THE INFLUENCE OF PSYCHOLOGY OF WOMEN CLASS
ON FEMINIST IDENTITY, PERCEPTIONS OF FEMALE LEADERS,
AND LEADERSHIP QUALITIES

A THESIS

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OLYVIA KUCHTA

DR. KATIE LAWSON - ADVISOR

BALL STATE UNIVERSITY

MUNCIE, INDIANA

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Abstract

Women are underrepresented as leaders in the United States in political and corporate sectors. This may be due in part to the social role theory which asserts that women are unlikely to adopt qualities that would align with the qualities needed for a position of power if women do not see other women in positions of power in society. The present study recruited participants from Psychology of Women classes to examine whether participation in a Psychology of Women course would increase feminist identity, and thus increase positive attitudes toward a female leader and increase transactional leadership qualities in women. Results of a mediational analysis indicated that feminist identity did not serve as a mediator between Psychology of Women course and perceptions of female leaders, or transactional qualities in women. Future research should incorporate a larger sample as well as examine samples with more diversity. Implications from this research suggest that Psychology of Women should shape the curriculum to incorporate more direct experiences with leadership and feminism.
The Influence of Psychology of Women Class on Feminist Identity, Perceptions of Female Leaders, and Leadership Qualities

Women are underrepresented as leaders throughout the U.S., including in political and corporate sectors. While there have been many strides toward increasing representation of women in leadership positions, gender inequality persists. For example, currently 19.4% of the United States Congress are women, 21% are in the Senate, and 19.1% in the House of Representatives (“Women in the U.S. Congress 2017”, 2010). Additionally, 24% of statewide elective executive office positions are held by women. Currently, a total of 6 women serve as governors, while only 39 women total have ever served as governors in only 27 states. Also, for the first time in American history, we saw the first woman as the Democratic nominee in the presidential election. Although this is a progressive time and the representation for women in politics is slowly increasing, it is still far from an equal representation of men and women. The lack of women in leadership positions is not unique to politics. In fact, in the corporate sector, the representation of women in leadership positions is even lower. Currently, only about 5% of the CEOs of Fortune 500 companies are women (Pew Research Center, 2017).

Even though women are more educated now than ever before, outnumber men in college enrollment and completion rates, and are more likely to continue their education after college, they still continue to fall behind men in top leadership positions (Pew Research Center, 2015). In order to move toward equality, women need to be in positions of power. People who are in power control the laws that govern us, how money is spent, who gets hired in a field, what is covered in health insurance, the types of media that people are exposed to, and much more. When women are prevented or discouraged from pursuing positions of power, this puts women at a disadvantage because they do not have the ability to have a voice and implement policies
that can benefit women. Thus, it is important to understand how to intervene in order to increase the number of women in leadership positions. The present research will examine whether a Psychology of Women college course – designed to challenge ideas about sex and gender with the utilization of empirical research and theory – may indirectly alter negative perceptions of females as effective leaders and change their leadership qualities by increasing students’ feminist identity.

**Psychology of Women Course & Feminist Identity**

The Society of Teaching and Learning has a website where they publish syllabi from professors which are reviewed by a selection committee using established rubric for best teaching practices. The Society of Teaching Psychology works to advance the teaching and learning of psychology which is why they have started this syllabus project. The mission statement is, “The Society for the Teaching of Psychology advances understanding of the discipline by promoting excellence in the teaching and learning of psychology. The Society provides resources and services, access to a collaborative community, and opportunities for professional development. The Society also strives to advance the scholarship of teaching and learning, advocate for the needs of teachers of psychology, foster partnerships across academic settings, and increase recognition of the value of the teaching profession” (Project Syllabus, n.d.). The website categorizes syllabi into categories based on topic covered in the class.

Examination of multiple syllabi from the Society for the Teaching of Psychology, which posts syllabi reviewed by a committee using an established rubric for best teaching practices, indicates that Psychology of Women college courses are designed to teach students biological, social and psychological aspects of women’s lives such as social behavior, experiences,
economic and political life, power and status, equity, workplace issues, and much more (Project Syllabus, n.d.).

While the present study uses participants at one mid-sized, Midwestern university (Ball State University), and uses only two professors’ classes, syllabi posted via the Society for the Teaching of Psychology suggest that professors have similar goals across universities (Project Syllabus, n.d.). There is great overlap between the syllabi posted on the website (4 total from multiple universities) and the syllabi from Ball State University in their focus on theoretical perspectives of gender norms and stereotypes. Thus, even though professors may have different teaching styles and different ways in which they approach the material, women may have similar experiences in Psychology of Women across universities and professors.

In Psychology of Women, students are encouraged to examine the media and current events with a new lens, through the view of feminist critique, where they can understand inequality in daily life through the use of theories learned in class (Project Syllabus, n.d.). As one course objective from the Psychology of Women course at Ball State University taught by one particular professor states, “The purpose of this course is to provide an introduction to the field of the psychology of women. The first portion of the class will lay the foundation for understanding research on women, including basic definitions of concepts like gender norms and stereotypes, theoretical perspectives on sex and gender, and research methodologies. The rest of the class will focus on a range of social, biological, and psychological topics surrounding women, including social behavior and experiences, sexual lives, mental and physical health, childhood experiences, relationships with family and friends, economic and political life, power and status, workplace issues, justice, equity, and social change” (Lawson, Syllabus, 2016).
In Psychology of Women, students learn to challenge gender stereotypes and recognize how gender roles dictate much of what people are allowed or encouraged to do within a given society. Gender roles were a core component of material that was covered in the Psychology of Women classes that were posted on the Project Syllabus (Project Syllabus, n.d.). Professors may use a variety of techniques to reach this goal. For example, within the class at Ball State University, students may write reflection papers on class content, read and discuss research and news articles related to gender issues, and/or watch popular media clips in class and relate it back to class content. In addition, students may complete a content analysis, which requires them to create a coding scale to analyze the media. For example, students may decide to examine Disney movies, and within their coding scale decide to count how many female lead characters there are in top grossing films in the last 10 years to examine whether the representation of female lead characters in Disney movies has changed throughout time.

Students also learn to become more comfortable violating gender norms and accepting of others, and expressing themselves for how they truly want to be instead of what society dictates. Understanding gender roles may help students to feel more comfortable embracing nontraditional gender roles. In Ball State University’s class, for example, students may be asked to violate a gender norm and then write a paper on their experience – including their own feelings and thoughts and how others reacted to them during the event. Students also learn to think critically about the media, question popular sources of information, and are exposed to some of the inequalities still present in the world – presented as opportunities for societal growth which is a larger theme that seems to be incorporated into many of the classes of the Psychology of Women syllabi cited on the Project Syllabus website (Project Syllabus, n.d.).
Because of the structure of Psychology of Women, it has the potential to influence feminist identity, which is characterized by the ability to recognize societal structures and pressures that are placed upon women so as to understand how these factors influence their daily lives, and provide a knowledge base surrounding the rationale for their struggles. Although Psychology of Women courses are designed in a way to encourage the development of one’s feminist identity, there has been little empirical research on the topic. The topics that are included within Psychology of Women courses focus on gender roles, and the many aspects of society that influence women, and how gender plays a big role in society. Thus, feminist ideology is taught through the explanation of gender because understanding inequality leads individuals to strive toward equality, which aligns with a feminist perspective.

A Psychology of Women class should influence feminist identity because, according to Downing and Roush’s (1984) feminist identity development scale, women who strongly identify with being a feminist will recognize the oppression of women, become immersed in women’s culture, move beyond traditional gender roles and recognize why it is beneficial to be a woman, and are committed to social change – all components addressed in the course. Psychology of Women has the potential to lead to the development of feminist identity because it allows students to recognize oppression, understand gender roles – including how they are expressed on a daily basis and how they may be restricting to both men and women, recognize how policies, societal constraints, and power within society influence the lives of women, and understand how they can make a difference in the world.

In one of the few studies that examined Psychology of Women, Bargad and Hyde (1991) utilized solely women in Psychology of Women and Women and Gender Studies courses and found that the classes increased students’ feminist identity. Therefore, we also predict:
Hypothesis 1: Completion of Psychology of Women will increase feminist identity for women in the course.

Social Role Theory, Gender Stereotypes, and Backlash Against Female Leaders

Social roles are socially shared expectations of what members of that social category should act like (Biddle, 1979; Sarbin & Allen, 1968). Social role theorists argue that people occupy the roles that are defined by their position in society. Because Western society is hierarchical, power differentials exist and are often related to constrained gender roles (Eagly & Johannesen-Schmidt, 2001; Eagly & Johnson, 1990; Eagly & Karau, 2002; Eagly, Wood, & Diekman, 2000). Moreover, another key component of social role theory is the idea that women and men look to how other women and men in society display characteristics congruent with their social roles in order to model themselves based on what are appropriate characteristics for their respective gender. Specifically, women and men look toward the positions that other women and men hold in society in order to assume the qualities needed to fit within the positions appropriate for their gender (Eagly & Johannesen-Schmidt, 2001; Eagly & Johnson, 1990; Eagly & Karau, 2002; Eagly, Wood, & Diekman, 2000). Therefore, if females are not seeing women as leaders, they are not likely to adopt qualities that a traditional leader would display.

Gender roles, which are beliefs about attributes of women and men, have the ability to influence individuals’ pursuit of leadership positions and how they lead. Prescriptive gender stereotypes describe what society believes men and women should be like, whereas prescriptive stereotypes describe what society believes men and women should not be like. Agentic traits, which are typically associated with males, are characterized by assertiveness, control, directiveness, and focus on the self. Communal traits, which are typically associated with females, are characterized by warmth, focus on others, the tendency to be friendly, unselfish, and
expressive (Eagly & Wood, 1991). Female and male leaders may act differently based on the social expectations provided to them based on their social role, gender role, and stereotypes.

Gutek and Morasch (1982) suggested that gender roles present themselves and become pervasive in organizations. Ridgeway (2001) suggested that gender is a way in which a background identity is assigned within the workplace. Thus, men and women who occupy the same role may not display the same behaviors, and, women may be prevented from getting the same opportunities as men to display leadership qualities (Kanter, 1977). Leadership is often seen as aligning with the male-typed traits, as agency is commonly seen as more desirable in a leader, and if women display agentic traits, they will be seen as atypical and often receive backlash (Eagly, Karau, & Makhijani, 1995; Peters, Kinsey, & Malloy, 2004; Rudman & Glick, 2008).

The backlash effect is seen when women self-promote, or try to become leaders. Oftentimes, because leadership has been a masculine domain for a long time, when women try to become leaders, they are viewed as violating a gender norm, and thus women receive negative feedback or offhanded comments for exercising similar leadership techniques as men. Women who display agentic qualities are viewed as less effective leaders when compared to men who display agentic qualities, and often results in hiring discrimination (Rudman, 1998; Rudman & Glick, 1999). Women are perceived to be less competent, ambitious, and competitive than men, and may be overlooked for leadership positions unless they present themselves as atypical women. However, the proscriptive nature of gender stereotypes can result in negative reactions to female agency and authority. This has serious consequences for women’s careers. It also has consequences for organizations, as it reduces diversity it in the workplace, and increases worker turnover (Biernat & Kobrynowicz, 1997). Additionally, this also has even more severe
consequences for women of color as components of racial and gender stereotypes interact with one another and influence perceptions of how a person is likely to perform as a leader, along with stereotypes about how a leader should act. For example, Rosette, Zhou Kaval, and Livingston (2016) found that when examining the most prevalent stereotypes of Black and Asian American women, this identity interacted with biases toward female leaders and racial and agentic biases. Such that, racial and gendered stereotypes are likely aligned with perceptions of agentic qualities, or leadership ability, and thus hindering women entering into leadership roles.

Women who seek leadership positions are often in a double bind, because if they display communal traits they will be liked, but not respected, but if they display agentic traits they will be respected, but not liked (Rudman & Glick, 2001). The present study aims to extend Bargad and Hyde’s (1991) research on how women studies courses influences feminist identity by examining the class as an intervention to change perceptions of female leadership due to an increase in feminist identity (see Figure 1). It is predicted that the increase in feminist identity will result in more positive attitudes toward female leaders over the course of the semester for students in Psychology of Women. Individuals who have a strong feminist identity will recognize that females can be successful as leaders. An important factor that prevents women from being successful as leaders are gender norms dictated by a patriarchal society. People with a strong feminist identity should then evaluate female leaders more positively because they will recognize that gender does not prevent females from being strong leaders. Therefore, it is predicted that:

Hypothesis 2: The completion of a Psychology of Women course will lead to an increase in feminist identity, and thus result in more positive evaluations of female leaders.

Leadership Styles and Tokens in the Workplace
Leadership qualities are defined as characteristics that leaders display as a means of accomplishing tasks and working with others in the organization, and consist of several dimensions, including, transactional leadership, and outcome types of leadership (Avolio & Bass, 1991). Transformational leadership is characterized by a shared vision between the leader and employees, strong orientation for focus on the future, is a charismatic, trustworthy, influential to the employees, intellectually stimulating, gives clearly defined tasks, and considers others’ needs. Transactional leadership is characterized by a high focus on contingent reward by giving employees clearly defined tasks, and active management by supervising and directing the employees.

Research conducted in laboratory settings has shown that, on average, men and women may differ in leadership styles. Males are more likely to take on an assertive approach and be transactional leaders, or leaders who tend to be assertive and maintain only simple back and forth exchanges with employees, like a transaction. Women are more likely to take on the collaborative approach and be transformational leaders, or leaders who focus on transforming their employees and display traits such as warmth and nurturance (Eagly & Johnson, 1990). Although there is evidence that gender differences in leadership styles may be exaggerated in popular press and research, there is evidence that the gender differences that do exist are a result of power (Bartol & Martin, 1986; Eagly & Johnson, 1990; Powell, 1990; Nieva & Gutek, 1981; Van Engen, van der Leeden, & Willemsen, 2001; Hyde, 2005). Kanter (1977) provided support for the idea that women may lead in different ways than men due to the culture of an organization – namely the fact that they have less power within organizations – and this leads them toward demonstrating different styles of leadership. For example, a woman with little power within a workplace may find that displaying assertiveness by, for example, directing other
employees on what tasks to complete in order to finish the work load more effectively (a dimension of transactional leadership) is likely to experience resistance from others for violating gender roles and the power structure within the organization and ultimately will result in the woman being less effective as a leader. A woman with little power within a workplace may find that displaying warmth, by something such as taking an invested interest in other employees in the workplace by getting to know them personally, a dimension of transformational leadership, may allow for the woman to be seen as admirable, but it may take a long time, if ever, before that woman is considered a leader. Many women in the workplace lack opportunity for challenging and interesting work, and because of their lack of power they lack resources to gain promotion which may make women more interested in their work, or have more opportunities to demonstrate different styles of leadership.

Kanter (1977) defined three ways that “token” women are placed within confining roles within the workplace in order for men to cope with their presence. “Token” women are either looked at as the mother who is told all about personal problems, the seductress who uses sexual attraction to arouse competition and jealousy in the men, or the pet whose existence is solely to support the men within the organization. These examples Kanter (1977) discusses provide support for how women are given less power within organizational structures, and thus have more difficulty displaying qualities outside of their expected gender roles.

Transactional leadership styles may be influenced by the Psychology of Women course because students who complete the course may then experience an increase in feminist identity, thus leading them to exhibit non-traditional types of leadership due to the new understanding of gender roles and stereotypes and how they can constrain and dictate behavior. Becker & Swim (2011) found that increasing people’s awareness to sexist events then increases activism, which
was experimentally demonstrated through seeing that those who were more aware of sexist events were more likely to sign a petition, showing that examining and understanding inequality leads individuals toward activism. Past research has defined being a feminist as a woman’s willingness to say, “I am a feminist”, the beliefs of an individual, and a combination of the two. This research found that feminist self-labeling is related to increased feminist activism (Yoder, Tobias, & Snell, 2011). Increased feminist activation may also be related to leadership in the sense that if individuals are more likely to be involved with feminist activism, they may also take on more leadership roles so as to change gender inequities and increase representation of females as leaders in the workplace.

Thus, it is predicted that:

\textit{Hypothesis 3: Psychology of Women will increase feminist identity, which will in turn increase transactional leadership qualities in women.}

\textbf{Method}

\textbf{Participants}

Participants were 18 years or older and enrolled in Psychology of Women at Ball State University in the Spring 2017 semester. There were 3 sections of Psychology of Women (taught by 2 professors) and each section had a capacity of 35 students. Participants were also recruited from Developmental Psychology (taught by 2 professors), each section had a capacity of 40 students. The current study used Developmental Psychology students as a control group. Participants only included women because there were not enough men in Psychology of Women for analysis. Men still had the opportunity to participate for extra credit, but were not included in analysis (6 men in Psychology of Women, 4 men in Development). One person enrolled in Developmental Psychology was also enrolled in a diversity course, Psychology of Prejudice and
Discrimination, and they were dropped from analysis. Of the remaining students, a total of 78 women completed Time 1 survey (55 from Psychology of Women, 20 from Development, 3 from both classes) and 69 women completed both Time 1 and Time 2 surveys (47 from Psychology of Women, 19 from Developmental Psychology, 3 from both classes). The three individuals who were in both classes were included in the Psychology of Women group to increase the sample size in Psychology of Women which was the main focus of the study and also because they had taken Psychology of Women, so they did meet the qualifications of being incorporated into that sample. See Table 1 for sample demographics.

In this sample, there were two professors that taught both Psychology of Women and Developmental Psychology: Dr. Katie Lawson and Professor Kim Brown. In the final sample, there were 39 women enrolled in Dr. Lawson’s Psychology of Women course who participated, and 8 women in Professor Brown’s Psychology of Women course who participated. Additionally, there were 18 women enrolled in Dr. Lawson’s Developmental Psychology course who participated and 1 in Professor Brown’s class. There were 3 students who were enrolled in both classes and listed both professors as their teachers.

**Procedure**

Participants were recruited via email by offering extra credit within Psychology of Women for participation, and the study was also announced in class. An alternative extra credit option was also available. In addition, to avoid coercion, professors of the classes (including the supervisor of this thesis) did not send any emails or recruit in class, and it was made clear in recruitment materials that data was collected for the graduate student’s thesis.

Data were collected from a control group of students enrolled in Developmental Psychology in order to determine that the changes in feminist identity, perceptions of female
leaders, and leadership qualities were due to the Psychology of Women course and not due to participants maturing and changing over time throughout their college education. Students enrolled in the Developmental Psychology course during the Spring semester were recruited using the same methods as students in the Psychology of Women class. This class was chosen because it is approximately the same class size (40 students) and course level (300-level) as Psychology of Women.

Participants were recruited via e-mail and in-class announcements in the first two weeks of the semester and the last two weeks of the semester. Participants completed the survey online via Qualtrics. Participants who consented to participate in the study and who were enrolled in either Psychology of Women or Developmental Psychology read a vignette about a female leader, evaluated the female leader, and then completed the Multifactor Leadership Questionnaire, the Feminist Identity Development Scale, and the Gender and Authority Measure in a randomized order. Participants read the vignette about a female leader before completing the evaluation and questionnaires to reduce the likelihood that the surveys would influence the results of the vignette ratings. Participants completed this same procedure during the first two weeks of classes and again during the last two weeks of the semester. A participant identifier code was used to match the data from the first measurement to the second measurement. Participants’ names were collected and utilized to merge Time 1 and Time 2 datasets.

**Materials & Measures**

**Feminist identity.** Feminist identity was defined as an individual’s level of feminist development as measured by the Feminist Identity Development Scale (Bagard & Hyde, 1991) (see Appendix A). This 48-item scale includes items such as the following, “Being a part of a women’s community is important to me” where participants indicate the degree to which they
think it describes them on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*). Past research demonstrated an internal consistency for each of the five subscales (Bargad & Hyde, 1991). Passive acceptance (alpha=.85), Revelation (alpha=.75), Embeddness-emanation (alpha=.82), Synthesis (alpha=.65), Active commitment (alpha=.80). In the present study, an internal consistency was also demonstrated for each of the five subscales, Passive acceptance (alpha=.9), Revelation (alpha=.7), Embeddedness-emanation (alpha=.82), Synthesis (alpha=.66), and Active commitment (alpha=.9). Items are averaged within subscales where higher scores mean higher feminist identity in that particular stage of feminist identity. In the present study, each stage was looked at individually from the pretest and posttest to examine whether these levels of change would mediate the relationship between Psychology of Women and attitudes toward female leaders and leadership outcomes. For the average score of each stage for Time 1 and change scores, please see Table 2.

**Attitudes toward female authorities.** To examine whether Psychology of Women reduced the negative evaluations of female leaders, two methods were used to examine participants’ attitudes toward female authorities. First, participants read about and evaluated a female leader. Heilman, Wallman, Fuchs, and Tamkins (2004) and Lawson and Lips (2014) utilized similar experimental methods to examine evaluations of female employees in male-dominated occupations. For the purpose of the present study, these methods were modified and in order to emphasize components of leadership. This position was pilot tested to ensure that participants viewed it as a leadership role and that there were not ceiling effects for participants’ evaluation of the women (see section after measures section describing the pilot study).

Participants were informed that the study concerned personnel decision making in work settings and, in particular, how people combine different sources and types of information when
evaluating others. Then, participants were informed that they would read about and react to a description of an employee in a large organization who is in a leadership position. Participants next viewed a list of 11 employees to potentially be evaluated, with an asterisk indicating the employee that the participant were to evaluate who was named Andrea. Then, the participants saw a job description for a leadership role, the Vice President of AE Fortune 500 Company. Next, participants read information about an annual performance review of Andrea, the Vice President of Sales at AE Fortune 500 Company. After viewing the job description and annual performance review, participants answered fact based questions about the position to ensure that they read the description, and the manipulation was effective and did not have the ability to progress in the study unless they answered the manipulation questions correctly. Then, the participant rated the leader on effectiveness, competence, likability, achievement, and interpersonal hostility. Likability was assessed on a 5-point scale 1 (like a great deal) to 5 (dislike a great deal). Competence, achievement, and interpersonal hostility were rated on the degree to which Andrea displays these characteristics on a 9-point scale from 1 (least amount) to 9 (greatest amount). For the average score for Time 1 and change scores, please see Table 2. For detailed information on the procedure and materials used, please see Appendix B.

The second method to evaluating participants’ perceptions of female leaders required participants to complete the Gender and Authority Measure (Rudman & Kilianski, 2000; see Appendix C). This 15-item scale examines the degree to which the participant prefers male authorities versus female authorities. An example item includes, “In general, I would rather take orders from a man than from a woman” where participants indicate agreement with each item on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Past research showed an adequate internal consistency (Cronbach’s alpha = .82; Rudman & Kilianski, 2000), and items
were found to be internally consistent with this sample as well (Cronbach’s alpha = .77). A total score was created by averaging the participants’ agreement with the 15 items on the scale, after reverse-scoring. High scores indicated preference for female versus male authorities.

**Leadership qualities.** Transactional leadership was measured by the Multifactor Leadership Questionnaire (Avolio & Bass, 1991; see Appendix D). Transactional leaders focus on contingent reward by giving employees clearly defined tasks and actively managing and directing employees. Transactional leaders focus on the job at hand and are direct with their expectations for employees to complete the task in order to receive any reward (e.g., *I make clear what one can expect to receive when performance goals are achieved*). This 45-item scale includes items where participants can indicate how frequently the statement provided fits them on a scale of 0 (*not at all*) to 4 (*frequently, if not always*). This transactional subscale has an internal consistency of alpha = 0.86 (Avolio & Bass, 1991). Items were separated into 11 leadership type subscales, but the present study only utilized the items for the transactional leadership subscale (8 items total). Transactional leadership consisted of contingent reward and active management subscales. The short four item contingent reward subscale was $\alpha = .50$. Also, the short four item active management subscale was moderately reliable ($\alpha = .66$). The reliability within this particular sample was not consistent with past research, and this may influence the results because this measure may not be reliable or applicable to this particular sample. Past researchers have debated the best way in which to break down the scales in terms of leadership styles, and although researchers have used the present method, it may not have been the best given this particular sample. Items were averaged with higher scores indicating higher levels of the leadership style. This measure has been utilized frequently in past research and is one of the most popular leadership questionnaires (Kirkbride, 2006; Ozaralli, 2003).
Pilot Study

In the pilot study, participants were informed that the study concerned personnel decision making in work settings and, in particular, how people combine different sources and types of information when evaluating others. Then, participants were informed that they would read about and react to a description of employees in a large organization who is in a leadership position. Likability was assessed on a 5-point scale 1 (like a great deal) to 5 (dislike a great deal). Achievement, and interpersonal hostility were rated on the degree to which each of three female leaders (Andrea, Emily, and Lauren) displayed these characteristics on a 9-point scale from 1 (least amount) to 9 (greatest amount). Leadership was assessed on a 6-point scale 1 (strongly disagree) to 6 (strongly agree) to the two statements, “I consider this job to be a leadership position,” and “The person occupying this position is a leader.” Higher scores on the leadership items indicated more leadership. In this particular data analysis within the pilot study, interpersonal hostility scores were reversed such that a low score meant more interpersonal hostility, a low score on achievement meant more achievement, a low score on likeability meant more likeability, and a high score on leadership meant more leadership. In the larger study, this was changed to be more intuitive so that higher scores would mean more of the construct.

For interpersonal hostility, Andrea had an average score of 31.91 with a range of 6 to 49, Emily had an average score of 34.50 with a range of 12 to 50, and Lauren had an average score of 32.90 with a range of 11 to 54. For achievement, Andrea had an average score of 22.20 with a range of 7 to 53, Emily had an average score of 29.07 with a range of 7 to 56, and Lauren had an average score of 21.76 with a range of 7 to 49. For likeability, Andrea had an average score of 5.24 with a range of 2 to 12, Emily had an average score of 5.58 with a range of 2 to 12, and Lauren had an average score of 4.50 with a range of 2 to 9. Overall, this pilot study found that
participants rated the woman relatively neutrally, with scores ranging in the middle of the data as indicated previously. Therefore, no ceiling effects were detected in the pilot study, which would allow participants in the study to show improvement from Time 1 to Time 2. Responses to the leadership items also indicated that participants viewed the job/individual as a leader: Andrea had an average score of 4.86 with a range of 1 to 6 for the first item, and an average score of 4.69 with a range of 1 to 6 for the second item, Emily had an average score of 4.83 with a range of 1 to 6, and an average score of 4.18 with a range of 1 to 6, and Lauren had an average score of 4.96 with a range of 1 to 6, and an average score of 4.75 with a range of 1 to 6. The pilot study demonstrated that Andrea would be the best fit as she was viewed the most favorably and was seen as a leader.

**Analyses**

To examine hypothesis 1 – that the Psychology of Women class would work as an intervention to increase levels of feminist identity – a regression analysis was conducted where Psychology of Women completion status was entered as the predictor variable (0 = not completed – took the Development course, and 1 = completed Psychology of Women) and the change in each feminist identity stage was entered as the outcome variable.

In order to examine hypothesis 2, that the completion of a Psychology of Women course will lead to an increase in feminist identity, and thus result in a more positive evaluation of the female leader in the proposed scenario, change scores were created. Change was at Time 2, at the end of the semester minus Time 1, at the beginning of semester. This meant that higher scores indicated they increased over the course of the semester, 0 means they stayed the same, and negative scores mean that they decreased over the semester. This variable was created for feminist identity, ratings of the vignette leader, GAM, and leadership qualities. After change
scores were created, a series of regression analyses were conducted to test for mediation using recommendations by Baron & Kenny (1986; see Figure 1).

Baron and Kenny (1986) lay out four steps for establishing mediation. In step one, it must be shown that the causal variable is correlated with the outcome (known as Path C). In this model, y is the criterion variable (i.e., changes in perceptions of female leaders) in the regression equation and x is the predictor (i.e., Psychology of Women course). If these are correlated, then this establishes an effect that can be mediated. In step two, it would have to be shown that the predictor is correlated with the mediator, essentially, the mediator is treated as if it were an outcome variable related to the predictor (Path A). In this case, participation in Psychology of Women should be correlated with changes in feminist identity. In step three, it must be shown that the mediator (i.e., changes in feminist identity) predicts the outcome variable (Path B). The causal variable (Psychology of Women course) must be controlled for when establishing the effect of the mediator on the outcome. In step four, it must be shown that the mediator completely mediates the relationship between the causal variable and criterion variables. Thus, when controlling for the changes in feminist identity, the relationship between the Psychology of Women course and changes in the perceptions of female leaders should be zero (C’ path). In order to examine hypothesis 3, that Psychology of Women will increase feminist identity, which will in turn increase transactional leadership qualities in women, the same 4-step process was conducted with changes in transactional leadership as the outcome variable.

Results

Preliminary Analyses

Preliminary analyses were conducted prior to testing the research question. First, an independent samples t-test was conducted to compare the average scores for the study variables
at baseline (feminist identity, attitudes toward female authorities, and leadership styles) between
the Psychology of Women \((n = 50)\) and Developmental Psychology \((n = 19)\) classes to examine
whether the groups are comparable. An independent samples t-test was conducted between the
two classes on each variable and yielded no significant differences across any of the study
variables by class (see Table 2). Second, Psychology of Women and Developmental Psychology
had two different professors across sections. An independent samples t-test was conducted and
yielded no significant difference across any of Time 1 study variables between professor.
However, because one professor had far fewer student participants than the other, it would be
unlikely to have found any meaningful results from this analysis.

Correlations among study variables can be seen in Table 3. Passive acceptance was
negatively correlated to revelation. Revelation was positively correlated with embeddedness.
Active commitment was negatively correlated with passive acceptance, and positively correlated
with revelation and embeddedness. Likeability was positively correlated with competence,
achievement was positively correlated with likeability and competence.

**Hypothesis 1: Psychology of Women will Increase Feminist Identity**

Contrary to the hypothesis, Psychology of Women did not significantly predict changes
in feminist identity (A path): Passive Acceptance, \(\beta = -1.46, t(67) = -1.21, p > .05\), Revelation, \(\beta
= 1.77, t(67) = 1.48, p > .05\), Embeddedness, \(\beta = 1.22, t(67) = 1.01, p > .05\), Synthesis, \(\beta = -0.14
\), \(t(67) = -1.13, p > .05\), or Active Commitment, \(\beta = 1.00, t(67) = 0.81, p > .05\). Please see Table 4.

**Hypothesis 2: Psychology of Women will Increase Feminist Identity and Positively Change
Perceptions of Female Leaders**

It was predicted that changes in feminist identity would mediate the association between
taking a Psychology of Women course and having more positive perceptions of female leaders.
In order to examine this hypothesis, we conducted analyses based on Baron and Kenny’s (1986) recommended steps described previously. First, we examined Psychology of Women as a predictor of changes in perceptions of female leaders (C path). Results indicated that taking the course was not associated with perceptions of female leaders, including: Competence, $\beta=-.05$, $t(67)=-.43$, $p>.05$, Likeability, $\beta=-.03$, $t(67)=-.29$, $p>.05$. Achievement, $\beta=.13$, $t(67)=1.10$, $p>.05$. Interpersonal Hostility, $\beta=-.23$, $t(67)=-1.95$, $p>.05$. or Attitudes toward Female Authorities, $\beta=-.06$, $t(67)=-.46$, $p>.05$.

Second, we examined Psychology of Women as a predictor of changes in feminist identity (Path A; previously reported for hypothesis 1). Taking Psychology of Women was not associated with changes in feminist identity.

Third, we examined changes in feminist identity as a predictor of changes in perceptions of female leaders (B path), controlling for whether students took Psychology of Women (C’). None of the feminist identity components predicted perceptions of female leaders. Please see Table 5 for results in detail. The C’ path was not significant as Psychology of Women does not predict perceptions of female leaders even after controlling for feminist identity. Therefore, the requirements for mediation were not met, and the results did not support our hypothesis.

**Hypothesis 3: Psychology of Women will Increase Feminist Identity and Increase Transactional Leadership Qualities**

It was predicted that changes in feminist identity would mediate the association between taking a Psychology of Women course and having more positive perceptions of female leaders. In order to examine this hypothesis, we conducted analyses based on Baron and Kenny’s (1986) recommended steps described previously. First, we examined Psychology of Women as a predictor of changes in transactional leadership styles (C path). Results indicated that taking the
course was not associated with Active Management, $\beta = .14$, $t(67)=1.13$, $p > .05$, or Contingent $\beta = .14$, $t(67)=1.13$, $p > .05$.

Second, we examined Psychology of Women as a predictor of changes in feminist identity (Path A; previously reported for hypothesis 1). Taking Psychology of Women was not associated with changes in feminist identity.

Third, we utilized changes in feminist identity as a predictor of transactional leadership styles (B path), controlling for whether students took Psychology of Women (C’). We found that taking the course was not associated with contingent reward or active management. Psychology of Women and changes in feminist identity did not predict changes in leadership qualities. Therefore, the requirements for mediation were not met, and the results did not support our hypothesis. Please see Table 6 for results in detail.

**Discussion**

While it was expected that Psychology of Women would increase feminist identity and thus influence the participants’ likelihood to adopt nontraditional leadership styles for women and positively influence perceptions of female leaders, this did not seem to be the case. The present study, unexpectedly, did not find much regarding the impact of the course on leadership or feminist identity. More specifically, the results did not find any significant changes in feminist identity, perceptions of female leaders, or leadership styles from the beginning to end of the semester.

**Changes in Feminist Identity**

The present study differs from past research that found that women in Women and Gender Studies classes increased in feminist identity over the course of the semester (Bargard
Historical time may play a role in the differing results. This study is outdated and a lot of change has happened in gender equality in society that might lead students in the current study to have different perspectives than before. For example, feminism is a controversial topic currently and has been currently under the spotlight due to recent events – many related to the most current election. It may take more than one course for women to commit to endorsing feminist beliefs. There are misconceptions held about what feminism is, and what it means to hold the label of feminist. While individuals may believe on the surface that women and men should be equal, it may be more difficult to challenge subtle messages that are deeply engrained in society about what women and men are allowed to do and what their purpose is in society. This class may serve as the first exposure to ideas regarding gender, and it may take more exposure for individuals to realize just how important gender is in determining the opportunities that are available to each gender. This study also examined identity, and while people may endorse some feminist beliefs, it may not be tied to their identity closely as the construct measures. Moreover, the difference between the two study’s findings could be due to methodological differences. Bargard and Hyde (1991) focused on Women and Gender Studies courses and had a larger sample size (2 studies, 484 participants) than the current study and thus had more power to detect smaller effect sizes. Moreover, Bargard and Hyde (1991) conducted a pre and post test which is different from the current study that looked at changes across the semester and across classes which could have led to differences in results.

Looking further into the data, it is apparent that some students did increase in their feminist identity, but it was not the case for every student, thus not producing an effect. For example, the standard deviations for many of the feminist identity development scale subscales scores were large, indicating that there was quite a bit of variance. Also, while many of the
change scores were negative, indicating that students actually had lower feminist identities, those scores also had large standard deviations thus indicating that for some individuals they did experience a change, but for others they had lower feminist identities. This may be due to individual differences in how the material resonated with the students and whether they used the material they learned in the class regarding equality to apply it to other settings.

**Perceptions of Female Leaders and Transactional Leadership Qualities**

Regarding the backlash effect that happens when women self-promote that Rudman & Glick (1999) discovered, even though the vignette of the female leader was pilot tested, it appears that women were still not viewing this woman as average as indicated by the means within the sample (See Table 2). These ideas also did not change as much as anticipated in that attitudes toward female leaders did not dramatically increase, or really increase much at all due to the course.

Psychology of Women did not predict perceptions of female leaders as it did not predict likeability, interpersonal hostility, competence or achievement of female leaders. Psychology of Women also did not predict transactional leadership styles of contingent reward and active management. This then could not be mediated by any stage of feminist identity. A class such as Psychology of Women may help a student to learn more about gender and society, but it may not translate into actual behavior that is dictated by feminist ideology. It may be that a class is not enough to combat all of the internalized misogyny that women have dealt with throughout their lives regarding their roles in society. Women are not socialized to believe in their abilities as leaders, are not rewarded for having agentic leadership oriented qualities, and are not typically taught how to demonstrate these characteristics. Thus, one class is not likely to change all of
these internalized messages in a short period of time. It would likely take a longer intervention with a direct clear message regarding leadership in order to make a difference.

In terms of leadership styles, it would be beneficial if society could appreciate leadership styles that are more focused on nurturance and warmth, as women may feel more comfortable within these types of leadership roles. Many women may feel as if they do not want to be seen as being rude, and fear defying their gender roles because it is looked down upon within society and may even result in hiring discrimination. This class in itself may not be enough to eliminate something that has such a strong influence on women, and is a multifaceted issue that is complex and misunderstood. It would be beneficial to examine ways in which to reduce gender roles in regards to leadership styles so that women and men both feel as if they do not have to adhere to traditional gender roles when seeking out leadership as well as exerting influence as a leader.

Limitations and Future Research Directions

One limitation to this study was that there were two professors that taught each of the courses. While there appeared to be no differences in the study variables, this still could have influenced the results, especially because there was not an equal number of participants in each of the classes. The professors could have taught the material differently, or focused on different components that may have shaped the way the women viewed feminism and leadership. Likely the classes covered similar topics, and an introduction to the influence of gender on society should have a significant impact on anyone by just learning about it, but larger samples would have allowed us to be more confident in our preliminary analyses that the two classes did not differ in study variables.
Another limitation to this study was the sample. Specifically, our sample size was small which led to having less power leading to an inability to detect small effect sizes. This was because the primary investigator could only recruit from a restricted sample, in that there were only select classes that could be recruited from. Also, our sample was unfortunately not diverse as it was predominately White, and thus this study cannot speak to the experiences of female minorities and leadership and feminism. It would be best to incorporate intersectionality and work toward having a more diverse sample because these results may not generalize to other populations, and it is important to understand leadership from an intersectional approach. Gender is only one component to the many identities that individuals can hold, and these identities are constantly intersecting with one another, which is important to consider when understanding how a person can develop their confidence as a leader. It would also be interesting to include men because much of the research has been done on females, and feminism may influence men in positive ways that are not generally considered, but should be capitalized on to demonstrate how feminism is for everybody. Finally, the aim of the present study was to examine leadership styles, but there may have been a better way to get students actively involved in some leadership activity so that they had a chance to think about their leadership and change it actively. For example, having a class work day where students were given a task to complete in the classroom together and having to actively assign someone to be a leader which may lead to a more authentic way to study leadership through an actual task in which students need to be leaders.

Another limitation to the study was student’s motivation. The students were offered extra credit to participate, and it may be the case that these individuals were interested in extra credit because they knew they would not do well in the course because they were not interested in the material. Psychology of Women is a class that can fulfill a requirement for a few majors, thus,
many individuals may not have been as actively involved in the material that they would make life changes because of what they learned in class.

Measurement was also a limitation in the study. The measures used for leadership within this study had low Cronbach’s alphas, and in the future, it would be beneficial to use a different measure leadership qualities. In addition, feminist identity could be measured in different ways. One ideas for future research would be to analyze assignments that students write as a way to gain more information about how students develop their feminist identity over the course of a semester which may help to combat some of the issues of motivation as it would be a sort of check in throughout the semester and not at the beginning or end of the semester when motivation may be different. One way to measure feminist identity would be to look into other forms of feminist labeling because Yoder (2011) found that there is great power for women in endorsing an actual label of “feminist” that may change some of these results.

One final limitation is that within the vignette, the women had traditionally White sounding names such that when a participant read the vignette, they likely assumed the woman to be White. This means that the study became focused on examining perceptions of a White female. In the future, it would be beneficial to examine perceptions of female leaders of different ethnicities and how this is influenced by both racial and gender stereotypes. Likely, attitudes toward female leaders are shaped by other identities as well. Future research should examine vignette paradigms utilizing people of color within the description of a leader to see how these individuals are viewed as leaders.

**Conclusion**
The underrepresentation of female leaders is a problem because it can contribute to the gender wage gap in that if women are not rising to the top of their profession, or not advancing, they are less likely to be making a competitive wage in comparison to males who can advance more easily than women. Moreover, many companies are concerned with leadership development and management trainings, but what they may fail to consider is how gender influences leadership development. Therefore, although this particular study found that feminist identity did not mediate the relationship between Psychology of Women and perceptions of female leaders and leadership qualities, future research is still needed to help alleviate this societal-level problem. However, females must advance into positions of power as it is incredibly important to represent the voice of women, thus, more research is needed to understand how to best promote women’s advancement.

While this class as a whole may not be the most effective training to boost feminist identity, it may predict other outcomes that could be beneficial for minorities in the workplace, or there may be select components of the class that would be better suited toward promoting the outcome variables discussed in the current study. For example, if the class had two units on feminism and on leadership for women, it would be more likely that participants would change as a result on these outcome variables. As another example of how this research may influence college curriculums in that Psychology of Women may need more of an emphasis on feminism and leadership and how women in the class can get involved and use the material to influence their own life. Students may see a disconnect between the material and their own life if they are not encouraged enough to use what they have learned within their own life, or guided through the process of relating the information. Thus, with more of a pointed focus on certain components of the class related to the study variables, this might change students’ feminist
identity and thus change their attitudes toward females as leaders, as well as their own leadership qualities.
References


Figure 1.
Table 1. Demographics for analysis sample

<table>
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<tr>
<th>Sample Size</th>
<th>Total Sample</th>
<th>Psychology of Women</th>
<th>Developmental Psychology</th>
</tr>
</thead>
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<tr>
<td>Characteristics</td>
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<td></td>
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<tr>
<td>Ethnicity (%White)</td>
<td>57 (82.6%)</td>
<td>41 (82.0%)</td>
<td>16 (84.20%)</td>
</tr>
<tr>
<td>Age</td>
<td>20.39 (.94)</td>
<td>20.28 (.99)</td>
<td>20.68 (.75)</td>
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<td>Full-Time</td>
<td>6 (8.7%)</td>
<td>5 (10.0%)</td>
<td>1 (5.3%)</td>
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<td>Part-Time</td>
<td>46 (66.7%)</td>
<td>32 (64.0%)</td>
<td>14 (73.7%)</td>
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<td>Temporarily Unemployed</td>
<td>8 (11.6%)</td>
<td>5 (10.0%)</td>
<td>3 (15.8%)</td>
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<td>Not Employed</td>
<td>9 (13.0%)</td>
<td>8 (16.0%)</td>
<td>1 (5.3%)</td>
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<td>Freshmen</td>
<td>6 (8.7%)</td>
<td>6 (12.0%)</td>
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<td>Sophomores</td>
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<td>23 (33.3%)</td>
<td>9 (18.0%)</td>
<td>14 (73.7%)</td>
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<td>Seniors</td>
<td>7 (10.1%)</td>
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<td>Majors (% Psychology)</td>
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<td>28 (56.0%)</td>
<td>12 (63.2%)</td>
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*Note. Those temporarily unemployed have employment, but not during the semester. Those not employed are not employed at all.*
| Table 2. Means and Standard Deviations for Study Variables by Professor, Class, and Time |
|----------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                          | Psychology of Women |                 | Developmental Psychology |                 |                 | Total Sample |
|                                          | Lawson (n = 42)    | Brown (n = 8)   | Total (n = 50)            | Lawson (n = 18) | Brown (n = 1)  | Total (n = 19) |
| Feminist Identity                       |                  |                 |                              |                 |                 |               |
| Passive                                 |                  |                 |                              |                 |                 |               |
| Acceptance                              |                  |                 |                              |                 |                 |               |
| Time 1                                  | 2.21 (.66)        | 2.14 (.85)      | **2.22 (.67)**              | 2.43 (.54)      | 1.5             | **2.27 (.56)** |
| Change                                  | -.09 (.38)        | .02 (.25)       | **-.04 (.35)**              | -.05 (.31)      | -.25            | **.04 (.31)**  |
| Revelation                              |                  |                 |                              |                 |                 |               |
| Time 1                                  | 3.12 (.57)        | 3.43 (1.00)     | **3.18 (.66)**              | 3.04 (.66)      | 4.86            | **3.20 (.83)** |
| Change                                  | .24 (.59)         | .05 (.52)       | **.15 (.56)**               | .00 (.49)       | -.29            | **-.01 (.48)** |
| Embeddedness                            |                  |                 |                              |                 |                 |               |
| Time 1                                  | 3.31 (.66)        | 3.18 (1.08)     | **3.32 (.72)**              | 3.03 (.41)      | 4.57            | **3.12 (.70)** |
| Change                                  | .09 (.51)         | .14 (.22)       | **.06 (.48)**               | -.02 (.50)      | -.29            | **-.03 (.49)** |
| Synthesis                               |                  |                 |                              |                 |                 |               |
| Time 1                                  | 3.91 (.41)        | 3.76 (.47)      | **3.88 (.43)**              | 3.89 (.45)      | 2.40            | **3.82 (.61)** |
| Change                                  | -.05 (.56)        | .30 (.46)       | **.05 (.51)**               | .12 (.34)       | .80             | **.16 (.36)**  |
| Active                                  |                  |                 |                              |                 |                 |               |
| Commitment                              |                  |                 |                              |                 |                 |               |
| Time 1                                  | 3.76 (.75)        | 4.02 (.77)      | **3.82 (.66)**              | 3.35 (.43)      | 4.50            | **3.51 (.52)** |
| Change                                  | .09 (.40)         | -.02 (.47)      | **.05 (.38)**               | -.01 (.29)      | -.13            | **-.01 (.28)** |
| Perceptions of Female Leaders           |                  |                 |                              |                 |                 |               |
| Likeability                             |                  |                 |                              |                 |                 |               |
| Time 1                                  | 4.85 (.71)        | 4.94 (.32)      | **4.88 (.65)**              | 4.81 (1.00)     | 5.0             | **4.87 (.89)** |
| Change                                  | -.02 (.62)        | .25 (.46)       | **.04 (.74)**               | .08 (1.07)      | .00             | **.08 (1.04)** |
| Competence                              |                  |                 |                              |                 |                 |               |
| Time 1                                  | 8.45 (1.28)       | 8.41 (.56)      | **8.42 (1.14)**             | 8.37 (1.89)     | 9.0             | **8.39 (1.69)** |
| Change                                  | -.20 (1.77)       | .42 (.73)       | **-.05 (1.44)**             | .07 (.58)       | .00             | **.07 (.56)**  |
| Interpersonal Hostility                 |                  |                 |                              |                 |                 |               |
| Time 1                                  | 4.18 (1.39)       | 3.38 (1.98)     | **3.99 (1.62)**             | 3.86 (1.58)     | 1.0             | **4.01 (1.68)** |
| Change                                  | -.38 (1.70)       | .14 (2.91)      | **-.02 (1.92)**             | .61 (1.79)      | 2.17            | **.69 (1.78)** |
| Achievement                             |                  |                 |                              |                 |                 |               |
| Time 1                                  | 7.95 (1.23)       | 8.20 (.75)      | **7.99 (1.13)**             | 8.40 (.85)      | 9.0             | **8.38 (.92)** |
| Change                                  | .25 (.97)         | .22 (.99)       | **.17 (.92)**               | -.03 (.81)      | .00             | **-.03 (.79)** |
| GAM                                     |                  |                 |                              |                 |                 |               |
| Change                                  | -.17 (8.38)       | -.38 (9.66)     | **.09 (8.38)**              | 1.11 (8.40)     | -4.00           | **.84 (8.25)** |
| Leadership                              |                  |                 |                              |                 |                 |               |
| Contingent                              |                  |                 |                              |                 |                 |               |
| Time 1                                  | 3.63 (.63)        | 3.56 (.70)      | **3.62 (.64)**              | 3.82 (.72)      | 3.25            | **3.77 (.69)** |
| Change                                  | -.09 (8.38)       | -.38 (9.66)     | **.09 (8.38)**              | 1.11 (8.40)     | -4.00           | **.84 (8.25)** |
|          | Change | Reward | | Change | Reward | | Change | Reward | | Change | Reward |
|----------|--------|--------| |        |        | |        |        | |        |        |
| Active   |        |        | |        |        | |        |        | |        |        |
| Time 1   |        |        | |        |        | |        |        | |        |        |
| Management | 2.86 (.75) | 3.15 (.90) | | 2.88 (.79) | 3.10 (.50) | | 4.0 | 3.30 (.63) | 2.97 (.72) |
| Change   | .15 (.86) | .14 (1.02) | | .05 (.38) | -.23 (.75) | | .00 | -.21 (.73) | .05 (.85) |

*Note: Change = Time 2 minus Time 1. GAM = Gender and Authority Measure.*
Table 3. Correlations Between Study Variables

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<td>.16</td>
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*Note.* **. Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).
Table 4. Results of Regression analyses examining Hypothesis 1: Psychology of Women Class as a Predictor of Changes in Feminist Identity

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<th></th>
<th>Passive Acceptance</th>
<th>Revelation</th>
<th>Embeddedness</th>
<th>Synthesis</th>
<th>Active Commitment</th>
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<td>Intercept</td>
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<td>-.23 (.27)</td>
<td>-.14 (.24)</td>
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<td>Class</td>
<td>-.12 (.10)</td>
<td>.22 (.15)</td>
<td>.11 (.13)</td>
<td>-.14 (.13)</td>
<td>.05 (.11)</td>
</tr>
</tbody>
</table>

*Note.* Class was either Psychology of Women or Developmental Psychology, it was coded as a 0 for Developmental Psychology and 1 for Psychology of Women.
Table 5. Results of regression analyses examining Hypothesis 2: Psychology of Women and Changes in Feminist Identity as Predictors of Changes in Attitudes Toward Female Leaders (Path B and C’)

<table>
<thead>
<tr>
<th>Interpersonal</th>
<th>Competence (β (SE))</th>
<th>Likeability (β (SE))</th>
<th>Achievement (β (SE))</th>
<th>Hostility (β (SE))</th>
<th>GAM (β (SE))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-.36 (.7)</td>
<td>.37 (.46)</td>
<td>.19 (.45)</td>
<td>(.92)</td>
<td>-.88 (3.9)</td>
</tr>
<tr>
<td>Class</td>
<td>.12 (.4)</td>
<td>-.29 (.26)</td>
<td>-.17 (.26)</td>
<td>.86 (.53)</td>
<td>.95 (2.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.90</td>
</tr>
<tr>
<td>Passive Acceptance</td>
<td>-.01 (.6)</td>
<td>.31 (.39)</td>
<td>.34 (.39)</td>
<td>.65 (.8)</td>
<td>(3.3)</td>
</tr>
<tr>
<td>Revelation</td>
<td>-.58 (.36)</td>
<td>-.16 (.23)</td>
<td>-.47 (.23)</td>
<td>.59 (.47)</td>
<td>.24 (2.0)</td>
</tr>
<tr>
<td>Embeddedness</td>
<td>.03 (.41)</td>
<td>.27 (.27)</td>
<td>.20 (.26)</td>
<td>-.85 (.54)</td>
<td>-.20 (2.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.20</td>
</tr>
<tr>
<td>Synthesis</td>
<td>.11 (.37)</td>
<td>.27 (.24)</td>
<td>.01 (.24)</td>
<td>.81 (.49)</td>
<td>(2.0)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-1.10</td>
</tr>
<tr>
<td>Active Commitment</td>
<td>.28 (.6)</td>
<td>.05 (.39)</td>
<td>.46 (.38)</td>
<td>1.40 (.79)</td>
<td>(3.3)</td>
</tr>
</tbody>
</table>

*Note. All variables included are change variables*
Table 6. Results of regression analyses examining Hypothesis 3: Psychology of Women and Changes in Feminist Identity as a Predictor of Changes in Leadership Styles (Path B and C’)

<table>
<thead>
<tr>
<th></th>
<th>Active Management</th>
<th>Contingent Reward</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$ (SE)</td>
<td>$\beta$ (SE)</td>
</tr>
<tr>
<td>Intercept</td>
<td>-.5 (.40)</td>
<td>-.24 (.36)</td>
</tr>
<tr>
<td>Class</td>
<td>.28 (.23)</td>
<td>.2 (.2)</td>
</tr>
<tr>
<td>Passive Acceptance</td>
<td>-.38 (.34)</td>
<td>-1.1 (.3)</td>
</tr>
<tr>
<td>Revelation</td>
<td>.1 (.2)</td>
<td>-.16 (.18)</td>
</tr>
<tr>
<td>Embeddedness</td>
<td>.05 (.23)</td>
<td>-.1 (.2)</td>
</tr>
<tr>
<td>Synthesis</td>
<td>.2 (.21)</td>
<td>.00 (.19)</td>
</tr>
<tr>
<td>Active Commitment</td>
<td>.04 (.33)</td>
<td>.00 (.29)</td>
</tr>
</tbody>
</table>

*Note.* All variables included are change variables.
Appendix A

**Feminist Identity Development Scale (FIDS) (5 point scale)**

Strongly disagree-Strongly agree, labeled with stage numbers

1. I don’t think there is any need for an Equal Rights Amendment; women are doing well. (1)

2. Being a part of a women’s community is important to me. (3)

3. I want to work to improve women’s status. (5)

4. I feel that some men are sensitive to women’s issues. (4)

5. I used to think there wasn’t a lot of sex discrimination, but now I know how much there really is. (2)

6. Although many men are sexist, I have found that some men are very supportive of women and feminism. (4)

7. Especially now, I feel that the other women around me give me strength. (3)

8. I am very committed to a cause that I believe contributes to a more fair and more just world for all people. (5)

9. While I am concerned that women be treated fairly in life, I do not see men as the enemy. (4)

10. I share most of my social time with a few close women friends who share my feminist values. (3)

11. I don’t see much point in questioning the general expectation that men should be masculine and women should be feminine. (1)

12. I am willing to make certain sacrifices in order to work toward making this society a non-sexist, peaceful place where all people have equal opportunities. (5)

13. I would describe my interactions with men as cautious. (NS)

14. One thing I especially like about being a woman is that men will offer me their seat on a crowded bus or open doors for me because I am a woman. (1)

15. When I think about sexism, my first reaction is always anger. (NS)

16. My social life is mainly with women these days, but there are a few men I wouldn’t mind having a non-sexual friendship with. (3)

17. I’ve never really worried or thought about what it means to be a woman in this society. (1)

18. I evaluate men as individuals, not as members of a group of oppressors. (4)
19. I just feel like I need to be around women who share my point of view right now. (3)

20. I care very deeply about men and women having equal opportunities in all respects. (5)

21. It makes me really upset to think about how women have been treated so unfairly in this society for so long. (2)

22. I do not want to have equal status with men. (1)

23. It is very satisfying to me to be able to use my talents and skills for my work in the women’s movement. (5)

24. If I were married and my husband was offered a job in another state, it would be my obligation as his spouse to move in support of his career. (1)

25. I don’t think there is one “right” way to be a feminist. (NS)

26. I tend to be careful when I interact with men. (NS)

27. I believe that when people choose a career, they should not let sex role stereotypes influence their choice. (NS)

28. I think that most women will feel most fulfilled by being a wife and mother. (1)

29. When you think about most of the problems in the world—pollution, discrimination, the threat of nuclear war—it seems to me that most of them are caused by men. (2)

30. I am angry that I’ve let men take advantage of me. (2)

31. Being a feminist is one of a number of things that make up my identity. (NS)

32. It only recently occurred to me that I think that it’s unfair that men have the privileges they have in this society simply because they are men. (2)

33. I feel that I am a very powerful and effective spokesperson for the women’s issues I am concerned with right now. (5)

34. I feel angry about the way women have been left out of history text books. (NS)

35. If I were to paint a picture or write a poem, it would probably be about women or women’s issues. (3)

36. I think that men and women had it better in the 1950s when married women were housewives and their husbands supported them. (1)

37. Some of the men I know seem more feminist than some of the women. (4)

38. When I see the way most men treat women, it makes me so angry. (2)

39. I can finally feel very comfortable identifying myself as a feminist. (NS)

40. Generally, I think that men are more interesting than women. (1)
41. Men and women are equal but different. (NS)

42. Recently I read something or had a specific experience that sparked my greater understanding of sexism. (2)

43. I think that rape is sometimes the woman’s fault. (1)

44. On some level, my motivation for almost every activity I engage in is my desire for an egalitarian world. (5)

45. I am not sure what is meant by the phrase “women are oppressed under patriarchy.” (1)

46. I think it’s lucky that women aren’t expected to do some of the more dangerous jobs that men are expected to do, like construction work or race car driving. (1)

47. I have a lifelong commitment to working for social, economic, and political equality for women. (5)

48. Particularly now, I feel most comfortable with women who share my feminist point of view. (3)

NOTE: Numbers in parentheses at the end of items indicate the stage for that item. NS = No Stage. These items are not part of the final scales but were present in test development. They can be omitted if desired.
Appendix B
Perceptions of Female Leaders Method Materials

Job Descriptions
The following is a job description for the Vice President of Sales at AE Fortune 500 Company.

**Vice President of Sales at AE Fortune 500 Company job responsibilities include:**
- Training and supervising junior executives
- Overseeing multiple projects at once
- Presenting workshops and orientations
- Breaking into new markets
- Keeping abreast of industry trends
- Generating new clients
- Communicating with other executive members
- Overseeing sales department employees
- Employee development
- Setting deadlines and requirements

**Necessary skills and personal characteristics needed for the job:**
- Ambitious
- Dedicated
- Independent
- Direct
- Motivated
- Ability to work well under pressure
- Ability to collaborate with others
- Ability to exert authority over others
- Ability to develop new and innovative ideas
- Must embrace challenges

Employees to be evaluated for an annual performance review, the employee you will be reviewing today is indicated by an asterix:
- Andrea*
- James
- Joe
- Mark
- Beth
- Steve
- Bill
- John
- Jared
- Sarah
- Jerry

The following is background information on the current Vice President of AE Fortune 500 Company to be evaluated:
Name: Andrea Smith
Birthplace: Indiana
College Attended: Indiana University
Grade Point Average: 3.8
Current status in the company: She has undergone the annual review and has been designated as a top performer by the organization.
Tenure within the company: 12 years
Management training history: Management classes completed, Business degree, Presents workshops on management
Present number of employees supervised: 250
A listing of personal interests: Reading, writing, biking, traveling

Manipulation check:
What type of company does Andrea work for?
Sales
Military
Teaching Lawyer

Which of the following is one of Andrea’s job responsibilities?
Generating new clients
Selling products
Greets customers
Enters data into system

Which of the following are necessary skills and characteristics necessary for the job? Check all that apply.
Mathematical computational skill
Motivated
Computer/Technical Literacy
Public speaking

Andrea was evaluated very highly by all reviewers. She was highly praised for her ability to lead others, commitment to work, her independence, and overall ability to control and coordinate the operation of sales. She has been identified as one of a small group of rising stars. Her performance is in the top 5% of all managers at her level.

Please rate the degree to which Andrea fulfills the following characteristics (9-point scale):
Competent/Incompetent
Productive/Unproductive
Effective Leader/Ineffective Leader

How much do you think you would like this individual (5-point scale)?
Like a great deal-Dislike a great deal
Please rate the degree to which Andrea fulfills the following characteristics (9-point scale):

Ambitious/Unambitious
Active/Passive
Decisive/Indecisive
Strong/Weak
Tough/Gentle
Bold/Timid
Assertive/Unassertive
Sensitive/Insensitive
Kind/Unkind
Warm/Cold

Please rate the degree to which Andrea fulfills the following characteristics (9-point scale):

Abrasive/Non-abrasive
Conniving/Non-conniving
Manipulative/Non-manipulative
Trustworthy/Non-trustworthy
Selfish/Unselfish
Pushy/Accommodating
Appendix C

The Gender and Authority Measure (5 point scale)

Strongly agree - Strongly disagree

1. If I were in serious legal trouble, I would prefer a male to a female lawyer.
2. The people I look up to most are women.
3. I would feel more comfortable if the pilot of an airplane I was traveling on were male.
4. I would rather be stopped by a woman police officer (vs. a man).
5. I probably prefer that the U.S. president is a man, versus a woman.
6. In general, I would rather work for a man than for a woman.
7. If I were having a serious operation, I would have more confidence in a male surgeon.
8. When it comes to politics, I would rather vote for women than for men.
9. For most college courses, I prefer a male professor to a female professor.
10. Personally, I would rather go to a male doctor than a female doctor.
11. In general, women make better leaders than men do.
12. In most areas, I would rather take advice from a man than from a woman.
13. In general, I would rather take orders from a man than from a woman.
14. If I were being sentenced in court, I would prefer that the judge be a woman.
15. In general, I feel more comfortable when a man (vs. a woman) is in charge.

a. Items require reverse scoring.
Appendix D

Multifactor Leadership Questionnaire

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank. Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word “others” may mean your peers, clients, direct reports, supervisors, and/or all of these individuals.

Use the following rating scale:

Not at all   Once in a while   Sometimes   Fairly often   Frequently, if not always

0 1 2 3 4

1. I provide others with assistance in exchange for their efforts.
2. I re-examine critical assumptions to question whether they are appropriate.
3. I fail to interfere until problems become serious.
4. I focus attention on irregularities, mistakes, exceptions, and deviations from standards.
5. I avoid getting involved when important issues arise.
6. I talk about my most important values and beliefs.
7. I am absent when needed.
8. I seek differing perspectives when solving problems.
9. I talk optimistically about the future.
10. I instill pride in others for being associated with me.
11. I discuss in specific terms who is responsible for achieving performance targets.
12. I wait for things to go wrong before taking action.
13. I talk enthusiastically about what needs to be accomplished.
14. I specify the importance of having a strong sense of purpose.
15. I spend time teaching and coaching.
16. I make clear what one can expect to receive when performance goals are achieved.
17. I show that I am a firm believer in “If it ain’t broke, don’t fix it.”
18. I go beyond self-interest for the good of the group.
19. I treat others as individuals rather than just as a member of a group.
20. I demonstrate that problems must become chronic before I take action.
21. I act in ways that build others’ respect for me.
22. I concentrate my full attention on dealing with mistakes, complaints, and failures.
23. I consider the moral and ethical consequences of decisions.
24. I keep track of all mistakes.
25. I display a sense of power and confidence.
26. I articulate a compelling vision of the future.
27. I direct my attention toward failures to meet standards.
28. I avoid making decisions.
29. I consider an individual as having different needs, abilities, and aspirations from others.
30. I get others to look at problems from many different angles.
31. I help others to develop their strengths.
32. I suggest new ways of looking at how to complete assignments.
33. I delay responding to urgent questions.
34. I emphasize the importance of having a collective sense of mission.
35. I express satisfaction when others meet expectations.
36. I express confidence that goals will be achieved.
37. I am effective in meeting others’ job-related needs.
38. I use methods of leadership that are satisfying.
39. I get others to do more than they expected to do.
40. I am effective in representing others to higher authority.
41. I work with others in a satisfactory way.
42. I heighten others’ desire to succeed.
43. I am effective in meeting organizational requirements.
44. I increase others’ willingness to try harder.
45. I lead a group that is effective.