

**THE INFLUENCE OF FEMINIST ROLE MODELS ON WOMEN'S  
EXPERIENCE OF SOCIAL IDENTITY THREAT**

by

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**THE INFLUENCE OF FEMINIST BELIEFS ON SOCIAL IDENTITY  
THREAT AND ROLE MODEL INTERVENTIONS**

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## ABSTRACT

Although the gender gap is getting progressively smaller, women are still vastly underrepresented in STEM (Science, Technology, Engineering, and Math) fields. One reason for this underrepresentation of women in STEM is a phenomenon called Social Identity Threat. Social identity threat (SIT) is a psychological dilemma occurring when individuals are confronted with a situation where they are at risk of perpetuating a negative group stereotype. More recent research has shown that presenting women in SIT context with ingroup role models can help buffer women from negative SIT effects. One way that role model interventions may work is by priming perceptions of open boundaries. However, when primed, open boundaries tend to promote individual mobility beliefs and self-focus. Ultimately, individual mobility tends to decrease collective action- anytime a group members actions are directed at improving the condition of the entire group. Therefore, while traditional role models are effective in increasing performance and promoting individual mobility, they may negatively influence women's collective action tendencies.

The current study tested whether feminist role model interventions could help women cope with SIT, while also helping maintain collective action among women in STEM. We hypothesized that like past work on role model interventions, women exposed to either role model conditions will perform better on the math intelligence task than women in the control condition. Additionally, we hypothesize that the feminist role model intervention would lead to more collective action tendencies than the traditional role model intervention.

Unexpectedly, results for performance on the diagnostic math task showed a decrease in performance for traditional and feminist role model conditions compared

to control. Interestingly, female participants in the feminist role model condition performed somewhat worse than the traditional role model and control condition. Furthermore, results showed that women in both role model conditions showed increased interest in joining a Women's STEM association. That said, participants in the traditional role model condition reported wanting to join more for personal (self-focused) reasons than participants in the feminist role model and control conditions. Alternatively, participants in the feminist role model condition reported participating for group-based (other-focused) reasons more than the traditional role model and control conditions. These results provide some evidence that feminist role model interventions can help women maintain collective action motivations, but that it may come at a cost to their performance in a SIT context.

## Chapter 1

### INTRODUCTION

The number of women who are entering science, technology, engineering, and math (STEM) fields is steadily increasing, but it is still disproportionate to the number of men in these fields (Hill, 2010). For example, a 2011 report by the U.S. Department of Commerce found that only 1 in 7 engineers are women (Huhman, 2012). One of the main reasons for this lack of inclusion could be negative group stereotypes that women have had to contend with. However, despite these pervasive stereotypes and biased gender roles, some women have succeeded in typically male-dominated fields, such as STEM. Public initiatives such as SciGirls Seven: How to Engage Girls in STEM and Girlstart (Mizzi, 2019) are helping women achieve success in many domains by motivating them not to reinforce the negative stereotypes about them, allowing them to pursue their goals. While these initiatives help, it is still important to ask why more women are not entering fields, such as STEM and what can be done to increase women's participation in STEM.

One reason that women are not entering STEM is phenomenon called social identity threat (SIT). Social identity threat is a situational predicament that occurs when individuals fear that others may devalue their social category (Branscombe et al., 1999). One way to overcome the adverse effects of social identity threat can be through exposures to role models or female exemplars in typically male-dominated fields (Betz and Sekaquaptewa, 2012). Betz and Sekaquaptewa (2012) believe that role model interventions help women motivate other women who may feel threatened in a situation by raising their expectations in STEM. Role models serve to inspire

women to continue to pursue success in male-dominated fields (Betz and Sekaquaptewa, 2012).

That said, it is possible that traditional role model interventions may help the individual target of social identity threat, but negatively affect how they behave towards other women. Women may be protecting themselves from the threat, and in doing so, they become more concerned with helping themselves. This can increase individual mobility, in turn making it less likely that they behave in ways that help enhance the group as a whole, (i.e., engage in collective action; Wright et al., 1998).

Therefore, we were interested in finding a solution that would allow women to engage in collective action while coping with SIT. A possible solution could be exposing women to a feminist role model. Traditionally, feminism is rooted in empowering other women (Booth et al., 1972). Therefore, if women are exposed to feminist female exemplars, then, they too may adopt a feminist mindset. Once they adopt a feminist mindset they may become motivated in helping other women and actively push for women's equality in STEM through collective action while coping with SIT.

In this study, we tested two different forms of role model interventions: a traditional role model intervention and a feminist role model intervention. The study aimed to test whether exposure to a feminist role model can influence women's performance on a diagnostic math test, as well helping maintain their willingness to engage in collective action on behalf of other women.

### **Does social identity threat moderate women's performance in STEM?**

Social identity threat can have a substantial influence on women's performance in domains where they are typically stigmatized, such as STEM (Schmader, 2002).

Steele et al. (2002) argue that cultural centeredness – the more a setting, like a classroom upholds a culture associated with a social identity (i.e. all men in a physics class), the more likely this type of setting is to cause social identity threat. For example, Spencer et al. (1999) found that when exposed to a negative group stereotype, women performed worse on a difficult math task than women not primed with the negative stereotype and men in general. However, when not exposed to a negative group stereotype, women performed like men (Spencer et al., 1999). This study demonstrates that social identity threat can negatively impact women in a STEM or math-related context. Additionally, this SIT performance effect has been demonstrated many times since Spencer’s initial study, (Inzlicht and Ben-Zeeve, 2000; Brown and Joesphs, 1999; Ambady et al., 2001).

The section above provides evidence that SIT threat can moderate women’s performance in STEM. Women in SIT environments tend to underperform in threatening contexts (Spencer et al, 1999). Their underperformance can be because being a woman and being in a typically male-dominated field, makes women increasingly more aware that there is a difference between men and women’s abilities. These perceptions in turn, can lead to social identity threat, ultimately impacting their performance in STEM contexts.

### **Are Role Model Interventions a solution to help buffer women from SIT performance effects?**

There have been many findings suggesting that SIT effects on performance can be moderated by presenting low-status group members with powerful exemplars or role models in a given domain. Role model interventions are tools that promote goals and suggest paths for success, ultimately engaging individuals in motivational

processes (Hermann et al., 2016). They are designed to help protect against the harm of negative stereotypic beliefs about their group (Dasgupta, 2011). Dasgupta (2011) used role model interventions to “inoculate” women against social identity threat. Specifically, women who are in contact with other successful members of their group, will become motivated to buffer themselves from SIT, allowing them to fight against the self-doubt which may they have (Hermann et al., 2016). It is believed that exposure to successful women who have been able to defy SIT and succeed, allows others belonging to the same group to enhance their self-efficacy and motivation to succeed (Dasgupta, 2011).

For example, Lockwood and Kunda (Study 1,1997) did a study looking at the impact of “superstar” role models on women’s self-views. They presented women with a superstar/role model and hypothesized that exposure to the superstars would give rise to greater inspiration and self-enhancement when they were perceived to be more self-relevant. They presented women with a fictitious newspaper article describing the success of a teacher or an accountant who had won an award for their high achieving successes. Lockwood and Kunda (Study 1, 1997) found that the more a female viewed the role model as belonging to the same group as them, the more inspired they were by that role model. These results are in line with Dasgupta's (2011) theory that exposure to a successful role model increases motivation to succeed.

That said, little is known about the mechanism behind role model interventions. That said, past research has looked at how “token” instances of low-status exemplars can prime perceptions of open status boundaries, or the degree to which an individual believes they can reach high status positions in domains where they are viewed as lower status. “Token” instances of low-status exemplars are like

role model interventions, in that, they both work by displaying examples of high achieving women. For example, Cheryl Taylor (2011) looked at women's performance on a GRE-Q task after being exposed to a successful role model: Hilary Clinton. And, she also measured how deserving the participants thought Hilary Clinton was of her successes. She found that women who viewed Clinton as deserving her success scored higher on the GRE-Q task compared to the threat-only condition (Taylor, 2011). Taylor (2011) argues that role model interventions are successful because they help an individual's remove themselves from the burden of the group, allowing themselves to believe that high-status is achievable. Therefore, Taylor's results are in line with research on how "token" instances may increase their performance.

That said, the problem with priming open boundaries is that those perceptions can lead to individual mobility beliefs and self-focus (Wright et al., 1998). Individual mobility is the belief that individuals are free agents who can move from one social group to another and is directed at improving one's personal status (Wright et al., 1998). In their Social Identity Theory, Tajfel and Turner (1974) stated that if group boundaries are open – allow for change within the hierarchy and structure of the group - then this can lead to social mobility beliefs as opposed to when boundaries are closed – not allowing for change within the group structure. So, Tajfel and Turner (1994) hypothesized that when group boundaries are open then members of that group are more likely to engage in individual mobility. Wright et al., (1990) conducted a study looking at how individuals would attempt social mobility when boundaries were open and found that when participants perceived boundaries as being open they were more likely to pursue individual actions to increase their own personal status.

However, women who endorse individual mobility beliefs and self-focus are less likely to engage in collective action tendencies on behalf of their own group (Tajfel and Turner, 1994). For example, Wright et al. (1998) presented low-status individuals with “token” group exemplars and found that these group exemplars led to increase individual mobility behaviors, and a decreased likelihood of engaging in collective action. Also, Wright et al., (1990) found that if boundaries are completely closed then women are likely to engage in more collective action compared to when boundaries are perceived to be open (which was primed by the token exemplar). Therefore, it is possible that open boundaries can be primed by group exemplars, which increases individual mobility, and decreases collective action.

The sections above show that role model interventions may work by promoting open boundaries. Open boundaries may lead to increased individual mobility, thus, increasing performance in STEM. Thus, while role model intervention may help individual performance in a SIT context, it may lead to less collective action amongst group members. We believe that a feminist role model may succeed at increasing collective action and ingroup support while maintaining the perception of open boundaries.

### **Can Feminism be an effective form of Role Model Interventions?**

This study proposes that exposing women to feminist role models could help buffer women from SIT performance effects while maintaining collective action tendencies. Collective action helps individuals overcome social dilemmas (Ostrom, 2007), like the underrepresentation of women in STEM by coming together as a unit to help other members of their group. Feminism has the potential to engage motivations for collective action because individuals who consider themselves

feminist are continually trying to create equality in areas where there is a “...grounded belief that women are oppressed or disadvantaged by comparison [to] men...” (McAfee, 2018). Furthermore, feminism is rooted in the belief of empowering other women (Booth et al., 1972). Therefore, if women are exposed to feminist female exemplars then they too may adopt a feminist mindset and become motivated in helping other women and actively push for women’s equality in STEM through collective action.

As mentioned in the section above, past research on collective action has shown there to be a reduction in collective action tendencies when group boundaries are perceived to be open (Wright et al., 1998). Another reason that collective action may become abandoned is because when individuals from low-status groups cross group boundaries and reach high-status, they are less likely to engage in actions to help other ingroup members. Evidence for this comes from Moss-Racusin et al. (2012) who looked at female faculty responses when asked to evaluate female and male employment applications. They found that females faculty members viewed female applicants as less competent compared to men applicants. Additionally, they found that female faculty members did not show interest in their willingness to mentor female applicants. This finding suggests that women are less likely to support the success of other ingroup members. This pattern found by Moss-Racusin et al. (2012) lines up with findings related to the System Justification Theory. The System Justification Theory (Jost et al., 2004) states that people are motivated to defend and legitimize a certain social system. They are also able to rationalize their behavior in a system that is actively oppressing stigmatized groups (Jost et al., 2014) So, women from low-status groups who achieve high-status success view the system as being

more legitimist and will not help other ingroup members achieve success. Therefore, it is possible that by exposing women to a feminist role model, they will adopt a feminist mindset and endorse increased collective action tendencies. A feminist mindset should allow there to be a shift away from individual mobility because women will not see themselves as having a self-focused drive for success, rather they want all women to do well in STEM (Booth et al., 1972).

The section above provides evidence that being in the presence of a successful woman in STEM who upholds feminist attitudes will help prime feminist attitudes for other women. Ultimately, increased feminist attitudes will allow for increased collective action tendencies by increasing ingroup support among women and decreasing individual mobility attitudes. This can improve women's standing in STEM and help fight against the gender inequality in STEM. That said, the study hypothesizes that when exposed to feminist role models, women will be more likely to engage in collective action.

### **Study overview**

There is ample evidence that role model interventions can be a successful way for stigmatized individuals to protect themselves from social identity threat. The current study plans to extend past work on role model interventions by testing whether feminist role models will be useful in buffering women from SIT effects while also promoting collective action tendencies. First, we hypothesized that both the role model interventions will help increase performance compared to controls. Additionally, we hypothesized that participants in the feminist role model condition

will show increased collective action tendencies compared to both the traditional role model and control conditions.

## **Chapter 2**

### **METHODS**

#### **Participants**

120 female undergraduate students from the University of Delaware participated for course credit. All eligible participants were aware of the stereotype that men are better than women in STEM fields. All participants were exposed to the threatening manipulation. Also, all participants were native English speakers, who scored above the scale mean on a pretest math identification measure and reported awareness of the gender/math stereotype (Forbes & Schmader, 2010). The study was preregistered.

#### **Materials**

The diagnostic math task questions were taken from the Graduate Record Examination (GRE) (Forbes & Schmader, 2010; Study 4). MediaLab software (Jarvis, B.G.) was used to run the math task. SPSS software was used to analyze the data from the task.

#### **Design**

The study utilized a one-way (role model intervention: traditional, feminist, and control) between-subjects factorial design. The primary dependent variables were performance on a diagnostic math task, interest in joining a proposed STEM association, and motivations for joining (personal or group-based).

## **Task and Procedure**

After providing informed consent, participants were randomly assigned to one of three conditions: control, role model condition, or feminist role model condition. All participants were exposed to the threat manipulation that performance on the diagnostic math task would show their natural math ability. To prime SIT, the instructions were read in a male voice, which has been shown to elicit a stereotype threat response (Lesko and Corpus, 2006), the participants were told that the math task was diagnostic of their natural math ability, which has also been shown to elicit a stereotype threat (Steele et al., 2002), and participants were asked to mark their gender, also eliciting the stereotype threat response (Chatard et al., 2007).

After the introduction to threatening manipulation, participants answered several demographic questions. Next, participants were exposed to one of the three role model manipulations. Participants in each condition read a vignette about the developer of the math task they will take. Participants in the control condition were introduced to a math test prep company. Participants in the traditional role model condition were given a brief biography of the developer of the math task, who was a successful female mathematician. Finally, in the feminist role model condition participants were given a brief biography of the developer of the math task, who was a successful female mathematician interested in gender-equality and engaged in collective action to help other women in STEM. All vignettes were matched for length and content to the best of our ability. After the role model manipulation, participants completed a 10-minute math problem-solving task. They were told to try and solve as many of the problems as they could, to the best of their ability. Participants were given scrap paper and monitored by a research assistant.

Once participants were done with the 10-minute math task, they completed the STEM Association collective action measure. First, they were introduced to a proposal for a Women's STEM Association and told that the primary goal of this association was to provide underrepresented individuals in STEM with information they needed to develop strong support networks and help bridge the gender gap in STEM. They were then asked if they were interested in joining the proposed Women's STEM Association. Participants further expanded on their interest in joining, by indicating if their decision to join was based on personal reasons or if it was based on their desire to help women succeed in STEM (group-based/collective action reasons). Participants were then debriefed and let go.

### **Dependent Measures**

#### **Performance on the Diagnostic Math Test**

The questions for the diagnostic test were standardized test questions with varying levels of difficulty (Forbes & Leitner, 2014). All participants had 10 minutes to complete as many questions as they could. Test questions were the same across all conditions. Math scores were calculated by dividing total number correct by the total number attempted.

#### **Interest in Joining STEM Association**

After completing the math task, participants across all conditions were introduced to a proposal for a women's STEM association and asked how likely they were to join. Specifically, they were asked, "Please indicate your overall interest in joining the proposed Women's STEM Association". Scores were measured on a scale of 1 (extremely interested) to 5 (not at all interested).

### **Motivation for Joining for Personal Reasons**

Once participants were proposed the idea of a women's STEM association, they were asked if their joining was due to personal reasons. We asked them, "Please indicate the extent to which your decision was based on personal reasons (boosting your resume, making connections, networking)". Scores were measured on a scale of 1 (a great deal) to 5 (none at all).

### **Motivation for Joining for Group-Based Reasons**

Participants were also asked if their joining the proposed association was due to them wanting their group to benefit. Specifically, they were asked, "Please indicate the extent to which your decision was based on your desire to help women succeed in STEM". Scores were measured on a scale of 1 (a great deal) to 5 (none at all).

## Chapter 3

### RESULTS

#### Task Performance

A one-way between subjects' ANOVA was conducted to test the effect of condition (role model, feminist role model, control) on performance on the GRE math task (Figure 1). Results revealed a marginal effect of condition  $F(1, 169) = 2.30, p = .104, \eta^2 = .027$ . Although not significant, there were interesting performance differences between conditions. Female participants in the control condition performed the best ( $M = 43.67, SD = 23.70$ ), female participants in the role model condition performed the second best ( $M = 39.76, SD = 23.47$ ), and female participants in the feminist role model condition performed the worst ( $M = 34.70, SD = 20.86$ ). Additionally, pairwise comparisons show that participants in the control condition ( $M = 43.67, SD = 23.67$ ) performed marginally better than participants in the feminist role model condition ( $M = 34.70, SD = 20.86$ ),  $F(1, 169) = 3.80, p = .024, \eta^2 = .044$ . There were no differences between the traditional role model manipulation and the control condition or the feminist role model condition ( $p$ 's  $> .5$ ). These results contradict our original hypotheses, which predicted the role model conditions (both traditional and feminist) would buffer women from SIT performance effects. However, these results are interesting because it is possible that exposure to the feminist role model, which included awareness of inequality, could have further primed SIT, leading to the decreased performance observed.

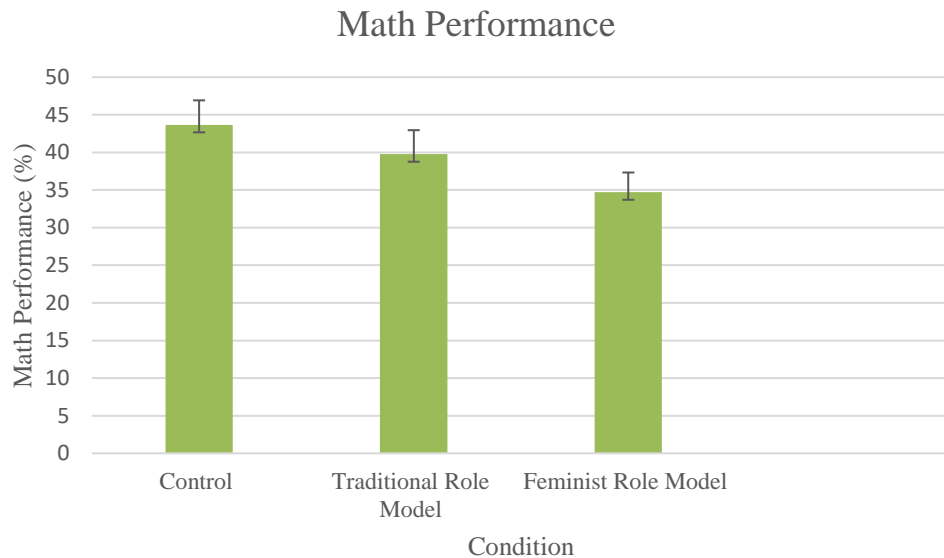


Figure 1 This figure depicts how each condition, (control, traditional role model, and feminist role model) performed on the math task. Compared to other participants, females in the traditional role model condition outperformed participants in both the control and the feminist role model condition.

### Interest in Joining

A one-way between subjects' ANOVA was conducted to test the effect of condition (role model, feminist role model, control) on overall interest in joining the proposed Women's STEM association (Figure 2). Results revealed a marginal effect of condition  $F(1, 169) = 2.120, p = .123, \eta^2 = .025$ , where female participants in the control condition showed the least amount of interest in joining ( $M = 4.019, SD = 0.137$ ), female participants in the feminist role model condition showed more interest than women in the traditional feminist condition ( $M = 4.286, SD = 0.126$ ), and female participants in the traditional role model condition indicated the highest interest in joining ( $M = 4.407, SD = 0.136$ ). Pairwise analyses revealed no significant effect of condition on likelihood of joining the Women's STEM Association, because

participants in this study self-reported that they were highly likely to join the Association in the control (M = 4.02, SD = 1.14), traditional role model (M = 4.29, SD = .92), and feminist role model (M = 4.41, SD = .94) conditions. Although these results are not significant, it shows to some extent that the role model interventions impacted women’s interest in joining. Although these results are not significant, it shows to some extent that the role model interventions impacted women’s interest in joining.

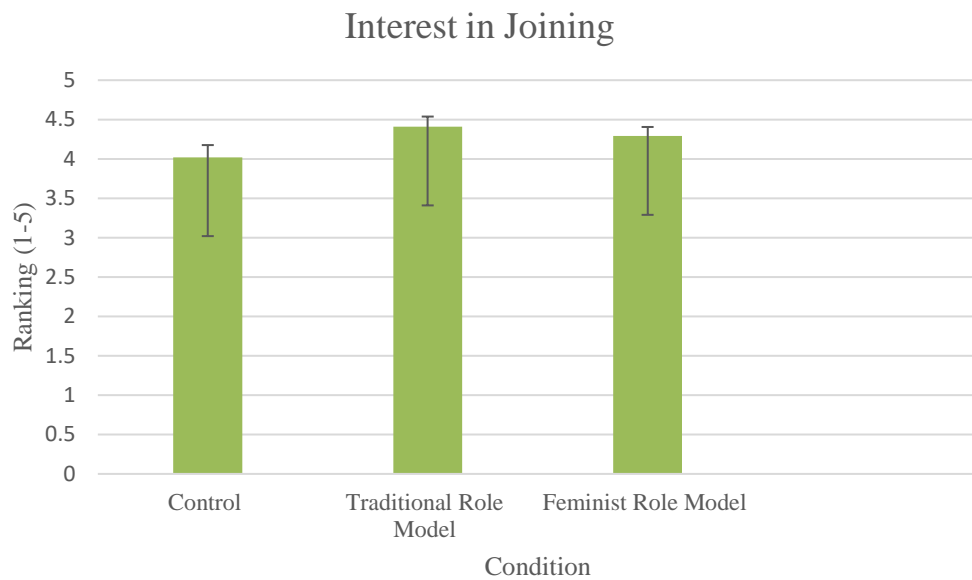


Figure 2 This figure depicts women’s interest in joining the Women’s STEM Association, by condition (control, traditional role model, and feminist role model). Compared to other participants, females in the traditional role model condition reported interest in joining the proposed association the most.

### **Interest in joining for Personal Reasons**

Since there were marginal effects present showing that role model interventions impact women’s interest in joining, we wanted to see what was driving

women's interest in joining the STEM association. A one-way between subjects' ANOVA was conducted to test the effect of condition (role model, feminist role model, control) on personal reasons for joining the proposed Women's STEM association (Figure 3). Results revealed a significant effect of condition  $F(1, 169) = 3.116, p = .047, \eta^2 = .036$ , where female participants in the control condition were the least likely to join the proposed STEM association for personal reasons ( $M = 3.491, SD = 0.173$ ), female participants in the feminist role model condition showed more personal interest in joining compared to the control participants ( $M = 3.730, SD = 0.158$ ), and female participants in the traditional role model condition indicated joining the proposed STEM association the most for personal reasons ( $M = 4.093, SD = 0.171$ ). Furthermore, pairwise comparisons showed that female participants in the traditional role model condition ( $M = 4.093, SD = 1.307$ ) were significantly more likely to join the Women's STEM Association for personal reasons compared to female participants in the control condition ( $M = 3.491, SD = 1.250$ ),  $F(1, 169) = 3.116, p = .047, \eta^2 = .036$ . Although participants in the traditional role model condition reported joining for personal reasons more than participants in the feminist role model condition ( $M = 3.730, SD = 1.27$ ), although this did not reach significance ( $p > .2$ ). These results suggest that our traditional role model condition led to increased individual mobility tendencies compared to the two other conditions. Additionally, these results indicate that women exposed to the traditional role model intervention reported wanting to join the STEM association for personal reasons.



Figure 3 This figure depicts women who joined the proposed Women’s STEM Association for personal reasons, by condition, (control, traditional role model, and feminist role model) Compared to other participants, females in the traditional role model condition reported joining the proposed association for personal reasons the most.

### **Interest in joining for Group-Based Reasons**

We also tested whether interest in joining the proposed women’s STEM association was due to group reasons for joining. A one-way between subjects’ ANOVA was conducted to test the effect of condition (role model, feminist role model, control) on group-based reasons for joining the proposed Women’s STEM association (Figure 4). Results revealed a significant effect of condition  $F(1, 169) = 5.123, p = .007, \eta^2 = .058$ , where female participants in the control condition were the least likely to join the proposed STEM association for group-based reasons ( $M = 2.925, SD = 0.180$ ), female participants in the traditional role model condition showed more group-based reasoning for joining compared to the control participants ( $M =$

3.167,  $SD = 0.178$ ), and female participants in the feminist role model condition indicated joining the proposed STEM association the most for group-based reasons ( $M = 3.683$ ,  $SD = 0.165$ ). Pairwise comparisons showed that participants in the feminist role model condition ( $M = 3.68$ ,  $SD = 0.165$ ), reported joining the Women's STEM Association for group-based reasons more than participants in the control condition ( $M = 2.925$ ,  $SD = 1.31$ ),  $F(1,169) = 3.13$ ,  $p = .007$ ,  $\eta^2 = .058$ . Participants in the feminist role model condition also reported wanting to join the association for group-based reasons more than participants in the traditional role model condition ( $M = 3.167$ ,  $SD = 1.37$ ), although this effect was only marginal,  $F(1,169) = 2.30$ ,  $p = .106$ ,  $\eta^2 = .027$ . These results suggest that our feminist role model condition increased female participants' desire to help women and engage in collective action for their ingroup.

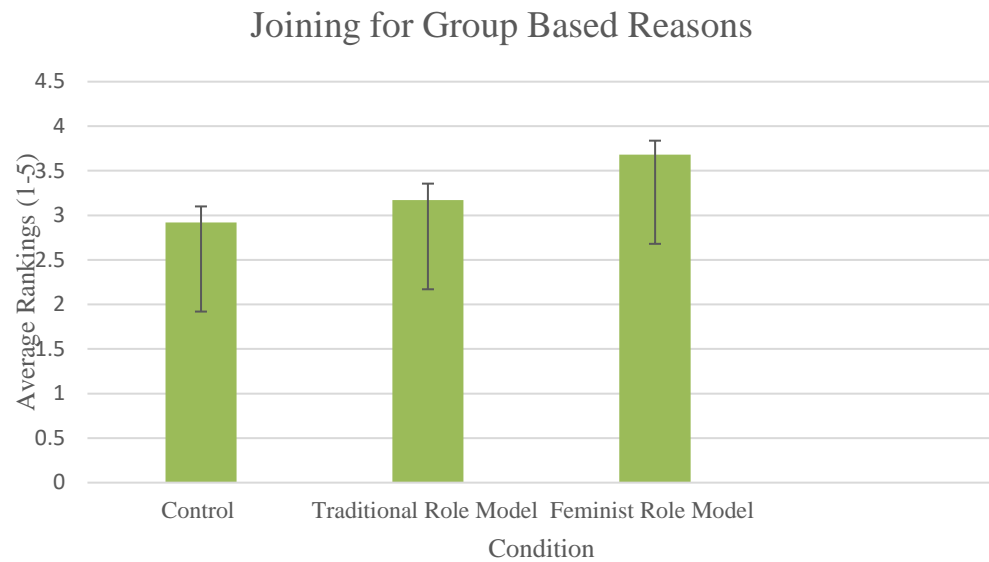


Figure 4 This figure depicts women who joined the proposed Women’s STEM Association for group-based reasons, by condition, (control, traditional role model, and feminist role model) Compared to other participants, females in the feminist role model condition reported joining the proposed association for group- based reasons the most.

## **Chapter 4**

### **DISCUSSION**

Previous research has shown the effectiveness of role model interventions in increasing women's performance in underrepresented domains. That said, no prior research has investigated the influence of feminist role models on women's experience of social identity threat and willingness to engage in collective action. The current study addressed this gap in the field by exposing women to a role model with feminist attitudes. The study measured their performance via a diagnostic math task and their and motivations for collective action through a STEM Association Collective Action measure.

Overall, the results of the study showed mixed results in relation to the two hypotheses. The first hypothesis was that women exposed to either role model conditions would perform better on the math intelligence task than women in the control condition. The second hypothesis was that participants in the feminist role model condition would show increased collective action tendencies compared to both the traditional role model and control conditions.

The first hypothesis was not supported for either role model condition. Performance on the diagnostic math task was lower in both the traditional and feminist role model conditions compared to the control. This finding was unexpected given past role model intervention findings on performance effects (Dasgupta et al., 2011 and Taylor, 2011). It was originally predicted that role model conditions (both traditional and feminist) would buffer women from SIT performance effects. However, pairwise comparison results were interesting because they showed that it was possible that exposure to the feminist role model, which included awareness of

inequality, could have further primed SIT, leading to the decreased performance observed.

Performance could have decreased in the traditional role model because for role model interventions to work, participants need to feel some degree of relatedness to the role model (Dasgupta, 2011). So, it is possible that performance decreased because participants did not feel a personal connection to the role model presented to them (as cited in, Dasgupta, 2011). Therefore, it is possible that they did not benefit from exposure to the role model. Performance could have decreased for participants in the feminist role model condition because, in an attempt to prime feminist ideologies and motivate collective action tendencies, we could have inadvertently primed the awareness of the gender gap in STEM, which could increase SIT effects.

The second hypothesis was supported, to some extent. Participants in the feminist role model condition reported increased collective action tendencies on the STEM Association measure. Additionally, participants in the traditional role model condition reported increased individual mobility tendencies. These findings support the idea that exposure to strong female feminist exemplars can increase women's endorsement of collective actions, making it more likely that they would help other ingroup members. Furthermore, the results from the pairwise analyses suggest that our feminist role model condition increased female participants' desire to help women and engage in collective action on behalf of their ingroup. Therefore, when women in STEM begin to work as a unit trying to achieve a common goal, then this could lead to an increase in the number of women seen in STEM.

Given the results of this study, one limitation is that the sample size was not that large. Perhaps with increased sample size, the results for performance on the math task would be more like the findings of Dasgupta et al. (2011) and Taylor (2011). Future studies should try to account for possible confounds, such as other negative stereotypes associated with feminism, which may result in decreased performance.

In conclusion, the number of women in STEM is not comparable to men and SIT could, in part, explain the gender inequality in the field. Role model interventions can help buffer SIT performance affects but it comes with a cost. Traditional role model interventions increase self-focus and individual mobility, allowing group members to remove themselves from the burden of the group. But, when there is individual mobility, collective action tendencies decrease, making it less likely that women will help other women. The feminist role model intervention was an attempt to increase collective action while protecting against SIT. Performance results were unexpected and interesting in that they were the opposite of what was expected. However, the feminist role model did increase collective action, it showed that women reported that their interest for joining the STEM Association was because of group-based reasons – wanting their group to benefit as opposed to personal (self-focused) reasons. That said, with more research done in the future, exposure to feminist role models could increase women’s STEM interest and help close the gender gap.

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