# The Undergraduate Research Journal

## Implicit Self-Esteem as a Potential Link between Gender Identity Threat in Males and Attitudes towards Women in Managerial Positions

Marwa Makhlouf
*The American University in Cairo AUC*, m.makhlouf@aucegypt.edu

Noha Ezz El-Din Fikry
*The American University in Cairo AUC*, nohaezz@aucegypt.edu

Hana Hazem Hafiz
*The American University in Cairo AUC*, hanahafiz@aucegypt.edu

Ingy Farweez
*The American University in Cairo AUC*, ingyfarweez@aucegypt.edu

Follow this and additional works at: https://fount.aucegypt.edu/urje

# Implicit Self-Esteem as a Potential Link between Gender Identity Threat in Males and Attitudes towards Women in Managerial Positions

# Implicit Self-Esteem as a Potential Link between Gender Identity Threat in Males and Attitudes towards Women in Managerial Positions

Marwa M. Makhlouf, Noha E. Fikry, Hana A. Hafiz, Ingy Farweez[1]
AUC Department of Psychology[2]

## Abstract

This experiment investigated the effects of male gender threat on implicit self-esteem, and how that in turn may influence prejudices towards women in managerial positions. The Self-Esteem Implicit Association Test (IAT) was administered to 82 male undergraduate students prior to and after a gender threat intervention using false results on a measure of gender roles. After the gender threat intervention and IAT, respondents answered the Women as Managers Scale. Results showed that participants who received the gender threat intervention did not show significant differences in attitudes toward women in managerial positions compared to participants who were randomly assigned to the group that did not receive the gender threat. However, there was a significant positive relationship within the overall sample between implicit self-esteem and positive attitudes towards women in managerial positions.

Tajfel and Turner's Social Identity Theory (1986) advanced the concept that individuals form their social identities from the various groups that they belong to. This paper focuses on gender identity as a primary social identity among males. According to Maass, Cadinu, Guarnier & Grasselli (2003), gender is one of the most vital and persistent social categories. The male gender identity is represented in the concept of masculinity. Masculinity in different cultures is measured on a standard called "hegemonic masculinity" (Connell, 1983), which is a set of behaviors or norms that are viewed as socially valued and desirable (Carrigan, Connell & Lee, 1985; Connell, 1987). According to Schrock and Schwalbe (2009) hegemonic masculinity can vary across cultures; however, there are common traits such as: assertiveness, competitiveness, displays of physical strength, aggression, risk taking, restricting emotional expression, and engagement in gender-specific activities. Many societies place a considerable amount of pressure on males to attain these types of qualities in order to be considered "masculine" and be socially acceptable (Connell, 1987, 1995). As a result of this pressure, male gender identity is prone to threat and can be relatively easily lost (Bosson, Weaver, Caswell & Burnaford, 2012).

Among men, threat to masculinity may lead to certain reactions in order to maintain the gender identity image or prestige and diminish the anxiety of being threatened (Cramer, 1998). A theory that supports the reaction of men after being threatened is the masculinity over-compensation theory (Willer, Rogalin, Conlon &

81

Wojnowicz, 2013). This theory states that men react to masculinity threats or insecurities with extreme demonstrations of their masculinity in order to recover their status in society.

Numerous studies have emphasized the relationship between gender threat and demonstrations of masculinity. A study by Macmillan and Gartner (1999) concluded that employed wives of unemployed spouses were more prone to suffering domestic abuse; the unemployment was a threat to their husbands' masculinity. Studies also found that men who were given false feedback indicating that they lacked masculinity showed more negativity towards homosexuals (Bosson et al., 2012; Willer et al., 2013), were more supportive of war, were more willing to purchase a sport utility vehicle (SUV), showed greater belief in male superiority (Willer et al., 2013), and were more likely to participate in harassing behaviors towards females (Maass et al., 2003). In a study on views towards date rape and sexual coercion, male participants who had experienced gender threat responded by blaming the victim and pardoning the offender more than did the men who were not threatened (Munsch & Willer, 2012). Although the previous literature shows a strong relationship between gender threat and compensations of it among males, it does not focus on the mechanism that links or mediates both phenomena.

*Implicit Self-Esteem*

82

One potential underlying mechanism between gender threat and overcompensation is implicit self-esteem. According to Greenwald and Banaji (1995), implicit self-esteem "is the introspectively unidentified effect of the self-attitude on evaluation of self-associated and self-dissociated objects (p.11)." In other words, it is a person's self-evaluation that is automatic, operating outside the conscious realm. On the other hand, explicit self-esteem is the direct measurement of self-esteem that captures conscious self-judgments (Tafarodi & Ho, 2006). Some studies indicate that participants manipulate their explicit self-esteem by changing their answers to project a good self-image (Smurda, Gokalp & Wittig, 2006), which might affect the research results.

Research indicates that implicit processes significantly influence attitudes (Banaji, Hardin, & Rothman, 1993; Greenwald, Klinger, & Liu, 1989) and stereotypes (Banaji & Greenwald, 1995). However, not many studies have linked implicit self-esteem and the impact of gender threat on the attitude of men towards women in superior positions. Some studies nonetheless briefly discuss the topic, including Rudman, Dohn, and Fairchild's (2007) study that concluded that as a result of gender threat, implicit self-esteem decreases. They added that to protect the self against anxiety, individuals experiencing a threat may favor the in-group (males) at the expense of the out-group (females). These processes can perhaps explain male prejudice towards women in positions of authority or power.

*Prejudice towards Women in Leadership*

83

Over the past decades, there has been a significant increase in the number of women who work (Heaton, & McWhinney, 1999). In addition, women have gained employment in stereotypically male jobs and positions, including supervisory and middle management posts (Eagly & Karau, 2002). The proportion of women in leadership positions may differ by country. For example, according to the International Labor Office, in 2008, 42.8% of U.S. women were working as managers, while less than 10% of United Arab Emirates women and 11% of Egyptian women held managerial positions (Simmons, Duffy & Alfraih, 2012).

Women in leadership positions such as managerial ones often face prejudice as there is a common belief that women possess fewer leadership traits than men (e.g., Boldry, Wood, & Kashy, 2001) and women leaders are perceived to violate standards of traditional gender roles (Eagly & Karau, 2002). As a result, when hiring or giving promotions, the decision maker will likely favor the male candidate, even if both resumes are similar (Schein, Mueller, Lituchy, & Liu, 1996). However, the superiority of men as leaders is not empirically supported; meta-analytic research has showed that men and women are not significantly different in their effectiveness as leaders, in fact, it was supported that women possess better skills than men in some leadership aspects (Eagly, Johannesen-Schmidt & Van Engen, 2003). Therefore, the question remains as to what are the underlying psychological mechanisms behind that prejudice towards women in authority positions.

84

## *Aims of the Present Research*

Additional investigation is needed to better understand the relationship between gender threat and prejudice towards women managers. One potential link between these to processes is implicit self-esteem. Our hypothesis was that males who experience gender threat would experience decreased implicit self-esteem, which would lead them to in response become prejudiced against women managers as a way to compensate for the loss in esteem.

## *Methods Participants*

A total of 82 undergraduate male students at a private university participated in the experiment. This university is a private elite university in Egypt; a considerable number of its students are from the more privileged socio-economic classes and are fairly westernized. Participants' ages ranged between 18 and 32 years ($M=$ 20.12, $SD=$ 2.26). The sample consisted of 73 Egyptian students (89.0%) and nine international students (11.0%) from seven different countries. From the sample, 19 participants were freshmen (23.2%), 25 were sophomores (30.5%), 18 were juniors (22.0%), 15 were seniors (18.3%), and five participants were graduate students (6.1%). A total of 47 were engineering majors (57.4%), 14 were business majors (17.1%), five were science majors (6.1%), and four were humanities majors (4.8%), while three were media and arts majors (3.6%).

85

Nine were students who were not yet registered in any major (11.0%).

*Materials and Instruments*

The design was an experiment. The independent variable was the introduction of gender threat through manipulating false results on the Bem Sex Role Inventory (Bem, 1974). The dependent variable was attitudes towards women in managerial positions, measured with the Women As Managers Scale (WAMS; Terborg, Peters, Ilgen, & Smith, 1977). Implicit self-esteem was a mediating variable, measured by the self-esteem Implicit Association Test (IAT).

*Gender threat intervention.*

Gender threat was introduced with a replication of part of a study conducted by Willer and colleagues (2013). Participants first completed on a computer the 30-item short form of the Bem Sex Role Inventory (BSRI; Bem, 1974). Participants rated themselves on a number of masculine and feminine characteristics from 1 to 7, 1 being "never true" and 7 being "always true". The BSRI was not scored in this experiment as it was only used as an element of gender threat; the computers were pre-set to give half the participants results saying their gender identity was masculine (result= 11) while it gave the other half results saying their gender identity was feminine (result= 32). Results were presented visually to participants on a 0-50 scale; 0-25 was indicated as being masculine and 26-50 was indicated as being feminine.

86

*Women as Mangers Scale (WAMS).*

The Women as Managers Scale (WAMS), developed by Terborg and colleagues (1977), was used to measure prejudice towards women in managerial positions. It included 21 items; 11 of these items positively described women as managers while 10 items described them negatively. The measure uses a 7-point Likert scale that ranges from 1 (strongly agree) to 7 (strongly disagree) (Cordano, Scherer, & Owen, 2003). For the current study we used the mean score of the ratings of the questions (with some questions scored in reverse). Higher scores indicated more positive attitudes towards women managers. Cronbach's alpha for the WAMS in the present study was .93.

*Implicit self-esteem IAT (Implicit Association Test).*

The self-esteem IAT is a computer-based test that relies on the speed of automatic associations. Implicit association tests thus operate outside the realm of conscious behavior (Cunningham, Preacher & Banaji, 2001). Participants were asked to quickly associate positive and negative characteristics with either the self or others. For example, if the word "pleasant" appeared in the middle of the computer screen, the participant's task was to associate it with one of two categories: "me" or "others". The test relies on automatic associations and on the fact that participants must complete the task as fast as they can; so that the answers can arise from

87

outside their conscious behavior and thinking (Greenwald & Farnham, 2000).

The IAT has shown good reliability and validity. It has 0.78 internal item consistency (Cunningham et al., 2001). IAT was shown to have high stability over time (Cunningham et al., 2001) and an average test-retest reliability of 0.56 (Schnabel, Asendorpf, & Greenwald, 2008). The predictive validity of IAT is higher than that of tests operating on explicit measures in the areas of discrimination and prejudice (Schnabel et al., 2008).

*Procedures*

This study was approved by the university's institutional review board. Participants were recruited using non-probability sampling. Announcements were made on social networking websites, and posted on the announcement list sent to all university students (however, not all students open or view these announcements). Also some professors agreed to offer extra credit to their students in return for participation.

The experiment took place in a computer lab inside the university's campus. The two researchers present in the lab were a male and a female in order to reduce experimenter gender effects. The participants were randomly assigned to different computers that were separated by barriers to prevent participants from seeing each-others' results. Before starting the experiment, the experimenter explained to participants that the purpose of the study was to assess the reliability and validity of

88

some personality tests; the true purpose of the study was not provided. Participants began by completing the self-esteem IAT, and then answering the short form BSRI. Computers were manipulated to provide participants with either masculine or feminine (gender threat) results to the BSRI. After viewing these results, participants completed the self-esteem IAT again. Finally, the Women As Managers Scale was distributed as a hard copy for them to answer, along with demographic questions. The WAMS items were intermingled with neutral distracter items to avoid participants realizing the purpose of the questionnaire.

*Results Pre-Threat Implicit Self-Esteem*

Participants answered the self-esteem IAT first in order to document pre-threat results to be able to record the change in implicit self-esteem after the gender threat intervention. Also, it was to make sure that both experimental (subsequently referred to as "Threat") and control ("No-threat") groups began with equivalent implicit self-esteem. To test for this, an independent samples t-test was conducted; results were significant: $t(80)= 1.99$, $p= .05$. This indicated that the No-threat group began the experiment with significantly higher implicit self-esteem than the Threat group.

*Difference between Pre and Post-Threat Implicit Self-Esteem*

In order to see if the pre- and post-threat scores of the self-esteem IAT differed significantly for the Threat and

89

No-threat groups, we conducted two paired samples t-tests (the pair was the pre- and the post-threat implicit self-esteem results). Results showed that for both the Threat and No-threat groups, the implicit self-esteem of the participants did not change significantly after receiving the manipulated gender results.

*Difference between Threat and No-Threat Groups Regarding Women as Managers Scale*

We conducted an independent samples t-test to know if the scores of the WAMS differed between the Threat and No-threat groups. The results showed that there was no significant difference in the scores.

*Relationship between Implicit Self-Esteem and Attitudes towards Women Managers*

Finally, we explored the relationship between implicit self-esteem and attitudes towards women in managerial positions for the entire sample of participants. Pearson's correlation showed a significant positive relationship between higher self-esteem IAT scores when it was administered for the second time and less prejudice in the Women As Managers Scale scores ($r = .34$, $p=.002$).

**Discussion**

This study aimed at understanding the effect of gender threat on implicit self-esteem and how this consequently may affect attitudes towards women in managerial positions. Our hypothesis relied on the assumption that

90

both experimental and control groups (Threat and No-threat) would start off with similar implicit self-esteem scores on the self-esteem Implicit Association Test (IAT); however, there was a significant difference between the two groups' scores despite randomization. The threat intervention showed no significant effects on the implicit self-esteem of participants; when comparing each group's amount of change of implicit self-esteem, no significant difference was found. This was contrary to our hypothesis that the experimental group's implicit self-esteem scores would decrease after they viewed false results indicating that they were feminine. Because of the insignificant results, more sophisticated statistical modeling of self-esteem as a mediating variable was not conducted.

Also regarding the Women as Managers Scale, we hypothesized that the experimental group would demonstrate more negative attitudes towards women in managerial positions to compensate for experiencing gender threat. However, scores showed no significant difference between the experimental and control groups. Therefore, it seems that the gender threat intervention was not strong enough to produce the effect we expected. Also, the Women as Managers Scale may have not been a sensitive measure of prejudice against women in power positions given that this was a student population. Moreover, it could be that an implicit test such as the Successful Manager Implicit Association Test would have yielded different results compared to the more explicit WAMS.

91

Despite these insignificant results, a significant positive relationship was found between implicit self-esteem and positive attitudes towards women in managerial positions. This partially supports our hypothesis that lower implicit self-esteem among males may be related to higher prejudice against women. The implicit self-esteem scores used in this correlation was the one measured immediately before the participants answered the Women as Managers Scale; thus it is supported that they were both related.

## *Implications for Future Research*

Prejudice against women in leadership positions is a widespread concern in many societies, and better understanding this issue could help inform interventions aimed at reducing such prejudice. This study explored implicit self-esteem as a potential underlying mechanism that could explain why men who are gender threatened overcompensate by demonstrating greater prejudice towards women. The results of these relationships were not significant. This raises the question of whether implicit self-esteem is indeed not a mediator in the process, or whether the study design and instruments were not sensitive enough to document any true effects. Therefore, future research is recommended to explore the hypotheses further. The current finding that high implicit self-esteem is related to more positive attitudes towards women managers can be a starting point for more future research in this topic. It is recommended that future studies obtain larger and perhaps more socio-demographically diverse sample sizes.

92

93

# References

Banaji, M. R., & Greenwald, A.G. (1995). Implicit gender stereotyping in judgments of fame. *Journal of Personality and Social Psychology, 68,* 181–198. http://dx.doi.org/10.1037/0022-3514.68.2.181

Banaji, M. R., Hardin, C., & Rothman, A. J. (1993). Implicit stereotyping in person judgment. *Journal of Personality and Social Psychology, 65,* 272–281. http://dx.doi.org/10.1037/0022-3514.65.2.272

Bem, S. L., (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42 (2), 155–162.

Boldry, J., Wood, W., & Kashy, D. A. (2001). Gender stereotypes and the evaluation of men and women in military training. *Journal of Social Issues, 57*, 689-705.

Bosson, J. K., Weaver, J. R, Caswell, T. A., & Burnaford, R. M. (2012). Gender threats and men's antigay behaviors: The harmful effects of asserting heterosexuality. *Group Processes & Intergroup Relations*, *15*(4), 471–486. http://dx.doi.org/10.1177/1368430211432893

Connell, R. W. (1983). *Which way is up? Essays on sex, class, and culture*. Sydney: Allen & Unwin.

94

Connell, R.W. (1987). *Gender and power: Society, the person and sexual politics*. Stanford, California: Stanford University Press.

Connell, R. W. (1995). *Masculinities*. Berkeley and Los Angeles: University of California Press.

Cordano, M., Scherer, R. F, & Owen, C.L. (2003). Dimensionality of the Women as Managers Scale: Factor congruency among three samples. *The Journal of Social Psychology*, *143*, 141–143. http://dx.doi.org/10.1080/00224540309598436.

Cramer, P. (1998). Threat to gender representation: Identity and identification. *Journal of Personality*, *66*, 335–357. http://dx.doi.org/10.1111/1467-6494.00015

Cunningham, W. A., Preacher, K. J., & Banaji, M. R. (2001). Implicit attitude measures: consistency, stability, and convergent validity. *Psychological Science*, *12*(2), 163–170. http://dx.doi.org/10.1111/1467-9280.00328

Eagly, A. H. & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109,* 573–598.

Eagly, A. H., Johannesen-Schmidt, M. C., & van Engen, M. L. (2003). Transformational, transactional and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological*

95

*Bulletin, 129*, 569–591.
http://dx.doi.org/10.1037/0033-2909.129.4.569

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*(1), 4–27. http://dx.doi.org/10.1037//0033-295X.102.1.4

Greenwald, A. G., & Farnham, S. D. (2000). Using the Implicit Association Test to measure self-esteem and self-concept. *Journal of Personality and Social Psychology*, *79*, 1022–1038. http://dx.doi.org/10.1037//0022-3514.79.6.1022

Greenwald, A. G., Klinger, M. R., & Liu, T. J. (1989). Unconscious processing of dichoptically masked words. *Memory & Cognition*, *17,* 35–47.

Heaton, C. A. N., & McWhinney, G. (1999). Women in management: The case of MBA graduates. *Women in Management Review*, *14*(4), 136–145.

Maass, A., Cadinu, M., Guarnieri, G., & Grasselli, A. (2003). Sexual harassment under social identity threat: The computer harassment paradigm. *Journal of Personality and Social Psychology*, *85*, 853–870. http://dx.doi.org/ 10.1037/0022-3514.85.5.853

Macmillan, R., & Gartner, R. (1999).When she brings home the bacon: Labor-force participation and the risk of spousal violence against women.

96

*Journal of Marriage and Family, 61*, 947–958. http://dx.doi.org/10.2307/354015

Munsch, C. L., & Willer, R. (2012). The role of gender identity threat in perceptions of date rape and sexual coercion. *Violence Against Women*, *18*, 1125–1146. http://dx.doi.org/10.1177/1077801212465151

Rudman, L. A., Dohn, M. C., & Fairchild, K. (2007). Implicit self-esteem compensation: Automatic threat defense. *Journal of Personality and Social Psychology*, *93*, 798–813. http://dx.doi.org/10.1037/0022-3514.93.5.798

Schein, V. E., Mueller, R., Lituchy, T., & Liu, J. (1996). Think manager—think male: A global phenomenon? *Journal of Organizational Behavior*, *17*(1), 33–41.

Schnabel, K., Asendorpf, J. B., & Greenwald, A. G. (2008). Using implicit association tests for the assessment of implicit personality self-concept. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *The SAGE Handbook of personality theory and assessment* (vol. 2; pp. 508–528). Thousand Oaks, CA: Sage.

Schrock, D., & Schwalbe, M. (2009). Men, masculinity, and manhood acts. *Annual Review of Sociology*, *35,* 277–295. http://dx.doi.org/10.1146/annurev-soc-070308-115933

97

Simmons, A. L., Duffy, J. A., & Alfraih, H. S. (2012). Attitudes toward women managers: The influence of social dominance orientation and power distance on men in college. *Gender in Management*, 27(7), 482–498. http://dx.doi.org/10.1108/17542411211273469

Smurda, J. D., Wittig, M. A., & Gokalp, G. (2006). Effects of threat to a valued social identity on implicit self-esteem and discrimination. *Group Processes & Intergroup Relations*, 9(2), 181–197. http://dx.doi.org/10.1177/1368430206062076

Tafarodi, R. W., & Ho, C. (2006). Implicit and explicit self-esteem: What are we measuring? *Canadian Psychology*, *47*(3), 195–202. http://dx.doi.org/10.1037/cp2006009

Tajfel, H., & Turner, J.C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (pp.7–24). Chicago, IL: Nelson-Hall.

Terborg, J. R., Peters, L. H., Ilgen, D. R., & Smith, F. (1977). Organizational and personal correlates of attitudes toward women as managers. *Academy of Management Journal, 20*(1), 89-100. http://dx.doi.org/10.2307/255464

98

Willer, R., Rogalin, C. L., Conlon, B., & Wojnowicz, M.
T. (2013). Overdoing gender: A test of the
masculine overcompensation thesis. *American
Journal of Sociology*, *118*, 980-1022.
http://dx.doi.org/10.1086/668417

99