicht, M., McKay, L., & Aronson, J. (2006). Stigma as ego depletion: How being the target of prejudice affects self-control. *Psychological Science, 17,* 262-269.

Judge, T., & Bono, J. (2001). Relationship of core self-evaluations traits-self-esteem, generalized self efficacy, locus of control, and emotional stability-with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86,* 80-92.

Judge, T., Jackson, C., Shaw, J., Scott, B., & Rich, B. (2007). Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Social Psychology, 92,* 107-127.

Kanungo, R. (1982). Measurement of job and work

    involvement. *Journal of Applied Psychology, 67,*

    341-349.

Klein, F., Mendoza, M., & Allers, K. (2008). Giving

    notice: *Why the best and the brightest leave the*

    workplace and how you can help them stay. San

    Francisco: Jossey-Bass.

Kline, R. (2005). *Principles and practice of structural*

    equation modeling, (2nd ed.). New York: Guilford.

Level Playing Field Institute. (2006). *The corporate*

    leavers survey: The cost of employee turnover due

    solely to unfairness in the workplace. San Francisco:

    Level Playing Field Institute.

Level Playing Field Institute and University of

    Connecticut Center for Survey Research & Analysis.

    (2003). *The HOW-FAIR study 2003: How opportunities in*

    the workplace and fairness affect intergroup

    relations. San Francisco: Level Playing Field

    Institute and Storrs, Conn.: University of

    Connecticut Center for Survey Research & Analysis.

Maertz, C., & Campion, M. (1998). 25 years of voluntary

    turnover research: A review and critique. In C. L.

    Cooper, & I. T. Robertson (Eds.), International

    review of industrial and organizational psychology

    (Vol. 13, pp. 43-83). Chichester: Wiley.

Maertz, C., & Griffeth, R. (2004). Eight motivational

    forces and voluntary turnover: A theoretical

    synthesis with implications for research. *Journal of*

    Management, 30, 667-683.

Martocchio, J. (1994). Effects of conceptions of ability

    on anxiety, self-efficacy, and learning in training.

    Journal of Applied Psychology, 79, 819-825.

Marx, D., Stapel, D., & Muller, D. (2005). We can do it:

    The interplay of construal orientation and social

    comparison under threat. *Journal of Personality and*

    Social Psychology, 88, 432-446.

Multon, K., Brown, S., & Lent, R. (1991). Relation of

    self-efficacy beliefs to academic outcomes: a

    meta-analytic investigation. *Journal of Counseling*

    Psychology, 38, 30-38.

Osborne, J. (2001). Testing stereotype threat: Does

    anxiety explain race and sex differences in

    achievement? *Contemporary Educational Psychology, 26,*

    291-310.

Osborne, J. (2006). Gender, stereotype threat and anxiety: Psychophysiological and cognitive evidence. *Journal of Research in Educational Psychology, 8,* 109-138.

Osborne, J. (2007). Linking stereotype threat and anxiety. *Educational Psychology, 27,* 135-154.

Osborne, J., & Walker, C. (2006). Stereotype threat, identification with academics, and withdrawal from school: Why the most successful students of color might be the most likely to withdraw. *Educational Psychology, 26,* 563-577.

Oswald, D., & Harvey, R. (2000). Hostile environments, stereotype threat, and math performance among undergraduate women. *Current Psychology: Developmental, Learning, Personality, Social, 19,* 338-356.

Pajares. F. (2002). *Overview of social cognitive theory and of self-efficacy.* Retrieved February 27, 2009, from http://www.emory.edu/EDUCATION/mfp/eff.html

Parker, D., & Decotus, T. (1983). Organizational determinants of job stress. *Orgnaizational Behavior and Human Performance, 32,* 160-177.

Pinel, E., & Paulin, N. (2005). Stigma consciousness at work. *Basic and Applied Social Psychology, 27,* 345-352.

Ployhart, R., Ziegert, J., & McFarland, L. (2003). Understanding racial differences on cognitive ability tests in selection contexts: An integration of stereotype threat and applicant reactions research. *Human Performance, 16,* 231-259.

Powell, G., Butterfield, D., & Parent, J. (2001). Gender and managerial stereotypes: Have the times changed? *Journal of Management, 28,* 177-193.

Riggs, M., & Knight, P. (1994). The impact of perceived group success-failure on motivational beliefs and attitudes: A causal model. *Journal of Applied Psychology, 79,* 755-766.

Riggs, M., Warka, J., Babasa, B., & Betancourt, R. (1994) Development and validation of self-efficacy and outcome expectancy scales for job-related applications. *Educational and Psychological Measurement, 54,* 793-802.

Roberson, L., & Kulik, C. (2007). Stereotype threat at work. *Academy of Management Perspectives, 21,* 24-40.

Roberson, L., Deitch, E., Brief, A., & Block, C. (2003).
Stereotype threat and feedback seeking in the
workplace. *Journal of Vocational Behavior, 62,*
176-188.

Rosenthal, H., Crisp, R., & Suen, M. (2007). Improving
performance expectancies in stereotypic domains: Task
relevance and the reduction of stereotype threat.
European Journal of Social Psychology, 37, 586-597.

Schimel, J., Arndt, J., Banko, K. M., & Cook, A. (2004).
Not all self-affirmations were created equal: The
cognitive and social benefits of affirming the
intrinsic (vs. extrinsic) self. *Social Cognition, 22,*
75-99.

Schmader, T. (2002). Gender Identification Moderates
Stereotype Threat Effects on Women's Math
Performance. *Journal of Experimental Social
Psychology, 38,* 194-201.

Shapiro, J., & Neuberg, S. (2007). From stereotype threat
to stereotype threats: Implications of a multi-threat
framework for causes, moderators, mediators,
consequences, and interventions. *Personality and
Social Psychology Review, 11,* 107-130.

Shaw, J., Gupta, N., & Delery, J. (2005) Alternative
Conceptualizations of the Relationship between
Voluntary Turnover and Organizational Performance.
Academy of Management Journal, *48*, 50-68.

Smith, J. (2004). Understanding the process of stereotype
threat: A review of mediational variables and new
performance goal directions. *Educational Psychology
Review, 16*, 177-206.

Spector, P. (2001, October). *Job satisfaction survey*. In
The University of South Florida Web site. Retrieved
January 25, 2009, from http://chuma.cas.usf.edu/
~spector/scales/jssovr.html

Spencer, S., Steele, C., & Quinn, D. (1999). Stereotype
threat and women's math performance. *Journal of
Experimental Social Psychology, 35*, 4-28.

Stajkovic, A., & Luthans, F. (1998). Self-efficacy and
work-related performance: A meta-analysis.
Psychological Bulletin, 124, 240-261.

Steele, C. M. (1997). A threat in the air: How stereotypes
shape intellectual identity and performance. *American
Psychologist, 52*, 613-629.

Steele, C., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 85,* 440-452.

Stone, J. (2002). Battling doubt by avoiding practice: The Effect of stereotype threat on self-handicapping in white athletes. *Personality and Social Psychology Bulletin, 28,* 1667-1678.

Tabacknick, B., & Fidell, L. (2007). *Using multivariate statistics,* (5th ed.). Boston: Pearson Education, Inc.

Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology.* Cambridge, UK: Cambridge University Press.

Tett, R., & Meyer, J. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analysis based on meta-analytic findings. *Personnel Psychology, 46,* 259-293.

Thomas, K., & Plaut, V. (2008). The many faces of diversity resistance in organizations. In K. M. Thomas (Ed.), *Diversity resistance in organizations* (pp. 1-22). New York: Taylor & Francis Group.

Van Knippenberg, D., Van Dick, R., & Tavares, S. (2007).

Social identity and social exchange: Identification,

support, and withdrawal from the job. *Journal of

Applied Social Psychology, 37,* 457-477.   .

Wiess, J. W. (2001). *Organizational behavior and change:

Managing diversity, cross-cultural dynamics, and

ethics* (2nd ed). Cincinnati South-Western.