

Full Length Research Paper

Gender and the Workplace: The Impact of Stereotype Threat on Self-Assessment of Management Skills of Female Business Students

Jennifer Flanagan

Jennifer Flanagan: Economics and Finance, College of Commerce, Texas A&M University, email: Jennifer.Flanagan@tamuc.edu

Accepted September 02, 2015

Stereotype threat, the threat of being stereotyped against (Steele & Aronson, 1995), regardless of the legitimacy of the stereotype, can impact not only productivity, but goals, behavior, and ultimately attitudes. Stereotype threat impacts not only racial groups but men and women as well, each group impacted by the negative stereotypes about their intellectual and/or work performance. As the workplace becomes more and more diverse, managers must understand and brace for the impact stereotypes have on their workers. This study looks at the impact of stereotype threat on male and female business majors in the workplace and future entrepreneurs. The impact of stereotype was measured in their ranking of their own management skills, how they thought others would rank their management skills, and their goals in the workplace.

Keywords: gender, stereotype threat, management self-assessment

Introduction

Although African American women have been participating in Certain groups have historically had an occupational disadvantage, namely due to prejudice, stereotypes, and old-world views, and women have felt this impact as much as any other group as they've attempted to move up the ranks (Bound & Freeman, 1992; Fassinger, 2008; King, 1992), especially when comparing the performance of women to men. As the American workforce becomes more and more diverse and as the percentage of women moving into management positions increase, it's important to recognize the role that stereotype threat has on the outlook and decisions men and women make in their careers.

The evidence is clear – women have made a tremendous mark in the workforce. In fact, 47% of those in the labor force are women - this equates to around 66 million women, with 73% full time and 27% part time, with the majority (40.6%) of those working full time in a management and/or professional occupation. But, even with women accounting for just under half of the workforce, in 2013, only 16.9% of Fortune 500 board seats were held by women (Catalyst, 2013), an increase from 14.7% in 2005 (Catalyst, 2006). The same is true in higher education, where women earn 30% of PhDs in the science fields, yet only 13% of full professors are women (National Science Foundation, 2008). So, what is keeping women from moving into higher-level management positions? Could stereotype threat have any sort of influence on how women see themselves in management? This question led to the following research on the impact of stereotype

threat on the management self-assessment skills of future and current women in business.

While there are countless stereotypes of women in various roles in business, they basically center on the main assumption that men are more than women (Duher & Bono, 2006; Sczesny & Stahlberg, 2002) in management positions. Stereotypes are a natural part of human cognition. It is a way for people to categorize information, and albeit sometimes incorrect, it is a safety mechanism people use in filtering information when encountering new situations (McGarty, Yzerbyt, & Spears, 2002). As a mélange of workers from different cultures, backgrounds, and walks of life, and as people bring with them preconceived ideas on how they view the world, other cultures, and themselves, misjudgments about certain groups can wreak havoc within an organization, since many of these ideas are based upon stereotypes, or overgeneralizations about a group of people (Mooney, Knox, & Schacht, 2004). But, there is a difference in being in the presence of a stereotype, being aware of its existence, and actually fearing the stereotype, and more specifically, fearing confirming the stereotype, referred to as stereotype threat (Steele & Aronson, 1995; Steele, 1997). Stereotype threat, consequently, is often associated with a group or category, such as cultural, gender, racial, or ethnic group (Brigham, 1971; Barker, 1991; Coon, 1994), in this case, women in business.

Literature Review

Risk Factors of Stereotype Threat

There are variables that make one more heightened and aware of stereotype threat, whether or not a real threat exists, especially for those in stigmatized groups. Stress can impact cognitive load, for instance, impacting performance, as well as being aware of the stigma (stereotype) of your group.

Stress and Cognitive Load. The impact of stereotype threat can be facilitated by stress, such as evaluation apprehension (test anxiety), which exists in the workplace in the form of micro-management of workers, one-on-one training, competence testing, and performance evaluations. Minorities were found to exert less effort during times of extreme stress (Steele & Aronson, 1995).

Cognitive load refers to the amount of information and tasks preoccupying your brain. If cognitive load is high, the impact of negative stereotypes is greater. Performance of complex tasks while under stereotype threat and other forms of stress can overload working memory, which can impact performance as well as predict future performance (Engle & Kane, 2004; Schmader & Johns, 2003). Increased anxiety, paired with the fear of being under a stereotype, can further increase cognitive load (Osborne, 2001; Wicherts, Dolan & Hessen, 2005), especially impacting female subjects (Bosson et al., 2004).

Stigma Consciousness. Stigma consciousness is the heightened awareness of stereotype threat, and it impacts female and minority workers disproportionately. In the service industry, for example, female workers in constant and even chronic stigma conscious situations were found to have decreased performance on work tasks and developed poor attitudes towards their job and supervisors, and exhibited subpar customer service skills (Pinel & Paulin, 2005).

Positive Stereotypes and Motivations in the Workplace. Positive stereotypes can have both a positive and negative impact on performance in the workplace. The adverse effects can include anything from setting unrealistic performance goals or the stress of living up to a positive stereotype (Cocchiara & Quick, 2004). But, stigmatized groups can, too, work hard to overcome the stereotype and thus live up to the positive reference. Positive stereotypes can help women, for example, set positive reference points for goal-setting, with the stereotype, instead of being seen as an unattainable accomplishment, is seen as an obstacle to be overcome, leading to higher goals being set and employees working harder in reaching those goals (Pinel, 1999).

Consequences of Stereotype Threat

A major source of social oppression, anxiety, and fear can come from the job (Blustein, 2008), and this is evident when analyzing the impact of stereotype threat on work performance. But it's not only actual job performance, but changing goals, disengagement, and self-handicapping, to name a few, that can result from the fear of confirming a stereotype.

Change in Goals. Stereotype threat can impact the choices women make. For instance, the presence of stereotype threat can cause those affected to reevaluate career objectives and perhaps even take a different path or make a different

decision than they might have chosen if not subjected to the threat of stereotype (Pinel & Paulin, 2005). Employees can become frustrated for not meeting previous goals (Spector, 1997), usually due to the factors within the organizational environment, and will change their goals to match what is closer to the expected outcome. This is also evident in managers as well (Gibson & Tulgan, 2002).

Decreased Performance. First formally addressed in 1995, Steele and Aronson found that African American participants were significantly impacted by stereotype threat with decreased academic performance, making them anxious and stressed (Steele & Aronson, 1995). Women under stereotype threat were found to have a notable decrease in math performance, although math skills were adequate for successful outcomes on the assessment (Stricker & Bejar, 2004; O'Brien & Crandall, 2003), and performance decrements increased in higher-skilled tasks, even in domains to which the participant identified (Neuville & Croizet, 2007; Wicherts, 2005; O'Brien & Crandall, 2003; Spencer, Steele, & Quinn, 1999).

A parallel can be made to academic tasks and performance measured in the workplace, as those minority and female participants under stereotype threat were found to have decreased performance in mock workplace settings (Flanagan & Green, 2013).

Disengagement. Stereotype threat can lead some to distance themselves from the assessed task, even going so far as to suggest the poor performance is not a reflection of self-worth or a proper assessment of the task in general (Crocker, Major, & Steele, 1998; Major, Spencer, & Schmader, 1998). This behavior can be used as a protection mechanism (Major et al., 1998), but it can also reduce motivation, interest, and even achievement in the task domain (Steele, 1997). Disengagement can lead to avoiding the domain or detaching his or her identity from a domain (Fryer, 2006; Osborne, 2007; Osborne & Walker, 2006; Steele, James, & Barnett, 2002; Zirkel, 2004), where they completely distance themselves from any association with the task domain.

Self-Handicapping. Self-handicapping, which is establishing a barrier to blame on underperformance, impacts minority and female participants (Steele and Aronson, 1995), causing them to exert less effort or create excuses to account for underperformance (Keller, 2002; Steele & Aronson, 1995; Stone, 2002). Task discounting, also under the self-handicapping umbrella, includes qualifying poor performance to the lack of validity or reliability of the task (Keller, 2002; Lesko & Corpus, 2006).

The Problem – The Influence of Stereotype Threat in the Workplace

Stereotypes are everywhere, in just about every aspect of life, and can be even more pronounced in today's diverse workforce. The ever-changing workforce dynamic supports the need for research in the area of stereotype threat, specifically how female employees are impacted. The consequences of stereotype threat are apparent in studies focusing on academia, but can the same conclusions be made in the workplace? What influence does

stereotype threat have on female workers and their management views, especially about themselves?

It can be reasonably hypothesized that similar results will be found in both academia and in the workplace, but will simply asking participants their gender, as well as telling them the study is a survey of their management qualities, be enough of to activate stereotype threat as produce similar results?

Hypothesis

The following hypothesis was tested: Female participants will have lower self-assessment scores on their own management skills when under stereotype threat as compared to male participants. By simply asking participants their gender prior to administration of the management skills assessment should be enough to activate stereotype threat in women and thus produce the hypothesized results.

Participants

The study involved 56 participants, including male and female business majors and current workers, with 51% full time students, 49% part time students. Out of these, 78% were currently working at least part time. All participants were aged 18 years and over. Participants were asked to complete a survey online to assess management skills, management outlook, and career aspirations.

The assumption is that business students will hold, if not already, management positions in their occupational field, and thus would be reflective of the present and future workforce dynamic.

Procedure

Participants were given a link to a survey via www.surveymonkey.com. They were then, after giving consent to the study, asked seven questions about management traits and how they viewed their own management skills. Participants were prompted to rate their opinions on a 5-point scale, with 5 being a more favorable and positive opinion, and 1 being negative and critical.

Participants were asked the following questions, in addition to demographic information, rating each strongly disagree, disagree, neutral, agree, and strongly agree.

1. Rate your leadership skills
2. How would OTHERS rate your leadership skills?
3. Leaders are born and have natural abilities and traits
4. A good leader give detailed and complete instructions to subordinates rather than giving them gender direction and depending on their initiative to work out details
5. I take responsibility for my own success
6. I have dreams of being an entrepreneur
7. Teamwork is an important part of success in the workplace

There were two conditions under which participants were subjected: the experimental group, where participants were asked their gender before the management questions, and a control group, where the management questions were asked first. Asking about gender initially made participants aware of gender and there is a heightened awareness of stereotype threat.

Findings

Data collected was analyzed using ANOVA. Only two main questions were analyzed during the survey, which involved how each participant rated their management skills, and how they thought others would rate their management skills.

The following results were found:

	<i>Female</i>	<i>Male</i>
<i>Control (non-stereotype condition)</i>	12	15
<i>Stereotype Condition</i>	17	12

Two of the seven questions were not analyzed (questions 3, 4, and 7) as they focused more on assessment of leadership skills, rather than the participant's own assessments and goals of personal management traits. To specifically focus on management skills assessment, two main questions were examined closer (question 1: "Rate your leadership skills"; and question 2: "How would OTHERS rate your leadership skills?").

Female participants had a significant drop in how they ranked both their own management skills ($F = 10.65$, $df = 1, 27$), and how they felt others would rank their management skills ($F = 4.73$, $df = 1, 27$). Men were not significantly impacted on how they rated themselves or how they thought others would rate them, $F = 3.90$, $df = 1, 25$; and $F = 2.31$, $df = 1, 25$; respectively. Therefore, female participants were more impacted by stereotype threat when answering the self-assessment questions.

Table 2

Analysis by Gender of Select Survey Questions Regarding Management Skills

<i>Male</i>	<i>NST</i>	<i>ST</i>
<i>How do you rate your own management/leadership skills</i>	4.13	4.58
<i>How do you think others view your management/leadership skills</i>	4.22	4.49
<i>Female</i>	<i>NST</i>	<i>ST</i>
<i>How do you rate your own management/leadership skills</i>	4.35	3.33
<i>How do you think others view your management/leadership skills</i>	3.94	3.25

Note: Results are based on a scale between 1 and 5, with 5 being most agreeable/favorable, and 1 being least agreeable/favorable.

The following questions were also analyzed according to gender and stereotype threat condition, representative of entrepreneurial

goals and motivation of participants: “I take responsibility for my own success” and “I have dreams of being an entrepreneur.”

Female participants ranked their responsibility for their own success, and entrepreneurial dreams, significantly lower while under stereotype threat, $F = 4.25$, $df = 1, 27$), and $F = 4.24$, $df = 1, 27$), respectively. Men were not significantly impacted by stereotype threat on either question, $F = .22$, $df = 1, 25$; and $F = .38$, $df = 1, 25$; respectively.

Table 3. Analysis by Gender of Select Survey Questions Regarding Basic Entrepreneurial Motivation

<i>Male</i>	<i>NST</i>	<i>ST</i>
<i>I take responsibility for my own success</i>	4.00	4.19
<i>I have dreams of being an entrepreneur</i>	4.27	4.06
<i>Female</i>	<i>NST</i>	<i>ST</i>
<i>I take responsibility for my own success</i>	4.58	3.76
<i>I have dreams of being an entrepreneur</i>	4.25	3.35

Note: Results are based on a scale between 1 and 5, with 5 being most agreeable/favorable, and 1 being least agreeable/favorable.

Conclusions

From the participants’ descriptions of their Female participants rated their management skills significantly lower when asked about their gender first, as compared to their male counterparts. They not only rated their own management skills lower, they also rated how they thought others viewed their skills at a lower level. Female respondents under stereotype also assessed their entrepreneurial goals and their ability to control their own success significantly lower.

This is significant – that merely asking about gender can lead to someone viewing themselves a less effective manager and have different, lower goals. This lower self-assessment score could possibly be related to management skills and ability to set higher goals, and thus advance in the workplace.

There are certainly limitations to this study, the main one being that many of the participants were not workers, the majority being full time students, and this could be expected to change the outlook of the participants. The researcher hopes to take this study to the field. Additionally, comparisons should be made

regarding age, graduate and undergraduate status, and full time and part time workers.

Discussion: Reducing the Impact of Stereotype Threat in the Workplace

This study explored stereotype threat on female workers with regard to self-assessment on management skills rankings, and the finds show that stereotype threat does impact how female workers view themselves. In an effort to promote diversity, manager try to not only choose to hire those employees that are not only capable of the job, but also have the confidence and motivation to handle the position. Women who feel they are being stereotyped might not exhibit the confidence of their male counterparts, although equally capable, and miss out on advancement opportunities in their careers.

There is a growing need for attention in this area, for managers to be proactive in addressing, handling, and preparing for stereotype threat in the workplace. First, managers must acknowledge that stereotypes exist, and stereotype threat has an impact. Stereotype awareness does not mean endorsement (Adler, 2002), and learning about the consequences of stereotype threat can protect individuals against those consequences. Further, managers should create a work environment that fosters diversity and discourages stereotyping. The stereotype threat process involves how much one personally invests in the task, the task difficulty, being aware of a stereotype, and, through perceived situational cues, reinforce the stereotype. To interrupt this process, managers can plan to provide a well-laid, tactical plan for completing the task, available and recognizable by all participating. Managers and supervisors should not only implement plans to interrupt the stereotype threat process, but continually improve upon those techniques (Roberson & Kulik, 2007).

Research has shown that a proactive approach to warding off the impact of stereotype threat can do one of two things: draw negative attention to the stereotype (Wheeler & Petty, 2001) and lead to negative impact and stereotype-consistent behavior (Johns, Schmader, & Martens, 2005); or, learning about the stereotypes and consequences of stereotype threat, it can, without endorsing the stereotype (Adler, 2002), protect individuals prone to the impact of stereotypes from the consequences (Wheeler & Petty, 2001).

The focus of tasks (i.e. performance evaluations) should not be on the complexity of analysis, but rather on the employee’s traits compared to desired trait of the position (Spencer et al., 1999; Roberson & Kulik, 2007). The complexity or even the relevance of the task isn’t the only factor to consider when evaluating management skills of women. For instance, when a woman is the only woman in a group of men, those single members of a group placed in stigmatized situations, are more aware of and impacted by stereotype threat stemmed by perceived gender difference (Roberson & Kulik, 2007).

Managers should also let employees know that, if they feel discriminated against, there are remedies for this, including Equal Employment Opportunity Commission and Human Resource outlets. Employees, especially supervisors and managers, should be trained on diversity issues. And, training

should go beyond the norms (i.e. race, gender, sexual orientation) and discuss other, less common stereotypes and prejudicial behavior. This training should continue, with open discussions and opportunities to learn from others' situations. Managers should reassign work groups so employees have opportunities to work with those they might otherwise not interact with, but to do so in a logical manner (i.e. revolving around a group project). Because requiring interaction and embracing of diversity can have unintended negative consequences, it is important for managers to set the stage for diverse interactions, but not force them upon employees.

Final Thoughts

Women are a key part of the workforce, and as they continue to move up in ranks, so do the problems associated with stereotyping. As the workplace becomes more and more diverse, companies must be aware of stereotypes and their impact, and recognize both positive and negative stereotypes can negatively impact choices in business, including career aspirations and a manager's own view of self.

The workforce has a culture that is always evolving, changing to reflect the social and demographic transformations. As society becomes more diverse and accepting, so, too does the demographic fabric of the office. There are benefits to a diverse workforce, such as a more diverse communication network, more innovative strategic plan, and a more collaborative company culture (Jackson et al., 1991). There is also an ability to reach a perhaps previously untapped market, to gain a creative edge, to view a more global perspective, and have an overall competitive advantage (Roberson & Kulik, 2007).

With the world and our workforce becoming more and more diverse, managers must adapt to the new picture of their workplace family. As the workforce continues to change, so too should the companies for which we all work. Managers must be proactive in addressing diversity within their organization, staying on top of possible issues employees might encounter. It's important to educate others about stereotype threat prior to threatening situations, and ideally, ward off threatening situations before they occur.

Since a major source of social oppression, anxiety, and fear can come from the job (Blustein, 2008), managing such a workplace is tricky and shouldn't be taken lightly, but implementation and management of a harmonious diverse workplace is vital to a company's long term organizational health, growth, and success.

References

- Bound, J., & Freeman, R. (1992). What went wrong? The 1980s erosion of the economic well-being of Black men. *Quarterly Journal of Economics*, 107, 201–232.
- Catalyst. (2005). *Connections that count: The informal networks of women of color in the United States*. Retrieved from <http://www.catalyst.org/publication/52/connections-that-count-the-informal-networks-of-women-of-color-in-the-united-states>
- Catalyst. (2013). *2013 Catalyst Census: Fortune 500 Women Board Directors*. Retrieved from <http://www.catalyst.org/knowledge/2013-catalyst-census-fortune-500-women-board-directors>
- Duehr E. E & Bono J. E. (2006). Men, women, and managers: Are stereotypes finally changing?. *Personnel Psychology*, 5(9), 815–846.
- Fassinger, R.E. (2008). Workplace diversity and public policy: Challenges and opportunities for psychology. *American Psychologist*, 63, 252-268.
- Flanagan, J. & Green, R. (2013). The Impact of Stereotype Threat in Manual Labor Settings on Hispanic and African American Female Participants. *Journal of Business and Economics*, 5.
- Gibson, D. E., & Tulgan, B. (2002). *Managing anger in the workplace*. Amherst, MA: HRD Press.
- Jackson, S. E., Brett, J.F., Sessa, V.I., Cooper, D.M., Julin, J.A., & Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. *Journal of Applied Psychology*, 76, 675-689.
- Johns, M.; Schmader, T.; & Martens, A. (2005). Knowing is half the battle: Teaching stereotype threat as a means of improving women's math performance. *Psychological Science*, 16, 175-179.
- King, M. C. (1992). Occupational segregation by race and sex, 1940–1988. *Monthly Labor Review*, 115, 30–37.
- McGarty, C., Yzerbyt, V., & Spears, R. (2002). *Stereotypes As Explanations : The Formation of Meaningful Beliefs About Social Groups*. London: Cambridge University Press, pp. 17.
- National Science Foundation. (2008). *Thirty-three years of women in science and engineering faculty positions*. Retrieved from <http://www.nsf.gov/statistics/infbrief/nsf08308/>
- Pinel, E. & Paulin, N. (2005). Stigma consciousness at work. *Basic and Applied Social Psychology*, 27, 345-352.
- Pinel, E. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology*, 76, 114-128.
- Roberson, L. & Kulik, C.T. (2007). Stereotype threat at work. *Academy of Management Perspectives*, 21, 24-40.
- Szesny S. & Stahlberg D., 2002. The influence of gender-stereotyped perfumes on leadership attribution. *European Journal of Social Psychology*, 32, 815-828.
- Spector, P. E. (1997). The role of frustration in antisocial behavior at work. In R. A. Giacalone & J. Greenberg (Eds.), *Antisocial behavior in organizations* (pp. 1-17). Thousand Oaks, CA: Sage.

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

Steele, C. & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African-Americans. *Journal of Personality and Social Psychology, 69*, 797-811.

Wheeler, S.C., & Petty, R.E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin, 127*, 797-826.