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Student Leadership and College Co-educational History

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Student Leadership and College Co-educational History

A thesis presented by

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Abstract

Leadership has been described and thought of as stereotypically masculine, and consequently, leadership positions in student government have historically been dominated by men. This study compared archival data from schools that changed their admission policy from all women to coed ($n = 2$), changed from all men to coed ($n = 1$), or a school that has been coed since its founding ($n = 1$) to see if the history of a school was related to gender representation in the student government leadership positions. The schools that shifted to coed all made the shift at the same time (1969). The study also surveyed students from one of the the schools that shifted from all women to coed ($n = 235$), and the school that shifted from all men to coed ($n = 55$) on how many student government presidents and vice presidents they guessed were women in the past 40 years. The survey also obtained their opinions of what traits an ideal leader possesses as well as their views on the presence of sexism in society today. The survey was to investigate if the history of a school was related to current students' opinions of sexism and of what traits they think an ideal leader would possess. Results show that history of the school is related to students' estimates of women's representation in student government leadership positions, but not to ideas of an ideal leader or sexist beliefs. Results also show that gender is related to sexist beliefs.

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Student Leadership and College Co-educational History

Leadership is a difficult concept to define and its conceptualization has evolved over time. Historically people believed leaders were “great men” who were born great with that special something referred to as charisma (Haslem, Reicher, & Platow, 2010). Charisma was not something that was measured or quantified; you simply knew it when you saw it. During World War II, a few such “great men” --Stalin, Hitler, and Mussolini --turned out to be less than the ideal leader. Haslem et al. then describe the shift after World War II from the great man to a standardized model of leadership focusing, for the most part, on leaders in business. Leaders of companies wanted to know which of their employees or employee candidates would be the best fit for leadership positions. This interest led to the development of personality tests to assess leadership qualities in candidates. In order to identify the traits that would be important to measure in a personality test, one approach was to use biographical information. In this approach researchers interviewed current leaders and studied past leaders to determine the types of life events, and the meaning assigned to different types of events, that lead to successful leaders (Shamir, Dayan-Horesh, & Adler, 2005; Shamir & Eilam, 2005). The problem with this personality test strategy according to Morgeson et al. (2007), however, is that the personality tests have a very low validity for predicting job performance. People can lie on the tests, or the tests are predicated on the assumption that a person’s personality is static when, in reality, a person reacts differently according to the context of the situation. Eventually other situational leadership assessments emerged called situational judgment tests. These tests were found to be much more valid in predicting job performance for leaders, and the importance of the relationship between leaders and followers became more popular (Lievens, Peeters, & Shollaert, 2008; Oostrom, Born, Serlie, & van der Molen, 2012).

Leadership as a Masculine Trait

One trait that comes up consistently in the literature on leadership characteristics is masculinity (Kolb, 1999; Linimon, Barron, & Falbo, 1984; Porter, Geis, & Jennings, 1983; Schein, 1973, 1975; Schein, Muller, & Jacobson, 1989). To be clear, masculine is not synonymous with male. As Kolb points out, women try to adopt masculine traits to be viewed as having more leader potential. However, in Kolb's (1999) study, men scored higher than did women on measures of leadership attitude; men see themselves adopting leadership roles more often than do women, and people in the study rated as masculine were more likely to be chosen as preferred leaders than were those rated as feminine. Leadership is seen as a masculine role; for that reason it historically has been more difficult for a woman to be seen as an equal or better fit for a leadership position than it is for a man. In fact two of the masculine items on the Bem Sex Role Inventory (the measure of androgyny used by Kolb) are: "acts as a leader" and "has leadership abilities" (Bem, 1974). Other masculine items included words such as dominance, decisive, and aggressive. These traits may not necessarily make better leaders, but one can see how someone with these traits is more likely to be seen as a leader because historically, the best known leaders have been those who endorse more masculine items rather than feminine ones (i.e., shy, affectionate, loyal, etc.) on the BSRI. Later studies such as Ellis and Holt (1998) have confirmed that the BSRI remains a valid measure of androgyny. The character traits for Bem's scale were 60 drawn from a pool of 200 that were judged to be more desirable for a man or a woman. Bem may not have intended her scale to cement gender stereotypical thinking, but by classifying traits as feminine or masculine, the idea that men are more one way and women are more the other is communicated and reinforced by this type of unconscious (or conscious)

categorization. Such categorization predisposes people to see men as more likely candidates for leadership positions than is true of women.

One real world manifestation of this gender bias in leadership characteristics is seen in Schein's (1973) study in which 300 male middle managers rated men in general, women in general, or successful middle managers in general on a list of 92 characteristics. The goal was to see if the characteristics that were rated high for successful middle managers would be more similar to the ratings of men in general, women in general, or both. Men were rated significantly more similar to the successful managers than were women. In fact, the women had little resemblance to the successful managers at all. The characteristics shared between women and managers more than between men and managers were stereotypically feminine traits such as helpfulness, neatness, caring, and empathy. The gender stereotype was so strong in this experiment that Schein (1975) redid the experiment; this time the raters were 167 female managers. The 300 managers from the 1973 experiment were all men so that definitely could have caused a bias; Schein wanted to see if the stereotype that men make better managers than do women was held just by men. In this follow-up study, the female managers rated both men and women as resembling successful middle managers, but again, the men resembled the middle managers significantly more than did the women. In this case, even women who broke out of the gender stereotype and were leaders in companies in the mid-70s, rated men as being more similar to successful middle managers than they rated women. In this experiment, the change was that the female managers could see how women could resemble successful middle managers, whereas the previous 300 managers rated women as having little to no resemblance to the group of middle managers.

It is surprising that successful women managers who clearly are not following the stereotype of men being better managers still rate men closer to successful managers than they do women. Philip Goldberg (1968) found another example of women exhibiting a prejudice against women in his study where female undergraduates evaluated articles written either by John T. McKay or Joan T. McKay. Even women undergraduates at an all-women school at the time (Connecticut College) were prejudiced toward other women, evaluating the identical essays written by Joan as less impressive than the articles attributed to John.

One caution against concluding that leadership is a masculine role is the difference between responses on a questionnaire and real life; the two do not always match. For instance, Linimon et al. (1984) showed that men and women think of a good leader as an authoritarian. An authoritarian personality lines up much closer to the masculine gender role (someone who is dominant, take-charge, decisive, etc.) than to the feminine gender role. However, men who saw themselves as democratic style leaders rated themselves as better leaders than did men who saw themselves as authoritarian. Women, on the other hand, saw themselves as better leaders when they had an authoritarian style rather than a democratic one. Even though men and women both seem to have had the same authoritarian construct in their minds when they think of a leader, the concept changes for men when they think of themselves in the leadership role.

As personality tests became less popular and situational factors became more important in leadership assessment, one might think that gender role would matter less, but gender bias still can influence how people interpret situations. Porter et al. (1983) conducted a study where people judged who would be the leader of a group based on pictures of simple situations (a group of people sitting around a table). One might think that, simply judging from the picture, the person at the head of the table would be seen as the leader of the group. This assumption was

true when the group was just men or just women, but when the group was mixed and a woman was at the head of the table, she was not chosen as the leader of the group. In fact, in those circumstances it was usually a peripheral man who was chosen. When the group was mixed and a man was at the head, he was consistently identified as the leader of the group. This result indicates that in certain circumstances, the gender bias that men are more likely to be leaders, even if it is sub-conscious, outweighs the situational cues.

Over time it became evident that, much like the BSRI, the gender stereotype illustrated in Goldberg (1968), and Schein (1973, 1975), might be out of date. Fifteen years after Schein's initial experiment, Schein et al. (1989) set out to conduct the same experiment, but this time the raters were undergraduate students (a sample of men and women), not managers. The results from this study showed that male undergraduate students still rated men closer to the successful manager group than they rated women. However, the results showed that the female undergrads no longer sex-typed the managerial position, meaning they rated women just as closely to successful managers as they did men. This study, although indicative of a changing trend, precedes the one by Kolb (1999), who demonstrated that people rated as masculine are more likely than people rated as feminine to be chosen as preferred leaders. The Schein et al. study was also done around the same time as the Porter et al. (1984) study in which the gender bias still outweighed situational cues. This outcome indicates that the bias still manifests itself in some circumstances. Even though women rate men and women as equally possessing the traits of successful managers (Schein et al., 1989), women still seem to seek to fulfill these authoritarian and masculine stereotypes because they rate themselves as better leaders when they are more authoritarian than democratic (Kolb, 1999; Linimon et al., 1984). The study by Schein et al. shows a trend toward viewing leaders as more androgynous, but the bias held by men is still

evident, and concurrent and subsequent studies (Kolb, 1999; Linimon et al., 1984; Porter et al., 1984) are evidence that the trend of viewing leadership as a masculine role is still prevalent, at least up to the late 1990's.

Women vs. Men Emerging as Leaders

Even if women can be seen as possessing the characteristics of successful leaders as much as men do (Schein et al., 1989), other research shows there is still a long way to go for women to be seen as leaders, emerge as leaders, be chosen as leaders, and be accepted as leaders to the same extent as men. The first step would be for women to emerge as a leader in a leaderless group. This outcome does not have to involve an election or competition of any kind. Megargee (1969) conducted a seminal experiment to see if dominance was the deciding factor in who emerged as a leader for a task in a two person, leaderless group. Studies in the past have correlated leadership with dominance, such as Hanawalt, Richardson, and Hamilton (1943) who used the Bernreuter personality measures with leaders at colleges. Megargee used a group of men and women and obtained dominance scores for all of them. She then made single sex male, single sex female, and mixed sex dyads where it was clear that one of the pair was dominant. In the single sex dyads, the dominant partner almost always was the one to emerge as the leader on the task. In the mixed sex dyads, the men who were dominant emerged as leaders, but in the pairs with dominant women, the less dominant man more often emerged as the leader than did the dominant woman. Megargee kept track of who emerged as the leader, and who chose the person to become the leader (or if it were a mutual decision). More often than not, in the mixed sex dyads with a dominant woman, the woman chose the less dominant man to be the leader. This outcome would suggest that the man did not become more assertive when paired with a

woman, but rather that the woman became less assertive when paired with a man. This behavior could have something to do with leadership being strongly thought of as a masculine role at the time (Schein, 1973), and it could result from the added pressure of women having to actually step in to fill the role rather than just rating women on whether or not they could fit the role. This result is an example of role congruity theory that states people take on the role that society expects them to take on regardless of their personality (Eagly & Karau, 2002).

Much like Schein's studies, Megargee's (1969) study inevitably was questioned as being out-of-date, and the stereotypes inconsistent with the changing culture. Carbonell (1984) replicated Megargee's experiment using the same dominance scores (California Personality Inventory Dominance scale) and the same design for pairings. This time, however, a feminine task was added (sewing a button). In Megargee's experiment, she used a masculine industrial task or a neutral clerical task, but Carbonell wanted to see how time had changed the gender stereotype as well as to see if a feminine task would affect dominant men's assertiveness. Carbonell's results were very similar to Megargee's. Fifteen years had not altered the fact that high dominance women became less assertive and yielded to less dominant men for masculine and neutral tasks. For the feminine task, however, dominance scores predicted leader emergence across all groups. One could see this outcome as only a minor change since high dominance men did not yield to less dominant women whereas in the masculine task, high dominance women did yield to low dominance men, but the results showed women felt comfortable in some situations assuming the leadership role. In the feminine task, high dominance women took the lead only slightly more often than did their less dominant male partner (9/16 times), whereas in the other three types of pairings, the dominant partner took the lead more often by a much greater margin.

This result could be a sample size issue or it could reflect the effects of male leadership gender bias even for feminine tasks.

Around the same time as Carbonell's (1984) study, Megargee's (1969) study came under scrutiny from an ecological standpoint because women who were rated as more dominant might not be the same as women who have proven themselves to be more dominant in real life circumstances. Carbonell and Megargee both used the same dominance rating scale to categorize their participants. Even though that scale to measure dominance is a valid dependent measure, perhaps the transition from a theoretical rating to a real life situation is not as valid as using women who have had the opportunity in real life to take on leadership roles, and pairing them with a group of men or women who did not necessarily have leadership experience. Golub and Canty (1982) conducted an experiment where the leader was an interviewer, and the follower was an assistant, and two confederates were used as interview subjects. The experimental subjects were 30 women from an all women's college, and the other subjects were women and men from a coed college. The idea was that these women from an all women's college would have more experience being leaders and asserting themselves than would women at co-educational institutions. The dominance scale from Megargee and Carbonell was administered, but the results were only used to compare after the fact, and not used to make pairings. The results showed that 60% of the time, women from the all women's college took the lead role when paired with a woman from the coed school, but only 30% of the all women's college subjects took the lead when paired with a man from the coed school. Analysis of dominance scores showed that they were not associated with who became the leader. Golub and Canty showed that increased opportunities to be leaders did not affect readiness to assume a leadership role in the presence of a man. One could say that the situational dominance (going to an all

women's college) was outweighed by the gender bias much as when situational cues were outweighed by gender bias in the Porter et al. (1983) study.

A more recent study has confirmed this idea of role congruity theory. In Ritter and Yoder's (2004) study, they basically did the same experiment as Megargee (1969) and Carbonell (1984), and again wanted to see if time had changed any of these stereotypes. They used masculine, neutral, and feminine tasks as did Carbonell, and paired dominant partners with less dominant people either of the same or opposite sex. Most of the time (67%) the dominant person took the lead on the task. Dominant women once again deferred to less dominant men when the task was masculine or neutral. Again, it was usually the dominant woman who appointed her less dominant, male partner to be the leader. The reverse was not found for the dominant men in the feminine task. This experiment is 35 years later than Megargee's original project, and the results are largely unchanged. This trend of assuming the stereotypical gender role remains. Schein et al. (1989) showed that the leader role was becoming less sex-typed, but the results from these simulated situations show that the judgments even by women themselves that women could possibly be leaders is not as likely in live circumstances as it is in hypothetical judgments.

In some circumstances, research indicates the women are more likely to assume the leadership role (Eagly & Karau, 1991; Karau & Eagly, 1999). Eagly and Karau conducted a meta-analysis of these leader emergence studies. They used studies where a leader was chosen from an initially leaderless group. They found that men are more likely to emerge as leaders in short-term groups, and groups not having to deal with complex social issues. When the task was masculine or unspecified, the man usually was chosen as the group leader. Karau and Eagly (1999) wanted to challenge Kolb's (1999) conclusion that higher masculinity led to higher scores on leader emergence. Karau and Eagly found that men did tend to emerge as the leader more

frequently when the task was masculine than when it was not, but that this lopsidedness decreased as the length of time spent together as a group got longer. That is, when members of a group got to know each other for a while, they were less likely to have a male bias. Women were also more likely to emerge as the leader when the task involved complex social situations such as when extensive negotiation is required (supporting the findings in the 1991 Eagly and Karau meta-analysis). Karau and Eagly say their results are a product of social role theory that states people are expected to behave in ways consistent with societal gender roles. This theory is basically the same idea as role congruity theory. In many cases in research and real life, there is not a good chance to get to know the candidates before a leader emerges. Typically a leader will emerge at the beginning of a task, and that usually does not allow a group of people to get to know one another first. You could liken this sequence to the political process. Do people really get to know the candidates from campaign speeches before they pick one to lead the party and then one to lead the nation? If not, then that unfamiliarity would seem to put women at a disadvantage, and the history of presidential choices seems to suggest as much.

Whether men or women emerge as leaders has been shown to depend at least partly on the type of task that the group has to perform. Hebl (1995) showed how men emerge as leaders more often than do women when competitiveness is emphasized in the task. The gender bias disappears however when social cooperativeness is emphasized. A trend in the literature is that women are seen as equal or better leaders than are men when there is a social aspect to the task (Eagly & Karau, 1991), but it is not clear why this pattern occurs. Is the stereotype that women are not seen as leaders shifting, or does the pattern reinforce the stereotype that women fit into their gender role?

Evaluating Women as Leaders

One of the most prestigious producers of leaders in the world is Harvard Business School (HBS). HBS produces many of the most successful business leaders, and many who reach the *Forbe's* 500 list. Not many of these high achievers are women (Kantor, 2013). Kantor writes how the gender imbalance is also seen with the faculty; there are about five times as many tenured men professors as there are women professors at HBS. Deans at the Harvard Business School set out to overhaul the gender imbalance in student performance because women were entering the school with the same or better grades and test scores as men, but quickly falling behind men in how they were evaluated. The investigation showed that women were especially suffering in the class participation area, which accounts for 50% of final grades. Part of the problem, according to an article about the research, is that women feel that they have to choose between academic and social success. Women at the business school who are seen as high achievers get labeled as assertive, and thus, not as attractive as passive women, reducing their likelihood of finding a successful partner. The plan to "fix" the gender imbalance was met with contempt from the student body. Students mocked the efforts of the dean and believed the workshops and new initiatives were a waste of time or not the right approach to deliver the message. Harvard Business School can say it has made progress closing the grade gap between men and women, but managing the social atmosphere is a far more complex problem, and the majority of the faculty members are still men.

Men and women have been shown to adopt different leadership styles (Jago & Vroom, 1982), and they also have been shown to have different reasons for trying to become leaders (Offerman & Beil, 1992). In 30 hypothetical decision-making situations, women adopted a more participatory approach such as asking others' opinions, and getting consensus than did men. The

participatory approach is consistent with the normative model of decision making where leaders follow a path of evaluations that help determine the amount of leader participation that a decision will require (Vroom & Jago, 1974), but it does not match the masculine stereotype as much as does an autocratic approach. Men and women also aspire to leadership roles for different reasons. Offerman and Beil (1992) show that women leaders derive satisfaction from helping others reach goals and exerting influence. Men, on the other hand, get satisfaction from those things as well, but scored much higher than did women for getting satisfaction from power and winning. This pattern seems to fit into Kezar and Moriarty's (2000) study that shows women favor a collaborative approach to leadership.

Emerging as a leader is a challenge for women, but the challenges do not stop there. If a woman manages to break through the glass ceiling and assume a leadership role, she still is not seen as a leader in the same way men are. Men and women have been shown to adopt different overall leadership styles (Jago & Vroom, 1982; Offerman & Beil, 1992). One strategy to be valued as a leader could be to adopt a leadership style similar to the style associated with men because men are clearly valued as leaders. However, seeing women acting in a non-stereotypical way could have a negative effect on how they are evaluated. Eagly and Karau (2002) show that people evaluate behavior that fulfills leadership role stereotypes less favorably when enacted by a woman. This pattern, again, fits into their role congruity theory that we favor people for roles into which they stereotypically fit. Eagly and Karau show that women emerge as leaders in feminine and socially complex tasks, but when they act in a masculine manner to assume leadership roles in other circumstances, they are devalued. A similar finding emerges in Jago and Vroom's (1992) study in which participants rated leaders in videos. Women managers who were viewed as having an autocratic style were rated negatively. Men who were viewed as autocratic

got low scores, but they were still in the positive range. This research fits into what is happening in the real world at Harvard Business School where women are disliked and excluded from social activities by men, if the women are perceived as high achieving. The business school is a masculine environment; when women try to excel there, they could be seen as trying to act in a masculine role and as a consequence experience some of the backlash described in the research.

Women have an interesting dilemma when choosing a leadership style. Women adopt the participatory leadership approach more often than do men (Jago & Vroom, 1992). This approach is more favorable in real life than is the authoritarian one. However, this participatory choice does not help women seem as if they'd make good leaders, because people think an authoritarian would make a better leader than would a participatory one (Linimon et al., 1984). In real life situations, when rating real leaders, they rate authoritarians lower than they do democratic leaders (Jago & Vroom). The stereotype does not fit the real world preference, but that does not help people who are trying to understand how to be elected or hired. Rudman, Racusin, Phelan, and Nauts (2012) conducted studies that showed women with authoritarian qualities were seen as less likable *and* less hireable than were men with the same qualities or people with more democratic qualities. These results seem to suggest that women are better off sticking to the democratic style that is more favored in real life (Jago & Vroom). The authoritarian concept is rated as a better leadership style in theory, but women who adopt that personality are still rated as less hireable than are men and other people with the democratic style. Rudman et al. also found that women who tried to break through the stereotype were met with what they called backlash effects such as increased prejudice and exclusion. This effect is similar to the backlash at the Harvard Business School when the deans began to implement change. Rudman et al. believe the backlash is a mechanism meant to maintain the gender hierarchy.

Women face many barriers both becoming and serving as leaders. Some are internal dispositional barriers, and others are external factors limiting women. For instance, when working in groups, all female groups tended to develop decentralized leadership, i.e., they led themselves as a group rather than having one central leader (Berdahl & Anderson, 2005). Male groups in this experiment developed centralized leadership; when it was mixed-gender but the majority was female, the group started with centralized leadership and shifted to decentralized. This difference could be an indication that women are hesitant to assume a leadership role in group settings and would prefer to be a member of a collaborative group rather than lead. The collaborative approach may be better than having a centralized leader, and women may perform better in that situation, but centralized leadership is the traditional model that people recognize. Also, there are circumstances where centralized leadership is necessary, and women are hesitant to take charge. When these circumstances arise, the hesitancy on the part of women may leave the door wide open for men to easily take charge. Women's hesitancy might come across to others as an unwillingness or a lack of ability to assume the leadership role.

Women seeking leadership positions are also affected to some degree by socio-economic factors (Tremblay & Manon, 2007). Systems are designed for specific types of candidates, and this sometimes limits groups of people such as women, minorities, and people with low socio-economic status (SES). At Harvard Business School, SES was a major dividing factor. Poorer students could not afford the same high-priced events and weekend getaways as the rich students and consequently were left out of the high status network. For students of color, leadership opportunities are beneficial, but racism and insensitivity are barriers. Also, collaboration with White students is limited, and this could impact the group's perception of the abilities of students of color (Lavant & Terrell, 1994). White women do not have to deal with racism, but sexism is a

powerful barrier for women. Black students also differ from White students in that they focus on the community needs whereas the White students seek to fulfill personal goals (Arminio et al., 2000). This contrast sounds similar to women choosing to lead in order to help others achieve goals versus men choosing to lead for the power and satisfaction of winning (Offerman & Beil, 1992). Arminio et al. (2000) assert that these differences between Whites and Blacks are a result of different life experiences. Black students reported that they would rather be seen working in a group than leading it. Arminio et al. (2000) suggest that this situation could also be a result of the lack of Black leader role models for Black students. Once again, these suggestions could apply equally to women. Women have very different life experiences growing up because of societal norms influencing how girls dress, act, play, etc.

Benefits of being a Leader

Some people might suggest that women are better off not trying to break through these barriers. The barriers seem hard to manage, and women face a lot of stress and adversity trying to become leaders only to be discriminated against or disrespected once they assume the role they sought. Perhaps somewhat surprisingly, then, Miles (2010) found that women reported that being a leader was a positive experience. Miles interviewed women who were student government presidents, and they reported that the experience helped them grow as a person, improve various skills, and build relationships with other students and faculty. Boatwright and Egidio (2003) found that the need for connectedness and self esteem scores were the highest correlating factors in their study of women's leadership aspirations. On the other hand, Boatwright and Egidio also found that femininity scores were negatively correlated with leadership aspiration. This relationship could occur because feminine women see themselves

fitting into stereotypical gender roles rather than lacking the aspiration to be leaders. Feminine women could think they would like to be leaders, and that they would be great leaders, but report that they do not have leadership aspirations because they do not see leadership as a realistic situation.

One of the other reasons students of any gender choose to participate in school organizations of any kind is to build their resumes and meet students with similar interests (McCannon & Bennett, 1996). This motivation could be another factor limiting the number of women trying to become student government leaders. Women may think of the administrative board or the group of highest ranked government members as a men's club where they are not likely to meet women with similar interests; they may also not see themselves going into political or business fields after college and consequently do not see the position of student body president as a major resume builder. Women may not say that they want to become leaders, and they may not run as often as do men for leadership positions, but Boatwright and Egidio (2003) show that when women do participate in leadership roles, is a positive experience for them. Also, one should be cautious saying women just do not like to lead, and consider how women may say or do things that they do not really believe because of the gender norms and stereotypes in place.

It is important to note that research does not show women are less effective leaders than are men, but that when the role is defined in masculine terms, men appear more effective (Eagly, Karau, & Makhijani, 1995). At Harvard Business School, women and men enter with equivalent grades and test scores, but women quickly fall behind when they begin classes (Kantor, 2013). This decline in performance could be related to the way the classes are conducted to frame the business field in masculine terms, thus leading men to be more successful at the school. Some studies show that evaluations of leaders have much more to do with group performance than

personality (Powell & Butterfield, 1984). Of course, prejudice toward women in masculine roles could lead to poor group performance, but otherwise, the more feminine stereotype of being collaborative and helping others succeed (Kezar & Moriarty, 2000; Offerman & Beil, 1992) would lend itself well to producing good group performance and therefore positive evaluations. Other studies show that the followers have a larger impact on the evaluation of the leader than does the leader him/herself. For instance, Cellar, Sidle, Goudy, and Obrien (2001) found that followers high in agreeableness rated democratic leaders higher than autocratic ones, but followers low in agreeableness rated the autocratic leaders higher. Also, women who come across as genuinely masculine avoid being disliked (Kawakami, White, & Langer, 2000). This outcome just means that a woman in a masculine role, who is usually disliked, can avoid that if she seems genuine and mindful, and not just trying to appear masculine because she is in charge.

Leadership In College

The current study targeted student leadership in colleges; for that reason an understanding of the gender differences of motives, styles, and perceptions of student leaders is especially important. At Whitman College, there are 60% women and 40% men yet the student senate is 81% men. The last time there was a woman student body president at Whitman College was 2006 (Vanderbilt, 2012). While six years is a long time, it is not rare even though the college is comprised largely of women. Clearly college students are not entirely exempt from the gender biases seen in the literature about the general population. For instance, fraternity leaders (men) rate themselves higher than do sorority leaders (women) on how much they inspire others, even though members of fraternities and sororities rate their leaders as equally inspiring (Adam & Keim, 2000). Perhaps this pattern is connected to the fact that men are more narcissistic than are

women, and therefore emerge more frequently as leaders (Brunett et al., 2008). These results also support Eagly et al.'s (1995) meta-analysis showing that women and men are equally effective as leaders when the role is not defined in masculine terms.

The literature shows that, much like students of color (Arminio et al., 2000), women are underrepresented in leadership roles such as the president and vice president of the student body (Miller & Kraus, 2004). One of the reasons for the underrepresentation in these positions is that women run for office at very low rates. One explanation for this underrepresentation from Miller and Kraus is that women lack role models, just as Arminio et al. suggested was true for students of color. Another explanation could be that women do not see themselves meeting people of common interest by running for these positions (McCannon & Bennett, 1996). Those who endorse feminine characteristics may not aspire to be leaders, may not see themselves fitting into that role due to established gender norms, and may fear negative evaluation (Boatwright & Egidio, 2003). Lavant and Terrell (1994) say that students participate in organizations that match their background and upbringing. Perhaps as a result of the difference in upbringing between men and women and the socialization of gender norms during childhood, women tend to be less interested in student leadership than are men.

The underlying cause could be any number of things, but the effect is that, in college, not nearly as many women run for top student government positions as do men. The other reason for women's underrepresentation in student leadership roles explained by Miller and Kraus (2004) is that the women who run do not win. This fact may be obvious, but it still needs to be explained. First of all, women are rarely the incumbents, and the incumbent has the advantage over the challenger (Erikson, 1971). Being the incumbent gives the student up for re-election recognition, the appearance of experience, knowledge of the issues, and more valuable networks. Women are

rarely the incumbents because so few women have run in the past. While half of the student government positions are filled by women, less than 30% of the leadership roles are filled by women (Miller & Kraus).

This barrier of incumbency goes back farther than student government elections in college. Renn and Ozaki (2010) conducted a study with college students that showed how leadership identities develop from prior experience, and that interest in leadership begins mainly with motivation to meet new friends. Again, women may lack prior experience because they do not see leadership as a similar interest and would not want to meet friends involved in that activity. Therefore, women do not develop a leadership identity, which leads to low interest and low aspirations for leadership positions later on in life. This lack of leadership identity eventually feeds into the cycle of not running, and then not being the incumbent when a woman does decide to run. Flemming (1935) found a similar effect where leadership transferred from junior to senior high school. People who were leaders in junior high school continued to pursue their interest in senior high school and were usually elected. The transfer is the same from student to adult politics; students are more likely to go on to careers in politics if they were involved in student government (Fendrich & Turner, 1989). Therefore, the lack of interest from an early age could be one of the major causes of underrepresentation of women in college student government.

Some of the literature suggests that women are less interested in leadership and government than are men (Boatwright & Egidio, 2003; Lavant & Terrell, 1994; Renn & Ozaki, 2010). However, being a student government leader is much more than politics and government. Being a student leader helps one grow and connect with faculty, learn from unique experiences, and serve a greater purpose; it has a positive effect on student development (May, 2009). These sound like experiences to which both genders would be attracted. Also, one of the major goals

reported by student leaders in May's study was to do something new and break with traditions. It sounds as if a woman with leadership inclinations would want to participate simply to break through the gender role stereotype. Students who participate in student government leadership also gain increased social competence, practical competence, writing skills, self-confidence, and self esteem (Kuh & Lund, 1994). One of the problems might be what Boatwright and Egidio (2003) suggest: that women have lower self esteem than do men because the gender roles have been reinforced their entire lives, and they fear negative evaluation. Lower self-esteem would be a problem because self-esteem is a predictor of leader aspirations, yet it is also an effect of being a leader. It is almost as if a woman needs to be a leader before she feels confident enough to run for a leadership position.

Transitioning to Mixed Gender

Another major area of study relevant to the current investigation is the overall change that occurs in schools and other organizations when an all women's institution switches to coed or the reverse. In a correctional facility for girls, the switch to coed caused some drastic changes (Bloom, 1977). First of all, there was a significant increase in destruction and physical violence. There also was an increased sophistication in the drug distribution network throughout the facility. These changes in behavior made the girls feel jealous and angry because the boys were not receiving the same level of punishment for lesser offenses the girls had previously received because the average level of offense had increased. Girls who had been punished severely for what now were minor offenses felt unfairly treated when the new arrivals subject to only minor punishments. The organizational adjustment to the boys' presence was rapid and negatively affected the girls because they saw that boys could get away with more and were treated

differently. In a way this pattern reinforced gender role stereotypes that boys will be boys, and girls are held to a higher, more civilized standard of behavior.

One major organization that started as all men and began accepting women is the military. Boyce and Herd (2003) conducted a study similar to the ones conducted in the past by Schein (1973, 1975) and Schein et al. (1989). In those studies participants rated men in general, women in general, and successful managers in general on 92 characteristics in order to see if one gender was rated more similar to the successful managers than was the other. Women and military students recognized men and women as equally resembling successful leaders, but men saw more similarities between men and successful leaders than between women and successful leaders. Also, senior military students had a stronger masculine role stereotype for leadership than did first year students. This finding suggests that military schools foster gender role stereotypes in a way that strengthens these stereotypes in the minds of students as they progress through the program. Another point of interest is that being led by a woman military officer did not affect the sex-role stereotype in the study. Even after seeing first-hand how women resemble leaders, men participants still expressed the gender stereotype of superior male leadership. A correctional facility for teenagers is not the same as the military, but these two cases reflect how the concept of shifting from single sex to coed is very different depending on which sex was the original. In the correctional facility that started as all girls, the shift to coed prompted a major change in policy and an immediate switch to societal gender norms. In the military, the admission of women (and the rise of women to officer level) did not prompt any major change in thinking or in policy. Men still saw less resemblance between leaders and women than between leaders and men, and the program continued to reinforce gender role stereotypes.

Effects following the shift from single sex to coed are felt in college classrooms as well. Canada and Pringle (1995) observed interactions in college classrooms during the first five years of transition to a coed from an all women facility. They saw that professors who were men initiated significantly fewer interactions in mixed-sex classes than did professors who were women (who actually initiated more after the change than when it was an all-women school). After the change, the number of student- initiated interactions in classrooms was greater in mixed-sex classes than in single-sex classes. Also, students of the sex opposite that of the professor interacted with the professor more than did students of the same sex, although the gender of the professor had a bigger impact in mixed-sex classes than in single-sex ones. These findings, while not particularly biased against women, do show how the shift to coeducation at a college can have a major impact on classroom culture. The findings also show that when men are admitted to an all-women's college, the faculty alter their classroom interactions quickly and drastically. This example may not be as biased against the women as was true of the events in the correctional facility where, after boys joined, major policy change occurred to accommodate the boys' behavior, but consider the Harvard Business School example (Kantor, 2013). Women are the minority, and the newer of these two genders to be admitted, yet no change in culture has taken place until recently, and those effects have yet to prove sustainable. In those classrooms, women are not as likely to initiate interactions or participate as are men, even though most of the classes are taught by professors of the opposite gender. The Canada and Pringle (1995) study shows how changing to coed in general can cause changes in the classroom atmosphere, but when men are the original sex (as in Harvard Business School), the same type of changes are not observed that previously favored the women.

The present study compares colleges that either shifted from an all women's school to coed in the past 40 years with colleges that shifted from all men to coed in the same year, and with colleges that have been coed from their founding. The goal was to compare how many women have been president or vice president of the student body (or main student government organization) from the time the shift was made by the schools. The first hypothesis was that the ratio of men to women presidents and vice presidents would not be significantly different across the three types of schools. Even though the schools that shifted from all women to coed might start out with more women leaders, the experimenter hypothesized that the ratios would not end up to be significantly different after 40 or so years, and societal gender stereotypes would prevail. However, the experimenter hypothesized that ratios of men to women presidents and vice presidents would be significantly different between the three school types for the beginning years of the transition, but that the significant difference would not last long.

The other factor to be measured was the students' estimates of women's representation in student leadership position. Students who attended the recently shifted schools were likely to know its history of being an all women's, or all men's college. This knowledge may have influenced their perceptions and caused them to overestimate the number of women or men who have been the leader of the student government. The students at the recently shifted from all women to coed college in the study may have a reversed stereotype because they saw their school as a women's school that shifted to coed and they may think the gender bias would be less in evidence than it really is. Students at the all men to coed school might have thought the gender bias is more in evidence than it really is. The third hypothesis was that the students at the school that shifted from all women to coed schools would estimate the number of women presidents and vice presidents of student government to be significantly higher than would students at the

school that shifted from all men to coed. The study also measured students' ideas of what traits an ideal leader would possess on the BEM Sex Role Inventory. The fourth hypothesis was that ratings on ideal leader traits would be more feminine at the schools that shifted from all women to coed than at the school that shifted from all men to coed. The fifth hypothesis was that students at the all women to coed school would exhibit less sexist beliefs on a measure of modern day sexism than students at the all men to coed school.

Method

Archival

Research Design

Archival information about past presidents and vice presidents of the student government was obtained from four different colleges (Connecticut College [all women to coed], Vassar College [all women to coed], Kenyon College [all men to coed], and Kalamazoo College [coed since its founding]).

Sources of Data

The data in the archival section came from the four schools being compared (Connecticut College, Vassar College, Kenyon College, and Kalamazoo College). The data from these four schools were compared starting in the year 1971, and continuing through 2013.

Materials/Instruments

The researcher used various methods to obtain archival data for each of the four schools. For Connecticut College, the researcher used student handbooks that were published every year and list the members of the Student Government Executive Board. The researcher also used the Student Government Association (SGA) records for more recent years. For Vassar College and Kalamazoo College, the researcher used online records of the school newspaper. Finally, for Kenyon College, the researcher contacted the institutional archivist who compiled a list of names of the past student government presidents and vice presidents. For all of the schools, a number of the most recent student government presidents and vice presidents were available on the college's website.

Procedure

The first step was to contact institutional archivists at Vassar College, Kalamazoo College, Kenyon College, and Connecticut College to obtain advice about the best way to access their records of past student body presidents and vice presidents. The archivists at Vassar and Kalamazoo College directed the researcher to the online records of the school newspaper. The Connecticut College archivist invited the researcher to come to the College Archives to look through the student handbooks. Finally the Kenyon archivist volunteered to compile the list and send it to the researcher. No student leader names appear in the final report.

Survey

Research Design

This was a between subjects design with the between subjects factor represented through survey data comparing two of the four schools from the archival section of the experiment: Connecticut College and Kenyon College.

Participants

The researcher recruited 235 students from Connecticut College, and 55 students from Kenyon College yielding a total sample of 290 participants (193 women and 91 men). The age range was 18-23 (mean = 19.84), and the participants spanned all 4 class years.

Materials/Instruments

The researcher used a combination of two different scales as well as other leadership assessment questions he created and demographic questions (see Appendix B). The first set of questions the participants answered began by asking them how many presidents and vice presidents of the student government had been men and how many had been women in the past 40 years (1974-2013). Participants were also asked how confident (from 0%-100%) they were in

their answer. Participants were then asked if they had ever run for (and been elected) president or vice president of their class in college or high school, and if they had run for (and been elected) president or vice president of their student government in high school or college.

The next measure was a slight variation of the short form of the Bem Sex Role Inventory (BSRI) labeled the Bem Inventory (Bem, 1978). The BSRI is a list of masculine, feminine, and neutral adjectives such as assertive (masculine), sensitive to needs of others (feminine), and reliable (neutral). The question was changed to be framed to ask participants to rate the degree to which the traits are fitting of an ideal leader rather than themselves. The question was worded as follows: For each of the adjectives listed below, please indicate, using a scale where **1 = never true to 7 = always true** the degree to which they are true of an *ideal leader*. The item, “Has leadership abilities” was replaced with individualistic because it would not make sense to rate an ideal leader on his/her ability to act like a leader, and individualistic had the next highest item-total correlation. The Cronbach’s alpha for the entire scale (30 items) was .841. The Cronbach’s alphas for the masculinity and femininity short form scales (10 items each) were .759 and .855, respectively.

The third measure to be filled out was the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995). The Modern Sexism Scale is eight items that measure participants’ attitudes about the current state of discrimination against women. The scale has reasonable internal validity with an alpha of .85. This scale was placed after the other two because the researcher did not want the questions about gender discrimination to affect participants’ thoughts about what an ideal leader would be or their beliefs about gender representation in student government leadership positions at their schools. The survey concluded with demographic questions such as the participants’ age,

gender, race, class year, major, and what types of schooling they had received (i.e., single sex, home school, or boarding school).

Procedure

The researcher worked with the Psychology Department and IRB at Kenyon College to get permission and facilitate the distribution of the survey to Kenyon students. The researcher also worked with John Nugent, the institutional researcher at Connecticut College, for permission to distribute the survey to students at Connecticut College. The survey was approved by both the Connecticut College and Kenyon College Institutional Review Boards (IRB).

Using Qualtrics, the study was distributed through students' emails (see Appendix D for email invitations). The participants all received the same survey with the exception of wording changes if the schools used different names for their main student government association. The participants were asked to give informed consent (see Appendix A). The participants then were presented with the survey (see Appendix B). Afterwards they received a debriefing document explaining the research to them (see Appendix C).

Ethical Issues

There were no ethical issues in this study.

Results

Archival Data

The aim of this archival study was to compare the numbers of men and women presidents and vice presidents of the student government across schools that have varied histories of coeducational status. The study used four schools (Connecticut College, Vassar College, Kalamazoo College, and Kenyon College) that fall into three categories (all women to coed, all men to coed, or coed since its founding). The initial hypothesis was that the proportions of men to women presidents and vice presidents over the past 42 (1972-2013) years would not be significantly different across the three types of schools in the study. A chi square analysis of gender proportions for the president of student government role ($2, N = 165$) = 3.42, $p = .181$ and a chi square analysis for the vice president role ($2, N = 162$) = 2.42, $p = .298$ confirmed the hypothesis. Another chi square analysis of gender proportions for the president and vice president role was run, but this time across the four different schools. The second chi square analysis for the president role confirmed the hypothesis that there would be no significant difference in gender proportions ($3, N = 165$) = 6.03, $p = .110$. However, the second chi square analysis for the student government vice president role ($3, N = 162$) = 8.55, $p = .036$ showed that Vassar (one of the all women to coed schools) had a significantly lower proportion of men to women vice presidents over the past 40 years than did any of the other three schools. There was no significant difference between Connecticut College (the other all women to coed school) and the other colleges. The archival information on total number of women and men represented in the president and vice president roles for the four schools is presented in Table 1.

Table 1

Student Government Presidents and Vice Presidents (1972-2013)

School	President		Vice President	
	Men	Women	Men	Women
Connecticut College	<i>n</i> = 26	<i>n</i> = 14	<i>n</i> = 26	<i>n</i> = 14
Vassar College	<i>n</i> = 20	<i>n</i> = 22	<i>n</i> = 15	<i>n</i> = 25
Kalamazoo College	<i>n</i> = 25	<i>n</i> = 17	<i>n</i> = 27	<i>n</i> = 14
Kenyon College	<i>n</i> = 30	<i>n</i> = 11	<i>n</i> = 22	<i>n</i> = 19

Note. Due to missing data, some schools don't have as many presidents or vice presidents as there are years

To test the second hypothesis, additional chi square analyses were run on smaller periods of time (e.g., 10 year segments) to see when the proportion of men to women evened to the point that the difference was no longer significant. As one might expect, the beginning years after the shift to coeducation showed the biggest difference between the schools. Multiple chi square tests revealed that, for the first 14 years (1972-1985), the proportions of male to female student government presidents were significantly different ($3, N = 55$) = 8.38, $p = .039$, but not after that. Vassar's proportion of men to women vice presidents was significantly different from all three of the other schools for every decade except for the first one. Table 2 displays the number of men and women presidents and vice presidents in 10 year segments.

Even though the initial hypothesis was confirmed, the experimenter ran goodness of fit tests, and found that, overall, there have been more men than women presidents of student government ($1, N = 165$) = 22.33, $p < .001$, and more men than women vice presidents ($1, N = 162$) = 10.42, $p = .001$. Goodness of fit tests were also run for each individual school to see if one lopsided ratio was throwing off the overall tests. Goodness of fit tests on presidents at Connecticut College (all women to coed) show significantly more men than women have been president ($1, N = 40$) = 10.42, $p = .001$, and more men than women have been vice president ($1, N = 40$) = 10.42, $p = .001$. For Kalamazoo College (coed since its founding), similar results were found for presidents ($1, N = 42$) = 5.29, $p = .021$, and vice presidents ($1, N = 41$) = 9.58, $p = .002$. Goodness of fit tests for Kenyon College (all men to coed) again showed that there have been more men than women student government presidents ($1, N = 41$) = 11.27, $p = .001$, but not significantly more men than women vice presidents ($1, N = 41$) = .73, $p = .393$. Vassar College (all women to coed) did not have any significantly lopsided proportions of men to women

presidents nor vice presidents. Again, the numbers of presidents and vice presidents broken down by school and gender are presented in Table 1.

Table 2

Student Government Presidents and Vice Presidents by Decade (1972-2013)

	<u>1972-1982</u>		<u>1982-1991</u>		<u>1992-2001</u>		<u>2002-2013^a</u>	
	Men	Women	Men	Women	Men	Women	Men	Women
Connecticut College								
Presidents	<i>n</i> = 5	<i>n</i> = 5	<i>n</i> = 8	<i>n</i> = 2	<i>n</i> = 5	<i>n</i> = 4	<i>n</i> = 8	<i>n</i> = 3
Vice Presidents	<i>n</i> = 4	<i>n</i> = 6	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 6	<i>n</i> = 3	<i>n</i> = 10	<i>n</i> = 1
Vassar College								
Presidents	<i>n</i> = 3	<i>n</i> = 7	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 3	<i>n</i> = 7	<i>n</i> = 8	<i>n</i> = 4
Vice Presidents	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 4	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 5	<i>n</i> = 1	<i>n</i> = 10
Kalamazoo College								
Presidents	<i>n</i> = 9	<i>n</i> = 1	<i>n</i> = 4	<i>n</i> = 6	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 6	<i>n</i> = 6
Vice President	<i>n</i> = 7	<i>n</i> = 3	<i>n</i> = 7	<i>n</i> = 3	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 7	<i>n</i> = 4
Kenyon College								
Presidents	<i>n</i> = 8	<i>n</i> = 1	<i>n</i> = 8	<i>n</i> = 2	<i>n</i> = 5	<i>n</i> = 5	<i>n</i> = 9	<i>n</i> = 3
Vice Presidents	<i>n</i> = 6	<i>n</i> = 3	<i>n</i> = 5	<i>n</i> = 5	<i>n</i> = 6	<i>n</i> = 4	<i>n</i> = 5	<i>n</i> = 7
TOTAL								
Presidents	<i>n</i> = 25	<i>n</i> = 14	<i>n</i> = 26	<i>n</i> = 14	<i>n</i> = 19	<i>n</i> = 20	<i>n</i> = 31	<i>n</i> = 16
Vice Presidents	<i>n</i> = 23	<i>n</i> = 16	<i>n</i> = 22	<i>n</i> = 18	<i>n</i> = 22	<i>n</i> = 16	<i>n</i> = 23	<i>n</i> = 22

Note. Due to missing data, some schools don't have as many presidents or vice presidents as there are years.

^aThe last period is more than a decade so as to include the last 2 years of data.

Survey Data

The survey data were drawn from participants at two of the four schools used in the archival section: Connecticut College, and Kenyon College. Their coeducational histories are the most different since Connecticut College shifted from all women to coed and Kenyon College shifted from all men to coed. The goal was to see if students from schools with opposite coeducational histories would have different opinions about gender representation in leadership at their schools, different opinions of leadership in general, and different beliefs about sexism. Demographics about the participants' schooling history, and experience with student government leadership in college are presented in Table 3. One interesting note about the sample is that hardly any of them have actually run for the president or vice president of student government or of their own class while in college.

Students were asked to estimate how many presidents and vice presidents they believed have been men and women in the past 40 years. The third hypothesis was that students at Connecticut College would estimate the number of women presidents and vice presidents of student government to be significantly higher than would students at Kenyon College (data from students' estimates are presented in Table 4). In order to investigate this hypothesis, a MANOVA was conducted for the mean estimates of men and women student government presidents, and men and women student government vice presidents. The results of the MANOVA were insignificant, Wilks's lambda = .981, $F(1, 271) = 1.28, p = .279$. A priori hypotheses argued for examination of the univariate findings, and the univariate tests indicate that Kenyon students estimated higher numbers of men presidents than did Connecticut students $F(1, 271) = 4.23, p = .041$. Kenyon students also estimated significantly lower numbers of women presidents than did Connecticut students $F(1, 271) = 4.55, p = .034$. The univariate tests

for estimates of vice presidents mirrored the estimates of presidents, but the results only approached significance for: men vice president estimates $F(1, 271) = 3.48, p = .063$, and women vice president estimates $F(1, 271) = 3.81, p = .052$ (students' mean estimates are presented in Table 4). An important side note is that, on average, students estimated that there have been 17.91 more men presidents than women presidents and 11.64 more men vice presidents than women vice presidents. There was a mean confidence of 48.5% for estimates of presidents and 43.3% for estimates of vice presidents.

Table 3

Demographics of Survey Participants

	Total Participants	Men	Women	Home Schooled	Single Sex High School	Boarding School	Ran for P or VP of Class or College Student Government
Connecticut College	<i>n</i> = 235	<i>n</i> = 76 (32.3%)	<i>n</i> = 153 (65.1%)	<i>n</i> = 1 (0.4%)	<i>n</i> = 20 (8.5%)	<i>n</i> = 32 (13.6%)	<i>n</i> = 10 (4.3%)
Kenyon College	<i>n</i> = 55	<i>n</i> = 15 (27.3%)	<i>n</i> = 40 (72.7%)	<i>n</i> = 0 (0%)	<i>n</i> = 5 (9.1%)	<i>n</i> = 6 (10.9%)	<i>n</i> = 2 (3.6%)
Total	<i>n</i> = 290	<i>n</i> = 91 (31.4%)	<i>n</i> = 193 (68.6%)	<i>n</i> = 1 (.3%)	<i>n</i> = 25 (8.6%)	<i>n</i> = 38 (13.1%)	<i>n</i> = 12 (4.1%)

Note. Percentages based on total participants column for each row.

P = president and VP = vice president

Table 4

Mean Estimates and Actual Numbers of Men and Women Presidents and Vice Presidents

	Mean men president estimate	Actual # of men presidents	Mean women president estimate	Actual # of women presidents	Mean men vice president estimate	Actual # of men vice presidents	Mean women vice president estimate	Actual # of women vice presidents
Connecticut College	$n = 28.65$		$n = 11.35$	$n = 14$	$n = 25.55$		$n = 14.53$	
Men	$n = 27.91$	$n = 26$	$n = 12.09$		$n = 25.19$	$n = 26$	$n = 14.95$	$n = 14$
Women	$n = 28.90$		$n = 11.09$		$n = 25.49$		$n = 14.57$	
Kenyon College	$n = 30.19$		$n = 9.81$		$n = 27.24$		$n = 12.76$	
Men	$n = 31.21$	$n = 30$	$n = 8.79$	$n = 10$	$n = 28.07$	$n = 21$	$n = 11.93$	$n = 19$
Women	$n = 29.82$		$n = 10.18$		$n = 26.92$		$n = 13.08$	

In addition to comparing mean estimates across schools, the experimenter also calculated how different from the actual data the students were with their estimates. When comparing the difference scores of students from the two schools, a MANOVA revealed a significant difference, Wilks's lambda = .694, $F(1, 272) = 29.19, p < .001$. Univariate tests revealed that students from Kenyon College significantly overestimated the number of men vice presidents compared to Connecticut College students $F(1, 272) = 40.81, p < .001$, and Kenyon students underestimated the number of women vice presidents compared to Connecticut students $F(1, 272) = 35.24, p < .001$. Difference scores for estimates of student government presidents show that Connecticut students were the ones who overestimated the number of men presidents and underestimated the number of women presidents more so than Kenyon students, but the differences were not significant. The actual archival data of presidents and vice presidents for Connecticut College and Kenyon College is presented alongside students' estimates in Table 4, and the difference scores are displayed in Table 5.

The fourth hypothesis was that the traits that the students at Connecticut College rated of an ideal leader would emerge as more feminine than would the traits that students at Kenyon College rated of an ideal leader based on responses to the Bem Sex Role Inventory. A chi square analysis was run for the proportions of students from Kenyon to the students from Connecticut that fell into each of the four possible gender alignment categories (masculine, feminine, androgynous, and undifferentiated). The test revealed no significant differences by school type, but a chi square analysis for gender proportions in the four gender alignment categories approached significance ($3, N = 284) = 6.76, p = .08$. Percentages of men and women from each school that fell into each of the four categories is presented in Table 6.

Table 5

Difference Between Estimates and Actual Data for Presidents and Vice Presidents

	Mean difference Men Presidents	Mean difference Women Presidents	Mean Difference Men Vice Presidents	Mean Difference Women Vice Presidents
Connecticut College	+2.41	-2.26	-0.66	+0.66
Men	+1.91	-1.91	-0.81	+0.81
Women	+2.91	-2.62	-0.50	+0.50
Kenyon College	+0.76	-0.76	+6.63	-6.22
Men	+1.21	-1.21	+7.07	-7.07
Women	+0.31	-0.31	+6.19	-5.36

Note. A + sign indicates an overestimate of the actual data and a - sign indicates an underestimate of the actual data.

Table 6

Gender Alignment of an Ideal Leader Across Gender and Across Schools

	Masculine	Feminine	Androgynous	Undifferentiated
Connecticut College	<i>n</i> = 45 (19.1%)	<i>n</i> = 50 (21.3%)	<i>n</i> = 79 (33.6%)	<i>n</i> = 61 (26.0%)
Men	<i>n</i> = 11	<i>n</i> = 16	<i>n</i> = 27	<i>n</i> = 22
Women	<i>n</i> = 34	<i>n</i> = 34	<i>n</i> = 49	<i>n</i> = 36
Kenyon College	<i>n</i> = 10 (18.2%)	<i>n</i> = 13 (23.6%)	<i>n</i> = 19 (34.5%)	<i>n</i> = 13 (23.6%)
Men	<i>n</i> = 1	<i>n</i> = 3	<i>n</i> = 5	<i>n</i> = 6
Women	<i>n</i> = 9	<i>n</i> = 10	<i>n</i> = 14	<i>n</i> = 7

Note. Percentages are based on participant totals from each school

In addition to investigating gender alignment, the experimenter also compared raw scores from the masculine and feminine portions of the scale. A MANOVA was run that revealed no significant results across schools, nor across gender. There were also no significant results across gender within each school. These tests refute the hypothesis that idea of an ideal leader would differ between the two schools. Means and standard deviations from these tests are presented in Table 7.

The fifth hypothesis was that students at Connecticut College would exhibit less sexist beliefs on the Modern Sexism Scale than would students at Kenyon College. The scale is an 8-item list divided into three categories (denial of continuing discrimination, antagonism toward women's demands, and resentment about special favors for women). A one-way MANOVA revealed that there were no significant results for the relationship of school type on sexist beliefs. Once again, however, a MANOVA showed that women overall scored significantly lower on the modern sexism scale than did men (lower scores mean less sexist beliefs), Wilks's lambda = .941, $F(1, 284) = 5.76, p = .001$. Univariate tests revealed that women scored significantly lower than men did on their total score, $F(1, 284) = 16.73, p < .001$, and the 3 sub-scales: denial of continuing discrimination, $F(1, 284) = 14.11, p < .001$, antagonism toward women's demands, $F(1, 284) = 9.12, p = .003$, and resentment about special favors for women $F(1, 284) = 8.40, p = .004$. Means and standard deviations of the Modern Sexism Scale scores are presented in table 8.

Table 7

Bem Sex Role Inventory Masculinity and Femininity Raw Scores

	<u>Leadership Masculinity Score</u>		<u>Leadership Femininity Score</u>	
	Mean	Standard Deviation	Mean	Standard Deviation
Connecticut College	M = 2.84	SD = 0.70	M = 2.89	SD = 0.81
Men	M = 2.75	SD = 0.77	M = 2.88	SD = 0.77
Women	M = 2.89	SD = 0.66	M = 2.89	SD = 0.83
Kenyon College	M = 3.02	SD = 0.80	M = 3.13	SD = 0.86
Men	M = 2.85	SD = 0.64	M = 2.97	SD = 0.62
Women	M = 3.08	SD = 0.85	M = 3.19	SD = 0.93

Note. Median masculine score was 2.90, and median feminine score was 2.90. scoring on or above on one and below on the other meant you fell into the category you scored on or above. Scoring above the median on both scales means androgynous, and scoring below on both scales means undifferentiated.

Table 8

Modern Sexism Scale Total, and Sub-Scale Scores

	Modern Sexism Score Total		Denial of Continuing Discrimination		Antagonism Toward Women's Demands		Resentment of Special Favors for Women	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
Connecticut College	M = 15.93	SD = 4.92	M = 9.4	SD = 3.11	M = 4.0	SD = 1.77	M = 2.53	SD = 1.03
Men	M = 17.92	SD = 5.55	M = 10.51	SD = 3.64	M = 4.5	SD = 1.85	M = 2.91	SD = 0.91
Women	M = 14.94	SD = 4.26	M = 8.85	SD = 2.66	M = 3.75	SD = 1.68	M = 2.34	SD = 1.04
Kenyon College	M = 16.13	SD = 5.34	M = 9.85	SD = 3.51	M = 3.78	SD = 1.49	M = 2.49	SD = 1.14
Men	M = 18.73	SD = 6.81	M = 11.47	SD = 4.47	M = 4.47	SD = 1.85	M = 2.8	SD = 1.37
Women	M = 15.15	SD = 4.39	M = 9.25	SD = 2.92	M = 3.53	SD = 1.26	M = 2.37	SD = 1.03

Discussion

Archival Study

The data show that the initial hypothesis was confirmed that the ratio of men to women presidents and vice presidents of student government would not be significantly different across the three school types. The data also show that the ratio of men to women presidents and vice presidents did not differ significantly between the four schools with the exception of Vassar's vice president men to women ratio. The goodness of fit tests revealed that, although the ratios between schools are similar, the ratios are themselves lopsided with overall more men than women presidents and vice presidents. These findings are consistent with the literature that predict men are more likely than women to emerge as leaders (Carbonell, 1984; Golub & Canty, 1982; Megargee, 1969; and Ritter & Yoder, 2004) and that women are underrepresented in leadership roles in college student government (Miller & Kraus, 2004). The decade by decade data from the archives show what many would expect; that the schools that shifted from all women to coed did not immediately have more men than women presidents and vice presidents. However, it did not take long (14 years) for the ratios at the four schools to no longer be significantly different. In fact, Connecticut College (all women to coed) ended up having more men presidents and only one less man vice president than did Kalamazoo College (coed since its founding).

The archival data suggest that Vassar College anomaly. It is the only school that does not have more men than women presidents (20:22) or vice presidents (15:25). This could be because Vassar was one of the original seven sister schools, and perhaps maintained its all women identity more so than did the other all women to coed school, Connecticut College whose ratios are much more similar to the all men to coed school, and the coed since its founding school. In

addition to the fact that Connecticut College was not a “seven sisters” school, one possible contributing factor to the school’s shift is that it became a member of the New England Small College Athletic Conference (NESCAC) in 1982, an NCAA Division III athletic conference that is considered to be one of the most competitive for Division III schools (National Association of Collegiate Directors of Athletics NACDA, 2014). The athletic conference may have attracted more men, or the sports culture may have contributed to the shift away from the all women identity. Whatever the reasons, it is clear from the data that the two all women to coed schools experienced different rates of culture shift, but, in the end, the overall ratios of men to women presidents were not significantly different. However, Vassar’s ratio of men to women vice presidents (15:25) is the only ratio that is significantly different from those of the other schools.

If you look at Table 2 with the break down by decade, it makes you realize that relatively little time has passed, and one decade with a lopsided ratio can drastically change the outcome. For that reason, it would be interesting to watch and see how the three schools that shifted to coed in 1969 (Kenyon, Vassar, and Connecticut) continue to shape their gender identity in the context of student government leadership positions. For instance, Kenyon is more lopsided in favor of its original gender than Vassar with regard to the president role, but Vassar is more lopsided in favor of its original gender with regard to the vice president role. Will Kenyon and Vassar continue to even out, and will Connecticut slide back to parity after its drastic shift? Or will the current gender bias on the campuses just perpetuate future gender bias? If you look at the decade break down (Table 2), Kalamazoo College, a school that has been coed since its founding would suggest that over time, the ratios will become more even, but that school does not have the same sort of history as the other three, and the same outcome may not hold true for them.

There were a number limitations for the archival section of this study. One of the limitations is that the goodness of fit tests were calculated using the current men to women student ratios at the schools. This means that the expected number of men presidents versus women presidents is based on the ratio the school advertises now, but really the ratio has been different, especially in the decade or two immediately following the schools' shifts to coeducation. For instance, Kenyon has a slight majority of women at the school, but that obviously was not the case in the 70s and 80s when women were just being admitted. The opposite can be said for Connecticut and Vassar, because their men to women ratio is much more even than it would have been 30-40 years ago. If the older ratios of men to women were known, it is possible that the goodness of fit tests for Vassar would in fact be significant because the number of women far exceeded the number of men in the past. For that reason one would guess that a man president or vice president would be rare at first, when in fact, the ratios were pretty even. Goodness of fit tests were already significant for Connecticut (showing more men have been president and vice president than have women), which just shows how drastic a shift the school made, given that there were many more women than men at first, and still more or equal numbers of men were president and vice president for the first two decades. For Kenyon, the results might be less compelling because they began as all men, and one would expect more men to fill the student government leadership roles than women at first. Unfortunately the ratios of men to women for past decades is not attainable. It would have been interesting to know in the case of Vassar, for instance, that three out of how many men were president between 1972-1981 (the first decade following the shift to coed), and for the other schools as well.

Another limitation, and possibly a more meaningful one is that student government president and vice president were the only leadership roles studied. It is possible that women are

much more represented in other forms of leadership that are equally powerful or involved as student government president. A good example is Connecticut College which, in addition to the student government, has a Student Activities Council that is in charge of planning all of the school events for students. There is an Honor Council that deals with most cases of student discipline, and these groups have their presidents, too. There are class presidents, residential leaders, club leaders, sport leaders, and even people who seek out leadership opportunities in the community. It may be overgeneralizing to say that women are underrepresented in leadership positions on campus when the study is only looking at two specific leadership roles. Of course, the data are still meaningful because student government is likely the most recognizable form of student leadership on campus. If the experimenter were to ask a random student to name the student leadership positions on campus, it is likely that student government president would be one of the first (if not first) position named.

Survey Study

The survey was sent to Connecticut College students and Kenyon College students. This approach was ideal because the participants came from schools with opposite coeducational histories (one from all women to coed and one from all men to coed). The students were asked to estimate how many student government presidents and vice presidents had been men and how many had been women over the past 40 years. The hypothesis was that students at Connecticut College would estimate the number of women presidents and vice presidents to be higher than would the students at Kenyon College. The results confirmed the hypothesis for estimates of presidents, but the estimates were not quite significantly different for estimates of vice presidents. Men and women did not differ significantly with their estimates of presidents or vice

presidents. These results suggest that the history of the school had a bigger impact on the students' guesses about its student leaders than did the gender of the participants. It is important to note that, even though Kenyon students estimated there would be more men presidents than did Connecticut students, students from both schools (regardless of gender) estimated that there had been more men presidents than women presidents and more men vice presidents than women vice presidents.

Estimating more men than women presidents and vice presidents may not be surprising because the archival data show that there actually have been more men than women in those roles. Table 5 shows that the estimates, for the most part, were accurate for both genders and both schools because the mean estimates were no more than three off from the actual data except for Kenyon students' estimates about men and women vice presidents. However, the sub-50% mean confidence ratings for students' estimates indicates that they did not actually know with much certainty the gender of the past 40 student government presidents and vice presidents, so their guesses must have still been influenced by some sort of gender bias. The literature suggests that leadership is seen as a masculine role (Kolb, 1999). For that reason some of that gender stereotype may have affected students' estimates. Another possibility is that the students do know the genders of the past several presidents and vice presidents most of whom have been men (aside from Kenyon vice presidents). This knowledge may have acted as an anchoring effect (Tversky & Kahneman, 1974) leading them to estimate consciously or unconsciously that the student government leadership roles have been similarly dominated by men over the rest of the past 40 years.

After the estimates, the participants were asked to rate character traits from the Bem Sex Role Inventory on how well the traits represented an ideal leader. The hypothesis was that the

traits of an ideal leader that Connecticut students rated would be more feminine than would the traits of an ideal leader that Kenyon students rated. The results were all insignificant, indicating that participants' ideas of an ideal leader did not differ across school, and they also did not differ across gender. Table 7 shows the mean femininity and masculinity raw scores. Using the median split scoring method (Hoffman & Borders, 2001), the mean scores for the schools are on the border of androgynous and undifferentiated. Therefore, despite the estimates that more men than women have been president and vice president, the traits of an ideal leader are not masculine for these participants. In fact, men from Kenyon College were scored as having a feminine ideal leader, but there were only 14 Kenyon men so the data could be affected by the small sample size.

These data supports the Schein et al (1989) study that found college students rated men and women as both resembling successful managers. In that study, men participants rated both men and women as resembling successful managers, but men resembled the managers more so than did the women. Women in the study did not sex type the manager position at all, rating both genders as equally resembling the successful manager. These results support that study, and even suggest that mens' idea of a good leader has become less masculine than maybe the Schein et al. results showed 25 years ago. Therefore the fact that the hypothesis was not supported is indicative of a changing trend of people's ideas of what a leader should be.

Finally, the students completed the Modern Sexism Scale to assess participants' covert forms of sexism. The Modern Sexism Scale is a good assessment of sexist beliefs because it measures constructs of sexism that are built into society rather than overt questions about unequal treatment of women (Swim & Cohen, 1997). The data show that, again there was no difference across school type, but there is a difference between men and women. Women scored

lower than did men on the scale, meaning that the women had less sexist beliefs. The scale is broken into three sub-scales: denial of continuing discrimination, antagonism toward women's demands, and resentment about special favors for women. Women scored lower than did men on all three of these sub-scales. Even though the scores were significantly different, the means show that men did not score very high on the Modern Sexism Scale, but women just scored very low.

The results about the estimates students made of men and women presidents and vice presidents would indicate that the history of the school had an impact on students' beliefs about their school. However, scores on the Bem Sex Role Inventory and Modern Sexism Scale indicate that there is no overarching affect that school history has on ideas of leadership or sexist beliefs. This finding might suggest that, going forward, the balance of women and men in the student government leadership positions will begin to even. The archives show that that is not the case so far, and the students' predictions show that they guessed as much, but their current beliefs about leaders and sexism could mean that they would not have the same bias when considering future candidates for the leadership positions. Another explanation is that social desirability played a role in how participants answered questions about the ideal leader and about modern sexism. Especially in the case of the Modern Sexism Scale, it's possible that students answered less than honestly. With the estimates, gender was not related to how many men and women participants guessed had filled the leadership roles, nor was gender related to the perceived traits of an ideal leader. The only place gender emerged was the Modern Sexism Scale, but men (who scored higher than did women) did not score high on the scale, but rather women scored very low. Again, this could be due to social desirability, and participants not wanting to appear sexist.

The results of the study are informative, but the study does have some limitations. The study shows how men and women from both schools estimated that there had been more men

than women presidents and vice presidents, but that might have been different if Vassar College had been included in the survey. Even though Connecticut College and Kenyon College have opposite coeducational histories, their past 40 years of student government leadership have not been that different. Vassar has the same coeducational history as Connecticut, but its gender ratios in the leadership roles is different, with women outnumbering men in both the president and vice president role. It might have also been informative to include Kalamazoo College in order to have a theoretical middle ground between the two opposite schools. Including the other schools for any of the measures would have been very informative, although comparing Kenyon and Connecticut is still a meaningful comparison, and the results show that they are more similar than previously hypothesized.

One of the limitations within the schools included is that the sample from Kenyon College was a lot smaller than the sample from Connecticut College, and the number of men from Kenyon College was only 14. In order to get a more accurate representation of the men's beliefs at Kenyon, a larger sample size may be required. Another interesting limitation is that only 12 of the 290 participants answering the survey have ever run for president or vice president of student government or of their class council. This finding is informative because it shows either not many students run for these positions, or that students find leadership opportunities in other places. It would be interesting to know if the participants were involved in other leadership roles on campus, and what roles students considered the most prominent leadership roles on campus for students. In future studies, more schools with different types of histories should be considered. Studying the other six schools that comprise the "seven sisters" would be one thing to consider as well as other schools that shifted from all men to coed. More qualitative data would also be informative regarding what makes a great leader. Another interesting thing to

measure in a future study would be to see how many presidents and vice presidents students estimate will be men or women over the next 40 years or other time period. Their estimates of the future might be more representative of their current idea of leadership and sexism. However, asking about the future might mean that they would answer in a way that they believe is socially desirable.

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Appendix A
Informed Consent

I hereby consent to participate in Gabe Plummer's research on college student leadership. This research is being conducted as part of his honor thesis at Connecticut College, a small liberal arts college in New London, Connecticut.

I understand that the researcher is working with the Office of Student Life to contact the students at my school.

I understand that this research will involve taking an online survey about my perceptions of student leadership at my college.

While I understand that the direct benefits of this research to society are unknown, I have been told that I may learn more about my perception of student leadership positions.

I understand that this research will take about 30 minutes.

I have been told that there are no known risks or discomforts related to participating in this research.

I have been told that Gabe Plummer can be contacted at gplummer@conncoll.edu.

I understand that I may decline to answer any questions as I see fit, and I may withdraw from the study without penalty at any time.

I understand that all information will be identified with a code number and NOT my name.

I have been advised that I may contact the researcher at any time, who will answer any questions that I may have about the purposes and procedures of this study.

I understand that this study is not meant to gather information about specific individuals and that my responses will be combined with other participants' data for the purpose of statistical analysis.

I consent to the publication of study results as long as the identity of all participants is protected.

I understand that this research has been approved by the Connecticut College Human Subjects Institutional Review Board (IRB).

Concerns about any aspect of this study may be addressed to Professor Ann Devlin Chairperson of the Connecticut College IRB (asdev@conncoll.edu).

By clicking below you are assuring that you are at least 18 years of age and you have read these explanations and assurances and voluntarily consent to participate in this research about perceptions of student leaders.

Appendix B
Survey

1. Out of the past 40 student body presidents at your school (1974-2013), how many do you think were

Men _____

Women _____

2. How confident are you in your estimate? _____% (where 0 means not at all confident to 100 means completely confident)

3. Out of the past 40 student body vice presidents at your school (1974-2013), how many do you think were

Men _____

Women _____

4. How confident are you in your estimate _____% (where 0 means not at all confident to 100 means completely confident)

5. In college, have you ever run for president of your class?

(Y / N) (circle one)

Did you win? (Y / N) (circle one)

6. In college, have you ever run for student government president?

(Y/N) (circle one)

Did you win? (Y / N) (circle one)

7. In college, have you ever run for vice-president of your class?

(Y/N) (circle one)

Did you win? (Y / N) (circle one)

8. In college, have you ever run for student government vice president?

(Y/N) (circle one)

Did you win? **(Y / N) (circle one)**

13. For each of the adjectives listed below, please indicate, using a scale where **1 = never true to 7 = always true** the degree to which they are true of an *ideal leader*.

Defends Own Beliefs	1	2	3	4	5	6	7
Affectionate	1	2	3	4	5	6	7
Conscientious	1	2	3	4	5	6	7
Independent	1	2	3	4	5	6	7
Sympathetic	1	2	3	4	5	6	7
Moody	1	2	3	4	5	6	7
Assertive	1	2	3	4	5	6	7
Sensitive to needs of others	1	2	3	4	5	6	7
Reliable	1	2	3	4	5	6	7
Strong Personality	1	2	3	4	5	6	7
Understanding	1	2	3	4	5	6	7
Jealous	1	2	3	4	5	6	7
Forceful	1	2	3	4	5	6	7
Compassionate	1	2	3	4	5	6	7
Truthful	1	2	3	4	5	6	7
Individualistic	1	2	3	4	5	6	7
Eager to soothe hurt feelings	1	2	3	4	5	6	7
Secretive	1	2	3	4	5	6	7
Willing to take risks	1	2	3	4	5	6	7
Warm	1	2	3	4	5	6	7
Adaptable	1	2	3	4	5	6	7
Dominant	1	2	3	4	5	6	7

Tender	1	2	3	4	5	6	7
Conceited	1	2	3	4	5	6	7
Willing to take a stand	1	2	3	4	5	6	7
Loves children	1	2	3	4	5	6	7
Tactful	1	2	3	4	5	6	7
Aggressive	1	2	3	4	5	6	7
Gentle	1	2	3	4	5	6	7
Conventional	1	2	3	4	5	6	7

14. Using a scale where **1=strongly agree to 5= strongly disagree**, please rate the following statements honestly

Discriminating against women is no longer a problem in the United States

1 2 3 4 5

Women often miss out on good jobs due to sex discrimination

1 2 3 4 5

It is rare to see women treated in a sexist manner on television

1 2 3 4 5

On average, people in our society treat husbands and wives equally

1 2 3 4 5

Society has reached the point where women and men have equal opportunities for achievement

1 2 3 4 5

It is easy to understand the anger of women's groups in America

1 2 3 4 5

It is easy to understand why women's groups are still concerned about societal limitations of women's opportunities

1 2 3 4 5

Over the past few years, the government and the news media have been showing more concern about the treatment of women than is warranted by women's actual experiences

1 2 3 4 5

15. Gender _____

16. Class year _____

17. Age _____

18. Major _____

19. Race _____

20. College that you attend: _____

21. Did you attend a single-sex high school? (Y / N) (circle one)

22. Were you home schooled? (Y / N) (circle one)

23. Did you attend boarding school? (Y / N) (circle one)

Appendix C Debriefing

First of all, thank you for participating in this research dealing with college student leadership. In this research I am comparing schools that have been coed since their founding, schools that shifted from all women to coed in the past 50 years, and colleges that have shifted from all men to coed in the past 50 years. I am investigating the differences in women's representation in student leadership positions across those 3 types of schools. The literature suggests that women are underrepresented in the leadership roles at colleges. To my knowledge, there is no research on whether the underrepresentation is less severe in a college that historically was all women, or more severe in a college that was historically all men. Students from Connecticut College (once all women, now coeducational), Vassar College (once all women, now coeducational), Kenyon College (once all men, now coeducational), and Kalamazoo College (coeducational almost from its founding) participated in this research.

The questionnaire you completed included measures of peoples' perceptions of an ideal leader, and a measure of modern sexism.

If you are interested in this topic and want to read the literature in this area, please contact me (Gabe Plummer) at gplummer@conncoll.edu.

If you have any questions or concerns about the manner in which this study was conducted, you should contact Professor Ann Sloan Devlin, Chairperson of the Connecticut College Human Subjects IRB at asdev@conncoll.edu.

Listed below are two sources you may want to consult to learn more about this topic

Miller, C. D., & Kraus, M. (2004). Participating but not leading: Women's under-representation in student government leadership positions. *College Student Journal*, 38, 423-428

Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management. *Journal of Applied Psychology*, 57, 95-100

Appendix D
Email Invitations

Email Invitation for Connecticut College students:

Hi,

You have been selected to participate in a brief honors study survey on student leadership. The survey should not take more than 20 minutes. The link below will take you to the survey

(Qualtrics generated link)

Thank you so much for taking the time to participate in my research,

Gabriel Plummer

Email Invitation for Kenyon College:

Hi,

You have been selected to participate in a brief survey on student leadership conducted by a senior completing an honors thesis at Connecticut College in New London, Connecticut. In this thesis project, I am comparing information from multiple schools so your participation would be greatly appreciated. The survey should not take more than 20 minutes. The link below will take you to the survey.

(Qualtrics generated link)

Thank you so much for taking the time to participate in my research,

Gabe Plummer