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## Suppression of Stereotype Threat Negatively Impacts Self-Evaluations and Interpersonal Outcomes

Zheng Li  
*University of Northern Iowa*

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**Suppression of Stereotype Threat**

**Negatively Impacts Self-evaluations and**

**Cross-gender Interpersonal Evaluations**

**Zheng Li & Helen C. Harton**

**Department of Psychology**



# Stereotype Threat

- When people are reminded of a negative stereotype that applies to them, they tend to perform worse because of the pressure of confirming the negative stereotype.
- For instance
- Intellectual test performance of African Americans (Steele & Aronson, 1995).
- Math and Science for women (Spence, Steele, & Quinn, 1999)



# Thought Suppression

The counterproductive effect of thought suppression - paradoxical rebound :

- “White bear” experiments (Wegner et al., 1987)
- Emotional reaction (e.g. anger, depression, Davies & Clark, 1998; Wenzlaff et al., 1991)
- Substance cravings (e.g. eating, drinking, smoking, Polivy, 1998; Salkovskis & Reynolds, 1994)
- Physiological reactions (e.g. pain, Cioffi & Holloway, 1993)



# Suppression of Stereotype Threat

- When people try to suppress the stereotype they were made to think of, the outcome can be even worse:
  - Suppression of stereotype threat led to women's underperformance in math (Logel et al., 2009)
  - Women who suppress stereotype threat tended to be less confident and more submissive in a math-related interaction (Borton et al. 2012)



# HYPOTHESIS:

Women's suppression of stereotype threat will negatively impact self-evaluations and cross-gender interpersonal evaluations.



# Method

- Participants and Design

63 female college students from UNI (mean age = 20 years,  $SD = 5.4$ ) were randomly assigned to one of three groups:

- ◆ stereotype threat with suppression
- ◆ stereotype threat without suppression
- ◆ control



# Method

- Procedure:

1. Moon task (5-10 mins)

2. Manipulation of stereotype threat/thought suppression:

(write down the stream of your consciousness when thinking about your spatial skills and science knowledge without mentioning gender differences)

3. Interaction with a male confederate (10 mins)

4. Completion of dependent measures and other scales.





# PARTICIPANTS' SELF- RATINGS

- 1: Now after the discussion ,how difficult do you think the “moon task” was? (from 1= not at all to 9= extremely)
- 2: Now after the discussion, how close do you think your score was to NASA’s standard answer ? (from 1= not at all close to 9=very close)
- 3: How do you think your partner would judge your spatial skills and science knowledge? (from 1= very poor to 9= very good)
- 4: How likely do you think it is that your partner will choose you for the next stage of the study? (from 1= very unlikely to 9= very likely)
- 5: Do you want to work with your partner again? (from 1= definitely not to 9 = definitely yes)
  - if you do not want to stay with your partner, why?
  - I think I have a higher score so I want to choose another person.
  - I think I have a lower score so s/he may not want me for next stage anyway.
  - Other reasons. Please specify:

# CONFEDERATES' RATINGS

- How confident do you think the participant was during the interaction? (from 1= not at all confident to 9= very confident)
- 2: How close do you think her score is to NASA's standard answers (from 1= not at all close to 9=very close)
- 3: How likely would you be to choose the participant to work with on a project about spatial skills and science knowledge ?  
(from 1= very unlikely to 9= very likely)

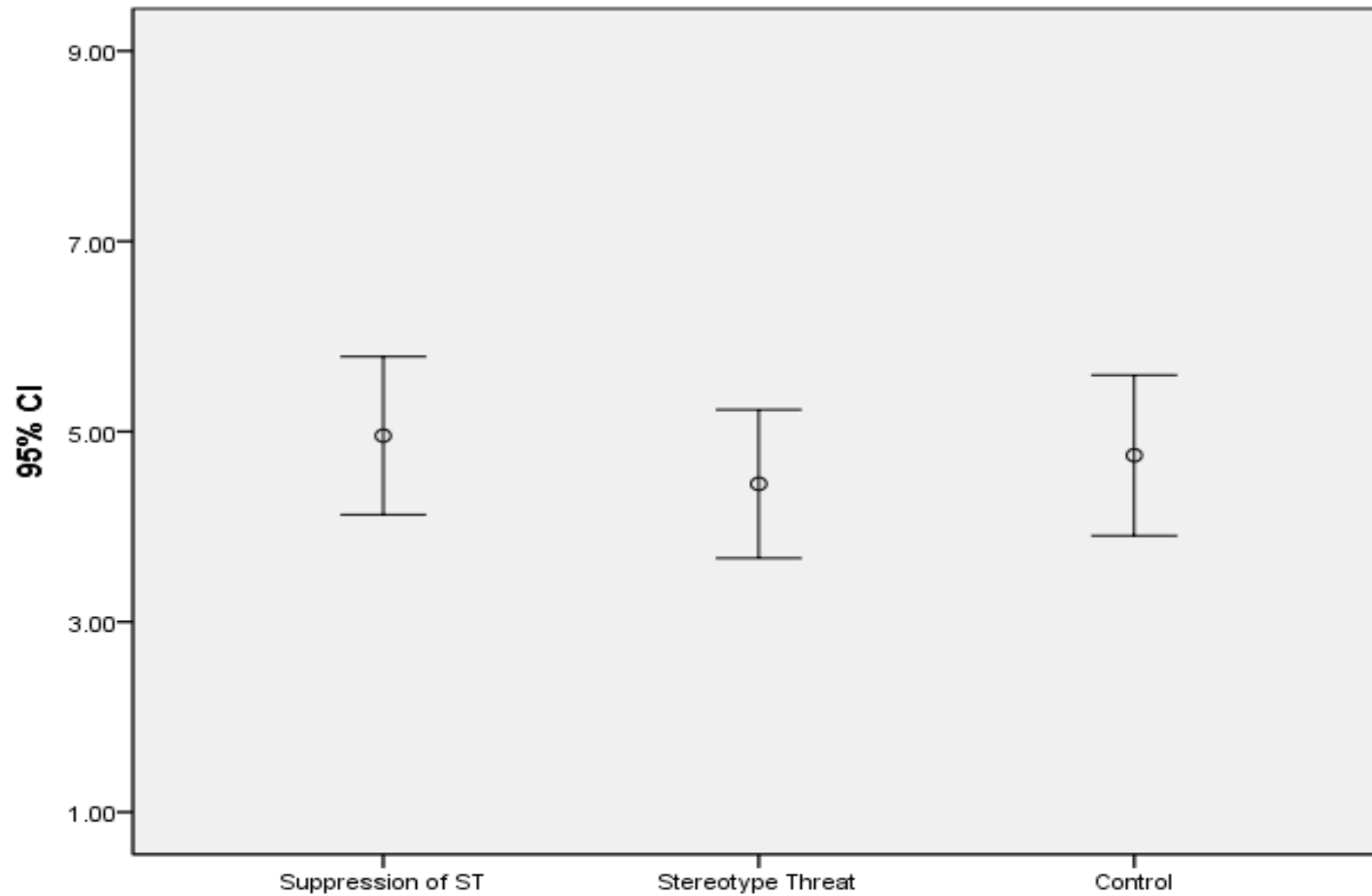


# MANIPULATION CHECK

- How hard did you try to not think about gender differences in the discussion (from 1= not hard at all to 9= very hard)?
- Ps in suppression condition ( $M = 4.13$ ,  $SD = 2.80$ ) scored higher than Ps in stereotype threat condition ( $M = 3.33$ ,  $SD = 2.03$ ) and control condition ( $M = 2.05$ ,  $SD = 1.67$ ),  $F(2, 63) = 4.65$ ,  $p = .01$ ,  $\eta^2 = .13$



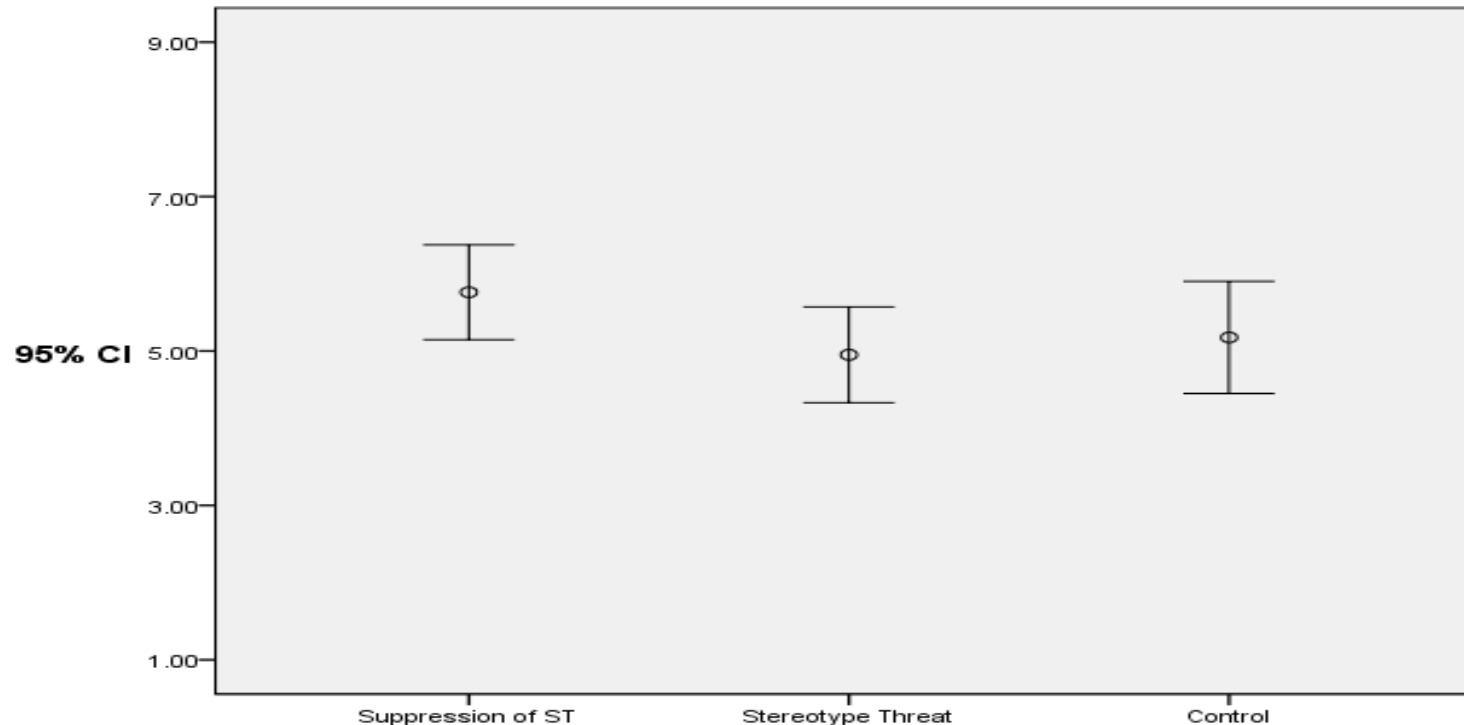
# PARTICIPANTS' SELF-EVALUATION OF SCORE ON MOON TASK



○  $F(2, 63) = .32, p = .73, \eta^2 = .01$

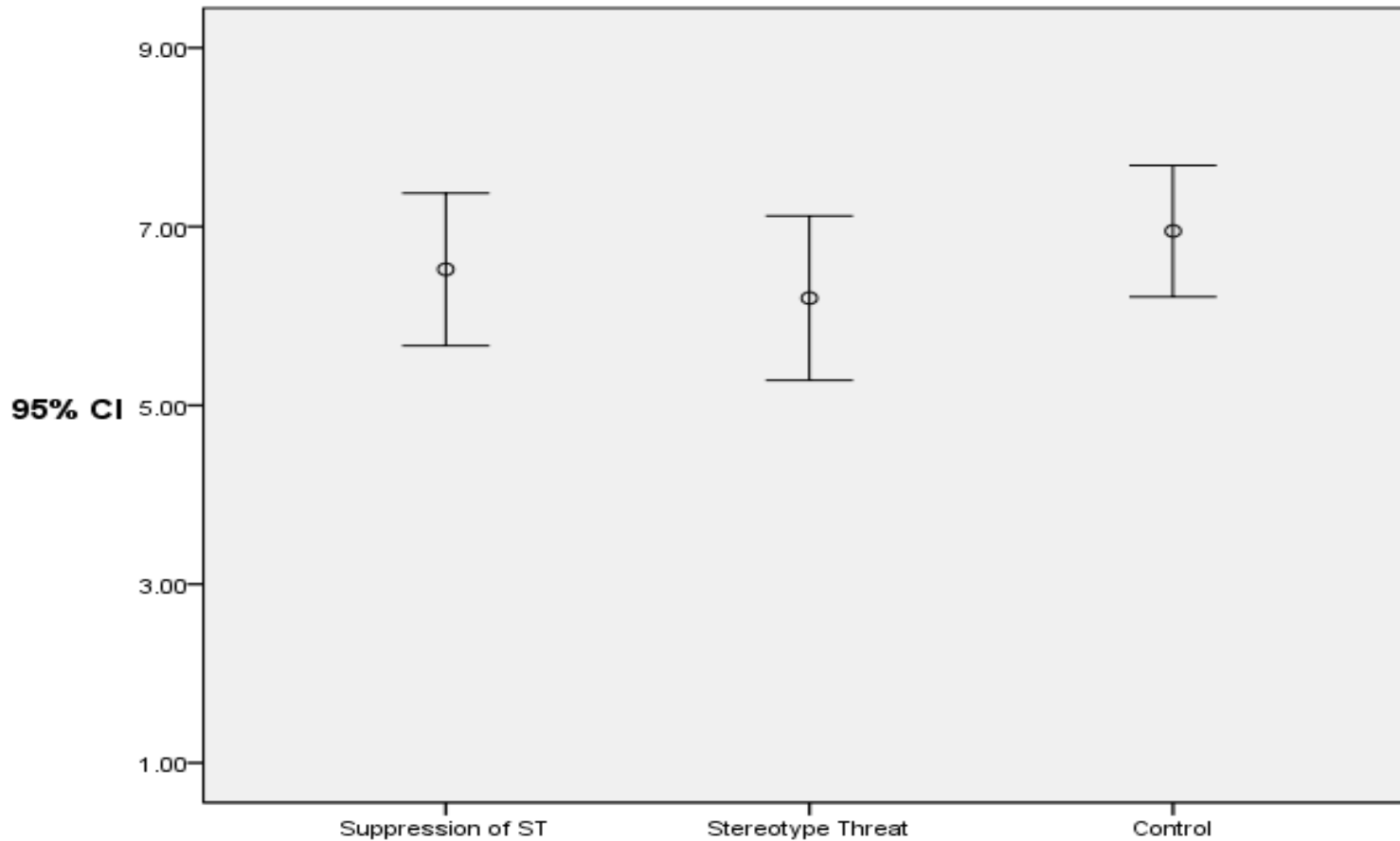


# PARTICIPANTS' ANTICIPATION ABOUT CONFEDERATES' EVALUATION:



- ANOVA:  $F(2, 63) = 2.23$ ,  $p = .12$ ,  $\eta^2 = .07$
- Pairwise comparisons indicate a significant difference between suppression condition ( $M = 5.76$ ,  $SD = 1.42$ ) and stereotype threat condition ( $M = 4.86$ ,  $SD = 1.36$ ),  $p = .04$ ,  $d = .65$
- Contrary to our prediction, Ps in suppression condition indicated a more positive rating on meta-perception compared with Ps in stereotype threat condition.

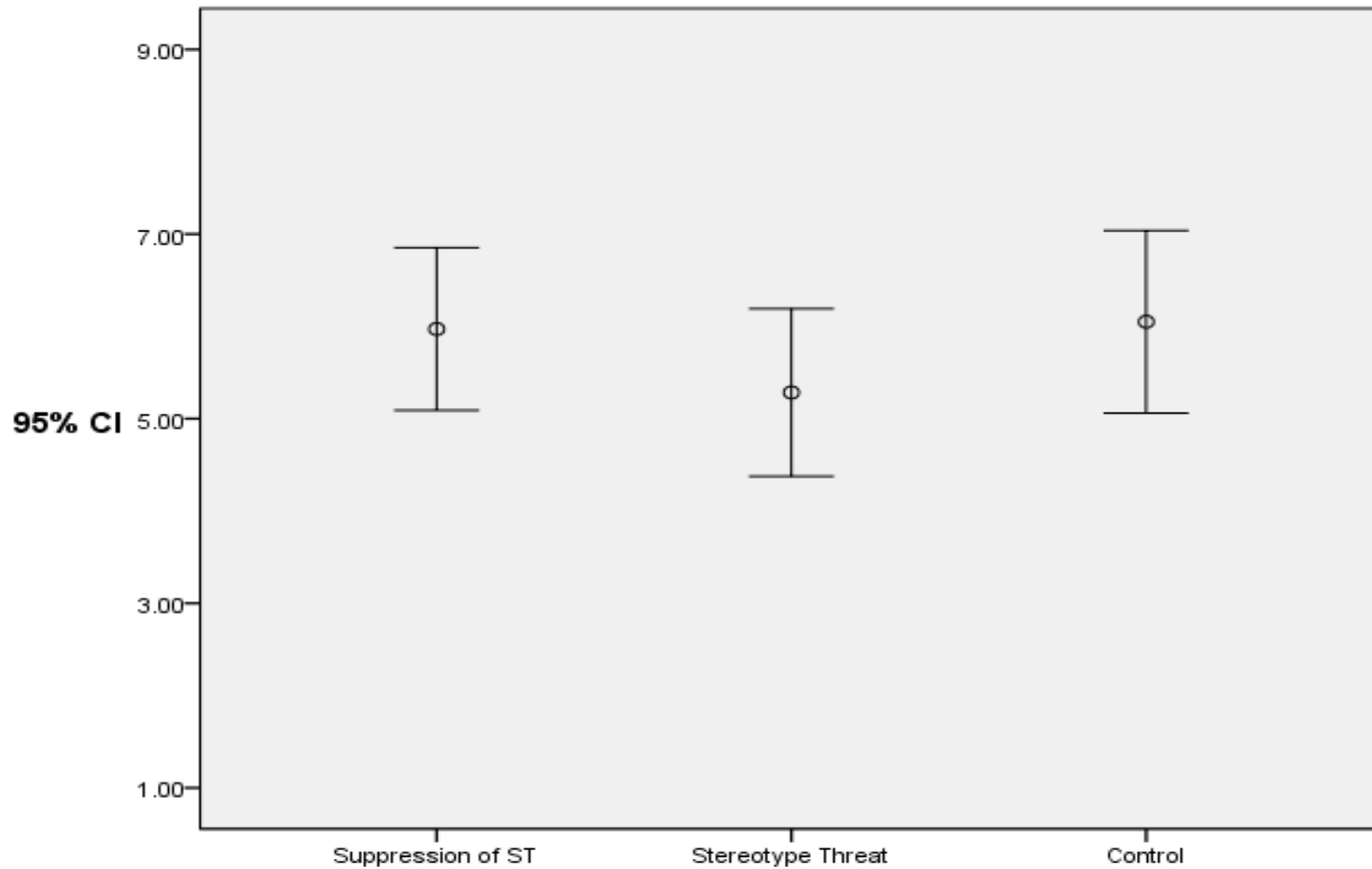
# PARTICIPANTS' WILLINGNESS TO WORK WITH THE CONFEDERATE AGAIN



- ANOVA:  $F(2, 63) = .78, p = .47, \eta^2 = .03$



# CONFEDERATES' RATINGS



- ANOVA:  $F(2, 63) = .88, p = .42, \eta^2 = .028$



# CORRELATIONS AND MODERATING ANALYSES

- Correlations:

Stigma consciousness, neuroticism, gender identification, white bear suppression inventory, and ACT scores are not significantly correlated with dependent measures (all  $r_s < .25$ ).

- Moderating analyses:

Scores on stigma consciousness, neuroticism, gender identification, and white bear suppression inventory were included in moderating analyses, none of them indicated a moderating effect (all  $F_s < 2$ )





# DISCUSSION

Possible reasons for not confirming the hypothesis:

- ◆ Confederates' inconsistency
- ◆ Participants' individual differences
- ◆ Participants' interpretation of “suppression”

To our surprise, Ps in suppression condition reported a more positive rating on the meta-perception of confederates' rating than Ps in the stereotype threat condition. One possible explanation is that active suppression leads to an defensive mechanism by viewing the self more positively, at least in the short term.

