

How Team Experience Affects Perceptions of Leadership Styles

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Abstract

Recent literature suggests that teamwork and leadership are becoming increasingly important in the workplace. To explore this trend further, we used an anonymous, online survey to examine students' experience with teams and their preferences for leadership styles. We also examined the effects of team experience on perceptions of gender and leadership styles. Results showed that students' preferences of leadership style do not change with more team experience. We also found that team experience affects gendered perceptions of task-oriented leadership.

Review of Literature

In an increasingly competitive global economy, a trend of working in teams is developing in the workplace. One definition of a "team" is an interdependent group of 20 or fewer members using complementary skills to work towards a common goal (Wellington and Foster 2009). Previous research has found that many factors influence teamwork including team cohesion (Varvel, Adams, Pridie, and Ruiz Ulloa 2004), communication (de Vries, Bakker-Pieper and Oostenveld 2010), peer evaluation (May and Gueldenzoph 2006) and conflict resolution (Li and Jin 2012). Leadership, especially, has become a very popular topic in current research concerning the performance of teams (Huang, Kahai, and Jestice 2010). Effective leaders tailor their approaches to the team's composition and the nature of the project. As the prevalence of teamwork increases, further research must be done in order to examine the way that leadership enhances or limits productivity. Our study adds to this research by examining leadership in the college setting and how future graduates may react to leadership and teamwork when entering the workforce. We examine students' preferences for leadership styles and the ways that experience with teams influences perceptions of leaders.

Leadership Styles

We primarily examine four different types of leadership styles. The first two of these styles are transformational and transactional leadership. A common definition of transformational leadership is a style that focuses on leading by example, interacting at an individual level and encouraging team performance (Eagly, van Engen, and Johannesen-

Schmidt 2003). This type of leadership intends to establish an emotional bond between leader and followers in order to rally efforts towards the team's goal (Kearney 2008). In addition, the leader must be legitimate in the eyes of the followers for her to be accepted in a privileged position and thus should have similar values as her followers in order to seem deserving of power (Kearney 2008).

Vincent, van Engen, Eagly and Johannesen-Schmidt (2011) also cite five specific dimensions of transformational leadership: inspirational motivation, idealized influence as an attribute and a behavior, intellectual stimulation and individualized consideration. Inspirational motivation means that the leader is optimistic and excited concerning the group's goals and future. A leader who utilizes the attribute of idealized influence motivates followers to have pride and respect for the leader and the team (Vincent et al. 2011), but when she uses idealized influence as a behavior, she shares the project's value, purpose and importance with the group. Intellectual stimulation encourages followers to discover new ways of problem solving in order to complete the team project. Lastly, a leader who utilizes individualized consideration develops followers' potential and mentors them according to their individual needs. All of these qualities combine to create a less hands-on, more inspirational form of leadership that appears to establish strong cohesion, the bond uniting group members (Botterweck 2012). In having more transformational behaviors, leaders give followers greater freedom to do their work and be creative. Workers feel very autonomous in their work, which can increase positive experiences associated with work and teams.

Transactional leadership regulates team members' performance by using a rewards and punishment system to keep teams focused and on task. This leader tends to reward the team for meeting their goals and punish the team for inadequacies (Thite 2001). Transactional leaders often replicate traditional views of leadership, such as bestowing power upon one person. The leader decides the direction of the team, makes the main decisions, and team

members see the leader as having control and power (Money-zine 2012). Leaders who use this style only intervene when tasks do not proceed as planned (Yang, Wu, Wang and Chin 2010).

There are also two specific aspects of transactional leadership that help differentiate it from transformational leadership: contingent reward, and active or passive management-by-exception (Eagly et al. 2003). A leader who utilizes the contingent reward concept gives rewards to followers who perform their work to the satisfaction of the leader. Management-by-exception has two components: active, where a leader quickly takes care of problems and mistakes that deviate from the established standard, and passive, where a leader waits until these problems and mistakes become extreme before intervening (Eagly et al. 2003). As such, this style tends to use behaviors that focus on the goal of the team or project instead of ones that contribute to individual autonomy and growth. Thus, transactional leadership is more interactive, with direct consequences for actions and focuses on the mechanics of leadership instead of inspiration.

The final two leadership styles that we examine are relationship-oriented and task-oriented. Relationship-oriented leadership focuses on creating a sense of cohesion within a group and individualized attention for team members (Tabernero, Chambel, Curral, & Arana 2009). The goal of leaders who are relationship-oriented is to ensure respect for all members of the team and to encourage their growth throughout the team project. Producing a positive team experience is contingent upon consideration for team members. Tabernero et al. (2009) found that consideration, showing respect and concern for others, had a strong effect on follower satisfaction in a group of social psychology university students. Relationship-oriented leaders are able to produce a greater sense of group cohesion and foster better relationships between team members than task-oriented leaders (Tabernero et al. 2009).

In contrast to relationship-oriented leadership, the focus of task-oriented leadership is the successful completion of a team's project. Leaders who use this style create a structured environment in which all team members focus on the success of their final product. Tabernero et al. (2009) also discovered that teams with leaders who are more task-oriented have greater

project achievement. This type of leadership is more effective for short-term projects than long-term projects. Because the entire team is focusing intently on completing the assignment on which they are working, there is less time to develop team cohesion (Taberner et al. 2009).

How Leadership Styles Interact with Each Other

When considering the different leadership styles we have so far mentioned, transformational and relationship-oriented leadership are often mistaken for each other, and the same goes for transactional and task-oriented leadership. Though there are many similarities, these categories are not the same styles with different titles. Transformational and transactional leadership describe the *method* of motivation utilized by leaders within teams. Relationship-oriented and task-oriented leadership, on the other hand, describe the *priorities* of leaders within teams. Thus, individuals who utilize transformational leadership rely on inspirational motivation and so on in order to *accomplish* their objective (Eagly et al. 2003). In contrast, relationship-oriented leaders' primary *objective* is to achieve group cohesion (Taberner et al. 2009). Similarly, a transactional leader relies upon contingent rewards and punishments and so on in order to *accomplish* their objective (Eagly et al. 2003); whereas a task-oriented leader's primary *objective* is for the team to successfully complete their task (Taberner et al. 2009). Therefore, a transformational leader would also be a relationship-oriented leader *only* if they utilized their transformational methods in order to achieve strong group cohesion. A transformational leader could just as easily be a task-oriented leader if they utilize their transformational methods in order to enable their team to successfully complete their task. A transactional leader would also be a relationship-oriented leader if they used their transactional methods in order to achieve strong group cohesion; yet, they would be a task-oriented leader if they utilized transactional methods to enable their team to successfully complete their task. With these distinctions in mind, we focus on four combinations of leadership types: transformational relationship-oriented leaders, transformational task-oriented leaders, transactional relationship-oriented leaders, and transactional task-oriented leaders.

Demographics and Leadership Styles

Several studies examine leadership styles and how different demographic categories influence not only the way a leader leads, but also how the followers perceive the leader (Eagly et al. 2003; Kearney 2008; Vinkenburg 2011). Because perceptions of demographics influence followers, they often affect which styles the leader uses in order to be most effective. This study explores the perceptions of gender and age, and the effects of experience with teams on perceptions of leadership style.

Age and Leadership

Age generally impacts leadership effectiveness in terms of authority and legitimacy. Kearney (2008) hypothesized that the effect of leaders of similar age to their followers is weak. He viewed this as a product of the idea of legitimacy within competitive work environments in his study on Research and Development teams in a multinational pharmaceutical company. If both parties are of similar ages, then feelings of doubt and suspicion can arise as to why one was chosen to be leader but not another. Leaders who are clearly older give the appearance that they have more experience either with the project or leadership in general, and thus their followers more easily accept them as leaders (Kearney 2008). This could be due to the assumption that having more life experience better prepares someone for being a leader, as opposed to someone of the same age or younger. Without having to worry about issues of authority, older leaders seem to have a stronger impact using transformational leadership styles to inspire the team than do younger leaders (Kearney 2008). This finding does not discount younger leaders, but because of the possible legitimacy issues, transformational leadership is more suited for older leaders, whom team members see as experienced. When a leader is the same age or younger, transactional styles of leadership are more appropriate, as attempts to inspire those of the same age yield limited effects.

Gender and Leadership

In looking at gender, women are more likely to be transformational leaders as well as dispense transactional leadership's contingent rewards, while men are more likely to be transactional leaders (Eagly et al. 2003). In a study of Dutch and American business people, Eagly et al. (2003) found that women exhibit more effective styles of leadership than their male counterparts, although the differences were slim. They also discovered that women possessed considerably more behaviors of transformational leadership; conversely, men possessed more transactional leadership behaviors.

Vinkenburg et al. (2011) researched the effects of perceptions of gender on leadership, which can be both *descriptive*, defined as typical attributes, and *prescriptive*, or ideal attributes of the genders (Vinkenburg et al. 2011). When studying the ways men and women should act in the workplace, inspirational motivation, an aspect of transformational leadership, was found to be the most necessary factor for promotion. In addition to inspirational motivation, the participants' expected women to possess more transformational leadership qualities than male leaders and to display individualized attention to members of the team in order to be considered for promotion (Vinkenburg et al. 2011). These results indicated that businesspeople think of men as being better leaders despite research deeming women more effective in their duties. However, a flaw of this study is the use of convenience sampling, surveying individuals at airports and other transit hubs based on their business clothing. Thus, the results lose some authority because of their non-random sample of participants.

Our Research on Leadership Styles and Demographics

Turning to our study, knowing the various types of leadership and the effects they have is imperative to our research questions. When looking at different types of leadership, many aspects can be seen as personality-dependent and can vary between persons and projects. For example, different projects will have different needs as already established in the literature. Generally, short-term projects do not need as much personal growth as long-term projects, so

greater team cohesion may not be a priority. Especially of note are the findings concerning greater team cohesion or higher team performance. Our literature shows that leaders who are relationship-oriented create better cohesion in the group, while those who are task-oriented achieve better project performance due to their differing goals. This is an important trade-off when attempting to figure out which is the best type of leadership because it depends on the different goals of the organization, leader, and project.

This information has greatly shaped the direction of our survey. With an understanding of the aforementioned aspects of leadership, we examined preferences and perceptions of leaders regarding demographics of gender and class year. One gap that we found in prior research was that many studies focus solely on leadership in the workplace. Only a few articles mention student's perceptions of leadership, and this is the direction that our study pursues. Looking into the way that students interact with leadership will be an important extension of academic knowledge of leadership in the classroom and how these experiences might shape future workplace performance. Because of the inability to reward and punish their peers in the classroom, we expected students to have a preference for transformational leaders over transactional leaders. Due to the short-term nature of most projects, we also expected students to prefer task-oriented leaders over relationship-oriented leaders. Further, we hypothesized that students with more team experience have different preferences for team leadership style than students with less team experience. We also hypothesized that students with more team experience have different perceptions about the relationship between gender and team leadership style than students with less team experience.

Research Methods

In our research, we examined four different leadership styles and the way that certain demographics influence how a leader leads and how the followers perceive the leader. Our study was conducted in the fall semester of 2012 at a private liberal arts college located in the Midwest of the United States. We conducted an online survey that included male and female

students of all four class years. Using a digital format instead of a paper survey allowed us to examine the responses of a large population at a low cost within the constraints of a single semester. We included our study's questions in one of two larger surveys conducted by our research class as a whole. The surveys were entirely about teams and teamwork; however, multiple research teams investigated their own subtopics. As a class, we defined teams as "a group of three or more people who have a shared goal, work together interdependently toward that goal, and share responsibility for achieving it, regardless of whether the team does these things well or successfully achieves its goals." We defined this further by discussing the relevance of classroom teams, stating that these teams are "organized as part of a course. [They] may meet only in class or also outside of class." Our subtopic included in the broader survey was that of team leadership. We investigated two hypotheses: 1) Students with more team experience have different preferences for team leadership style than students with less team experience and 2) Students with more team experience have different perceptions about the relationship between gender and team leadership style than students with less team experience. We also explored perceptions of student team leaders by gender and class year.

Our class sent an online invitation to a random sample of the student body, which explained the purpose of our research, asked for voluntary participation, and explained their anonymity. By accepting our invitation, respondents followed a hyperlink to Form Creator, an online survey program. Form Creator was a useful way to organize questions in a coherent manner as well as ensure the participant anonymity.

Variables

Both of our hypotheses examined the effects of experience with teams. To test our first hypothesis, we examined the independent variable of *experience with teams* (total number of teams, workplace teams and classroom teams) and the dependent variable *leadership style preference*. We operationalized experience with teams in terms of number of class teams and workplace teams since entering college. Participants identified their level of experience on a

scale with the response categories of 0, 1-2, 3-4, 5-6, and 7 or more. The four leadership styles that we examined are transformational, transactional, relationship-oriented, and task-oriented, as explained in our review of literature. We measured leadership style preference through two questions. The first differentiated between transformational and transactional leadership, asking participants to indicate their preference for a leader who “always encourages me to do my best, checks in with me at various points in the project, and works at making the project engaging” (transformational) and a leader who “rewards me for my contributions to the project, lets me know when I mess up, and deals with problems when they arise with the project” (transactional). The second question differentiated between relationship-oriented and task-oriented leadership, asking participants to indicate their preference for a leader whose goal is “to have everyone get along and who allows each member to grow intellectually” (relationship-oriented) and a leader whose goal is “to complete the project as efficiently and effectively as possible” (task-oriented).

For our second hypothesis, we examined the relationship between the independent variable of experience with teams to the dependent variable of *perceptions of gender and leadership style*. To measure perceptions of gender and leadership style, we had a series of four ordinal indexes. Each style had its own index, which included three items with five Likert-type response categories: Much more typical of male team leaders, Somewhat more typical of male team leaders, Equally typical of male and female team leaders, Somewhat more typical of female team leaders, Much more typical of female team leaders. In our index of *transformational leadership*, our three items were “Tries to make the project fun and interesting,” “Acts encouragingly towards members concerning their work on the project,” and “Checks in with me to see how project work is going.” In our index of *transactional leadership*, our three items were “Lets me know when I have done something poorly,” “Rewards members for a job well done,” and “Steps in to help when there is a problem.” In our index of *relationship-oriented leadership*, our three items were “Takes my ideas seriously,” “Ensures that members balance tasks throughout the work process,” and “Focuses on team members getting along.” In our index of

task-oriented leadership, our three items were “Tells me exactly what to accomplish,” “Considers the top priority to be a good grade,” and “Focuses on getting the job done.”

Our exploratory question examined *perceptions of class year and leadership styles*. We measured this variable with four ordinal indexes much like those of gender. Each index had three items, containing five Likert-type response categories: Much more typical of older team leaders, Somewhat more typical of older team leaders, Equally typical of older and younger team leaders, Somewhat more typical of younger team leaders, Much more typical of younger team leaders. For the purpose of this question, “older” refers to anyone of a class year higher than the participant, and vice versa for “younger.” All of the indexes had exactly the same items as those in the gender indexes described above (e.g. “Tries to make the project fun and interesting”; “Focuses on getting the job done”).

Validity

In our study we worked diligently to achieve measurement validity, a sound match between conceptual definitions of our research topics and operational definitions (Neuman 2012). To do so, we attempted to achieve both face and content validity (Neuman 2012). We acquired face validity, which requires that members of the scientific community believe our results to be accurate measures of what we studied, through consulting with our course instructor, Dr. Ryan Sheppard, and her teaching assistant, Charlotte Bolch (Neuman 2012). In addition, our classmates also reviewed our survey questions and concurred with our definitions and measurements. We attempted to achieve content validity by ensuring that every aspect of our conceptualized definitions was covered in our questionnaire (Neuman 2012). To help us with content validity, we met with Dr. Sheppard to help construct our questions, indexes, and scales. Additionally, we held a focus group with students from the college. We were in the formative stages of our research when we conducted the focus group, which provided us with valuable feedback on our topic and its conceptualization and operationalization.

Reliability

The scientific community considers a survey's results reliable if other researchers can easily replicate the method of study and achieve similar results (Neuman 2012). If the study has measurement reliability, it reduces the likelihood of responses skewed by the measurement instrument itself (Neuman 2012). Across the different indexes that our class used, we standardized response categories. This standardization increased the chances of receiving reliable answers and easily replicable results because it reduced the likelihood of respondent confusion between questions.

In our non-Likert-type questions, we used response categories that were mutually exclusive and exhaustive to ensure no overlap or confusion. Exhaustive attributes make sure that scales or any other type of measure provide a category for all of the possible responses (Neuman 2012). Mutually exclusive attributes guarantee that a person's answer can only fit into one of the available response categories (Neuman 2012). For example, our questions concerning experience with teams is both exhaustive and mutually exclusive because the response options, "0, 1-2, 3-4, 5-6, 7 or more," cover all possible answers and do not have any overlapping categories.

Sample and Sampling Procedure

Our study's target population included students that attend a liberal arts college and have experienced teamwork within a classroom and/or work setting. The rule of thumb method for sampling states that for populations of less than 1,000, researchers must aim for a sampling ratio of 30 percent, but for populations of approximately 10,000 people, researchers must aim for a ratio of 10 percent (Neuman 2012). Using the rule of thumb for our research means we would use approximately 25% of the population of approximately 3,000 students. We used a simple random sample because it is the most accurate form of random sampling, necessary for generalizing results to the broader population, and we had all of the information and access necessary to achieve a simple random sample (Neuman 2012). First, we created a sampling

frame that excluded all students currently enrolled in our research course and students who had participated in our prior focus group session because of exposure to our research topic, hypotheses, goals, and questions. Then we removed students in our research course, those under the age of eighteen, currently studying off-campus, non-full-time, and our teaching assistant. Susan Canon, Director of Institutional Research, created a sample based on the above criteria, and sent them our survey.

The total number in our attempted sample was 707 students, 204 of whom responded to our survey, giving us a response rate of 28.9%. Our sample consisted of 67.8% females (141), 24.5% males (51), and 0.5% other (1). It also accounted for the different class years, with 31.8% first years (63), 32.3% sophomores (64), 15.7% juniors (31), 19.7% seniors (39), and 0.5% other (1). Respondents were 77.9% Non-Hispanic White (162), 0.5% Native Hawaiian or other Pacific Islander (1), 5.8% Asian American (12), 1.4% Black or African American (3), 1.9% Hispanic (4), 0.5% American Indian or Alaskan Native (1), 4.3% Other (9) and 3.8% Preferred not to answer (8).

Ethics

The Institutional Review Board (IRB) at St. Olaf College works to ensure the protection of human subjects, implements appropriate procedures for this protection, and previews research at the school to ensure the ethicality of studies (St. Olaf College 2012). We, as a class, submitted an application to the board detailing the nature of our project and the procedures regarding human subjects. Our project is a Type I, meaning that the main intent of this research is limited to the St. Olaf audience and to further the research skills of the students conducting the study. We have no special factors because we excluded vulnerable subjects from our sample frame and there is no greater than minimal risk. Therefore, we only needed Dr. Sheppard to review and approve our research.

Throughout our research we considered a variety of ethical issues concerning our human subjects. One of our main ethical issues during our research was to keep our

respondents' identities anonymous. We addressed this ethical concern by using Form Creator, which prevents us from connecting participants' personal information with their responses, protecting their privacy. After completing the survey, participants could enter to win one of ten \$20 gift certificates to the college bookstore. Respondents who entered the drawing provided their name to Dr. Sheppard; however, this disclosure does not compromise their anonymity because we cannot connect names with responses.

Another ethical issue within our research was informed consent. Respondents must know about the nature of the research and agree to participate (Neuman 2012). In order to address this issue, we prefaced our survey by sending out a cover letter to our sample that ensures participants have a complete understanding of the study that they are being asked to participate in. The cover letter included a brief description of the topic, goals of our research and approximately how long the survey would take. We removed any students under the age of eighteen, a vulnerable population because of their status as legal minors according to IRB guidelines. If they were to participate in the study, they would require parental permission to achieve true informed consent. Concerning the other groups removed from our sampling frame, we removed them because they had been exposed to our research prior to the survey, which could impact their responses. At the end of the cover letter we included the names of both Dr. Sheppard, the professor leading the class, and Dr. Jo Beld, member of the St. Olaf IRB, in the event of ethical questions or concerns. If respondents had qualms about participating in the research or had trouble understanding informed consent, they would be able to contact Dr. Sheppard or Dr. Beld with those questions or concerns.

Our last means of addressing ethical concerns was through explicit knowledge of voluntary participation. In the cover letter and at the beginning of the survey itself, we reminded respondents of the voluntary nature of the survey. If at any time they felt uncomfortable answering a question, participants could skip it and continue the survey or stop taking the

survey altogether without penalty. Though our topic is not highly sensitive, we still aimed to eliminate any distress caused by taking our survey.

Results

To test our hypothesis that students with more experience in teams have different preferences for leadership styles than those with less experience with teams we conducted statistical analysis using a Chi-Square test. To test our hypothesis that students with more experience in teams have different perceptions of leadership styles between different genders than those with less experience with teams we conducted statistical analysis using a Spearman test. We also investigated descriptive univariate data of participants' responses to our survey questions about their perceptions of age and gender as determining factors of leadership styles.

Hypothesis 1: Students with more team experience have different preferences for team leadership style than students with less team experience.

Univariate Analysis

Our independent variable was team experience, measuring total experience with teams (Figure 1), experience with workplace teams (Figure 2), and experience with classroom teams (Figure 3). Of the 204 respondents, most had high levels of total team experience, with 36% at 7 or more. However, most respondents had low levels of workplace team experience, with 44% at 1-2. Classroom team experience was a more normal distribution; the largest percentage (28%) of students reported 3-4 teams.

Our dependent variable for Hypothesis 1 was preference for leadership style. This question was filtered so that only those with team experience would answer; this limited our sample to 173 of 204 respondents. When choosing transformational or transactional leadership, respondents favored transformational leaders (57.8%) over transactional leaders (42.2%) as seen in Figure 4. When choosing relationship-oriented or task-oriented leadership, respondents favored task-oriented leaders (67.3%) over relationship-oriented (32.7%) as seen in Figure 5.

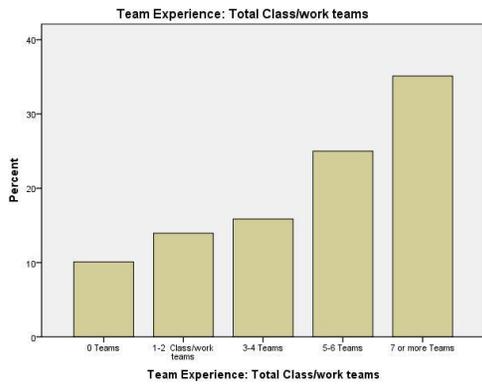


Figure 1: Total Combined Classroom and Workplace Teams



Figure 2: Total Workplace Teams

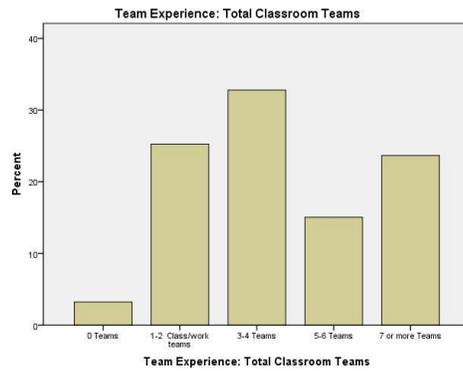


Figure 3: Total Classroom Teams

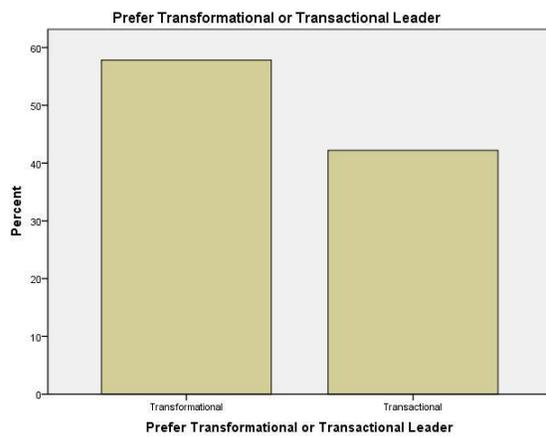


Figure 4: Preference for Transformational vs. Transactional

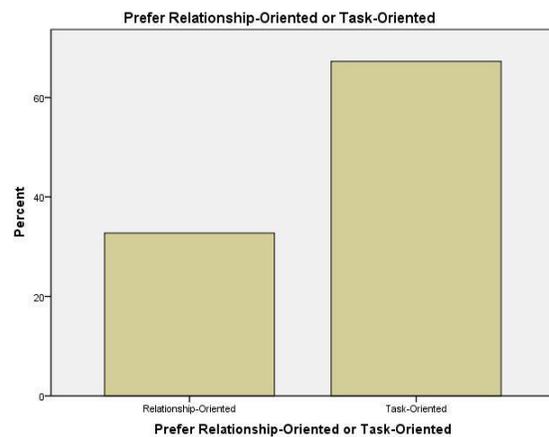


Figure 5: Preference for Relationship-Oriented vs. Task-Oriented

Bivariate Analysis

We calculated a chi-square test of independence examining the relationship between experience with total teams and preferences of transformational/transactional leadership styles and found no significant interaction ($X^2(3)=3.23$, $p>0.05$). This was also the case for total team experience and relationship-oriented/task-oriented leadership styles ($X^2(3)=0.953$, $p>0.05$). Students with differing levels of total team experience were no more likely to hold differing preferences for leadership styles.

Similarly, we calculated a chi-square test of independence analyzing the relationship between experience with workplace teams and preferences of transformational/transactional leadership styles and found no significant interaction ($X^2(3)=3.755$, $p>0.05$). This was also the case for workplace team experience and relationship-oriented/task-oriented leadership styles ($X^2(3)=5.293$, $p>0.05$). Students with differing levels of workplace team experience were no more likely to hold differing preferences for leadership styles.

We also calculated a chi-square test of independence comparing experience with classroom teams and preferences of transformational/transactional leadership styles and found no significant interaction ($X^2(3)=2.788$, $p>0.05$). This was also the case for classroom team experience and relationship-oriented/task-oriented leadership styles ($X^2(3)=0.768$, $p>0.05$). Students with differing levels of classroom team experience were no more likely to hold differing preferences for leadership styles.

Through conducting these chi-square tests, we found that our first hypothesis was unsupported. Though the univariate data showed that students preferred transformational, task-oriented leaders, students' preferences for leadership style were not likely to differ by experience with teams - whether total, workplace, or classroom.

Hypothesis 2: Students with more team experience have different perceptions about the relationship between gender and team leadership style than students with less team experience.

Univariate Analysis

Our independent variable for the second hypothesis was also team experience, measured by total experience with teams, experience with workplace teams, and experience with classroom teams. The univariate data for this variable was presented in the results for Hypothesis 1 (Figures 1-3).

Our dependent variable for Hypothesis 2 was perceptions of gender and leadership style, measured with four indexes with three items each (Figures 6-9). Each index had a relatively normal normal distribution: transformational leadership (mean=10.44, SD=1.42, as seen in Figure 6), transactional leadership (mean=8.95, SD=1.254, as seen in Figure 7), task-Oriented leadership (mean=9.17, SD=1.902, as seen in Figure 8), and relationship-Oriented leadership (mean=9.81, SD=1.41, as seen in Figure 9).

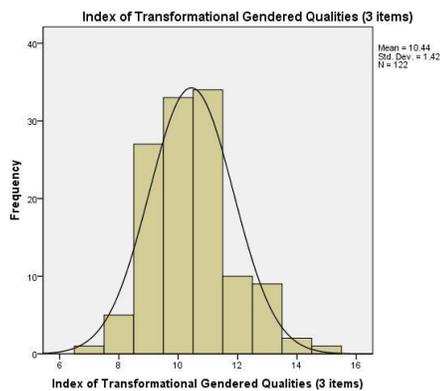


Figure 6: Index of Transformational Gendered Perceptions

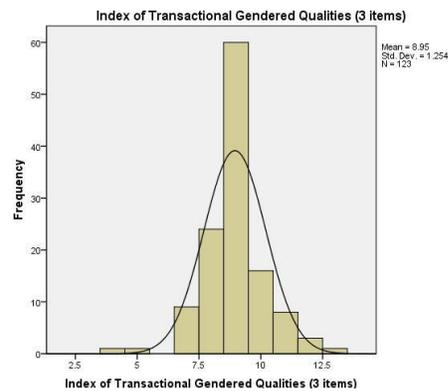


Figure 7: Index of Transactional Gendered Perceptions

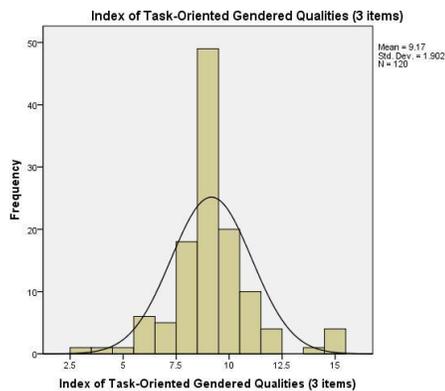


Figure 8: Index of Task-Oriented Gendered Perceptions

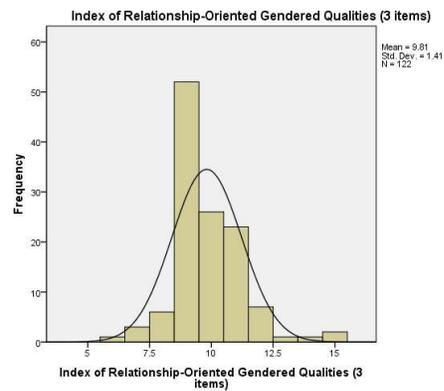


Figure 9: Index of Relationship-Oriented Gendered Perceptions

Bivariate Analysis

We calculated a Spearman rho correlation coefficient for the relationship between classroom team experience and gendered perceptions of transformational leadership. We found a weak, non-significant correlation ($r(120)=0.119$, $p>0.05$) indicating no linear relationship between the two variables. The same applied to our Spearman test for the relationships between classroom team experience and transactional leadership ($r(121)=-0.067$, $p>0.05$) and relationship-oriented leadership ($r(120)=0.074$, $p>0.05$). Students with differing levels of classroom team experience were no more likely to hold differing perceptions of gendered transformational, transactional, or relationship-oriented leadership styles.

Similarly, we calculated a Spearman test for the relationship between workplace team experience and gendered perceptions of transformational leadership. We found a weak, non-significant correlation ($r(120)=-0.125$, $p>0.05$) indicating no linear relationship between the two variables. The same applied to our Spearman test for the relationships between workplace team experience and transactional leadership ($r(121)=-0.014$, $p>0.05$) and relationship-oriented leadership ($r(120)=-0.1$, $p>0.05$). Students with differing levels of workplace team experience were no more likely to hold differing perceptions of gendered transformational, transactional, or relationship-oriented leadership styles.

We also calculated a Spearman test for the relationship between total team experience and gendered perceptions of transformational leadership. We found a weak, non-significant correlation ($r(120)=0.039$, $p>0.05$) indicating no relationship between the variables. The same applied to our Spearman test for the relationships between total team experience and transactional leadership ($r(120)=-0.064$, $p>0.05$), relationship-oriented leadership ($r(120)=0.072$, $p>0.05$), and task-oriented leadership ($r(120)=-0.029$, $p>0.05$). Students with varying levels of total team experience did not necessarily perceive gendered leadership styles differently.

Table 1: Spearman Rho results for Perceptions of Gender and Leadership Style			
	Classroom Teams	Workplace Teams	Total Teams
Transformational	r(120)=0.119 p>0.05	r(120)= -0.125, p>0.05	r(120)=0.039, p>0.05
Transactional	r(121)= -0.067, p>0.05	r(121)= -0.014, p>0.05	r(120)= -0.064, p>0.05
Task-Oriented	r(118)= -0.182, p=0.047	r(118)=0.180, p=0.049	r(120)= -0.029, p>0.05
Relationship-Oriented	r(120)=0.074, p>0.05	r(120)= -0.1, p>0.05	r(120)=0.072, p>0.05

As seen in Table 1, though 10 of our 12 tests for Hypothesis 2 produced non-significant results, two of our tests revealed small significant linear correlations. We calculated a Spearman test for the relationship between gendered task-oriented leadership and workplace team experience, and found a weak, positive correlation ($r(118)=0.180$, $p=0.049$) indicating a statistically significant linear relationship between the two variables. Students with more workplace team experience were more likely to perceive women as task-oriented leaders than students with less workplace experience.

However, our Spearman test calculation for the relationship between gendered task-oriented leadership and classroom team experience found a weak, negative correlation ($r(118)=-0.182$ and $p=0.047$) indicating a statistically significant linear relationship between the two variables. Students with more classroom team experience were more likely to perceive men as task-oriented leaders than students with less classroom team experience. Thus, although most of our tests yielded non-significant results, we found that task-oriented leadership was more associated with women by individuals with more workplace team experience, while it was more associated with men by individuals with more classroom team experience.

Exploratory Question: Do student perceptions of leadership styles of older versus younger student team leaders vary?

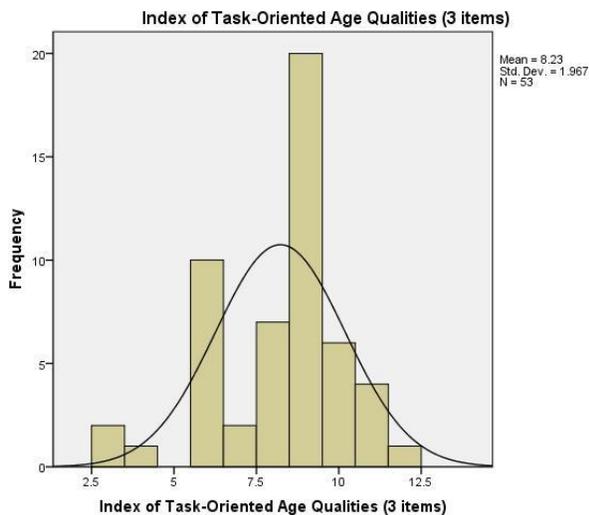


Figure 12: Index of Task-Oriented Age Perceptions

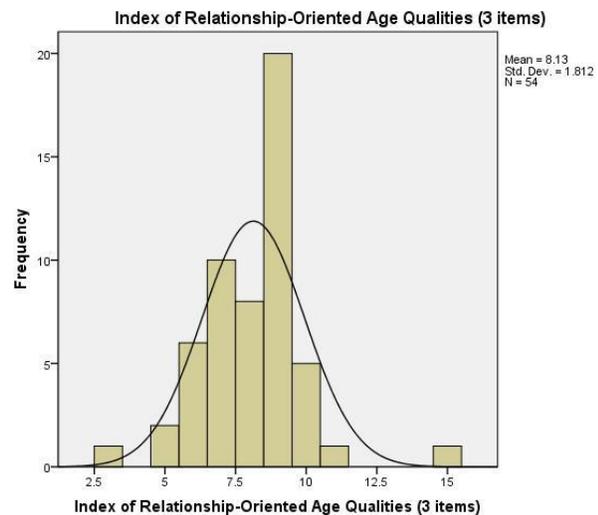


Figure 13: Index of Task-Oriented Age Perceptions

Our exploratory question, whether students perceived different leadership styles as more typical of older or younger leaders, showed that students marginally saw all leadership qualities as being more typical of older leaders. Our variable for the exploratory question was perceptions of age and leadership style, measured with four indexes with three items each (Figures 10-13). Transactional leadership was most associated with older leaders (mean=7.28, SD=1.95), followed by transformational leadership (mean=7.83, SD=2.31), then relationship-oriented leadership (mean=8.13, SD=1.81), and finally, task-oriented leadership (mean=8.23, SD=1.97).

Discussion

Our first hypothesis was unsupported, which means that students' preferences for leadership style do not differ by experience with teams. Though we found a tendency for students to prefer transformational, task-oriented leaders, none of our tests found statistical significance. This could mean that leadership style preferences, and consequently effective leader-team relations, are better when they include transformational, task-oriented leaders

regardless of how much experience the members had with teams. We cannot generalize these results to the larger population of our study.

Analyzing these results in the setting of a small, undergraduate liberal arts college, we suspect our respondents felt constricted in their actions in teams. In the qualitative comments section of our survey, many respondents mentioned that everyone should contribute and not have a single leader in a group project. Moreover, if there is a single leader, they should keep the team enthusiastic and focused on the project and not dictate jobs and roles. These comments highlight aspects of transformational leadership as described by Vinkenbergh et al. (2011). This is possibly because in the type of college setting where we conducted this study, it is generally socially unacceptable to utilize the contingent rewards and punishments that Eagly et al. describe (2003). Thus, transactional leadership is most likely less appropriate than transformational leadership. Further, many student teams occur in the classroom under the time constraints of less than one semester, so it would be more difficult and less effective to use relationship-oriented leadership. This was also the case in the study by Taberner et al. (2009), which showed that task-oriented leadership is more effective for short-term projects. Additionally, almost all participants stated that the goal of a project is to achieve a good grade, usually as quickly and efficiently as possible. These expectations would explain the students' preference for task-oriented leadership. In terms of the larger implications of this finding, it is important to note that, although there was a tendency to prefer transformational and task-oriented leadership, it was not a unanimous preference. There are multiple different styles of leadership to which individuals respond differently. When learning about leadership, team members should be reminded of each style's strengths and weaknesses and choose the one best suited for the project and team members.

The two statistically significant results of our second hypothesis revealed opposing perceptions of gender and leadership. The more experience a student had with classroom teams, the more likely they were to associate men with task-oriented leadership. Yet, the more

experience a student had with workplace teams, the more likely they were to associate women with task-oriented leadership. It is important to remember that these responses could be biased and distorted because of the continued presence of gender stereotypes. However, if we are to believe these perceptions to be accurate reports of actions, then women manifest task-oriented style more often in workplaces, potentially as a coping mechanism for entering male-dominated workforces. Determining the accuracy of these claims would require further investigation. Research by Vinkenburg et al. (2011) evidenced the heightened pressure on women in the workplace: though participants recognized that women exhibited more effective leadership styles in the workplace, they expected more of women than they expected of men in order to earn the same promotions. In such a male-oriented work environment, the pressure to outperform colleagues by exemplifying masculine leadership styles might have led to participants' perceptions of women as task-oriented in the workplace.

Additionally, we found that, though statistically insignificant, there were intriguing patterns regarding which types of leadership students associated with which genders, and which types of team experience led to which types of gendered perceptions. Total team experience and classroom team experience were not aligned with any gendered assumptions. However, workplace team experience led participants to associate almost all forms of leadership with men. This finding suggests that exposure to the workplace exposes students to more male leaders. Another pattern in our data was that students associated transformational and relationship-oriented leadership more with women, while associating transactional and task-oriented leadership more with men. These results are intriguingly in alignment with traditional gender expectations, which portray women as exhibiting more caring qualities and men more accomplishment-driven qualities (Vinkenburg et al. 2011).

Because most of our tests were not statistically significant, we cannot generalize a relationship between work experience and gendered perceptions of leadership styles to a broader population. However, we can state that a pattern existed within our sample.

Additionally, some of our issues with statistical significance might have been consequences of the limitations of our study, such as our small response rate and survey construction. These patterns and interpretations could be useful for employers and academic institutions: gender is still relevant in how leaders conduct themselves and how their followers perceive them.

For our exploratory question, we found very little difference between perceptions of age and each leadership style; however students slightly associated all of the styles with older leaders. These nearly homogeneous results could be attributed to the setting in which our study took place. When it comes to age at a four-year college, there are few differences between a student in one's own class year and a student in a class year above or below, similar to Kearney's (2008) findings. With teams consisting of very little age diversity, it would be understandable that there is little variation between perceptions of leadership style and age.

Conclusions

Our study examined the effects of team experience on preferences of leadership styles as well as gender and leadership style. Our tests revealed that there is no relationship between the amount of team experience and preferred style of leadership. No type of experience whether total, classroom or workplace, determined leadership style preference. Further, there was a weak association between team experience and gendered perception of leadership style in that respondents were more likely to view women as task-oriented in workplace teams and more likely to view men as task-oriented in classroom teams. Our exploratory data revealed that students marginally perceived older leaders as utilizing more of all leadership styles.

Based on our findings, we have several recommendations for employers, academic institutions, career centers and educators to add to their services for employees and students. Firstly, the college should disseminate information about various styles of leadership, which would allow students to think critically about how they exhibit and react to each one. Different students generally prefer one or two styles over the rest, and it is important for each student to understand how they work best as leaders, as well as how to engage with other students and

their preferred styles. Second, it is also important to understand the implications of gender when choosing teams and leaders. Professors and employers should reflect upon their expectations for male and female leaders, and consciously evaluate all leaders based on identical criteria. Because gender still factors into perceptions of leadership styles, this can potentially affect team performance. Stereotypes about gender and age are not about to disappear, and being more informed about their effects on a project will be beneficial.

There are several limitations to our research that should be taken into account. First and arguably most important are the design of our study and the consequences of that design on our response rate. In our survey, we asked those without any team experience to skip all subsequent questions except for demographic information. Additionally, we asked students who had not experienced at least one female and one male team leader to skip questions relating to gender and leadership style. Similarly, we asked students who had not experienced at least one older and one younger student team leader to skip questions about age and leadership style. Thus, out of our 204 participants, dramatically fewer actually answered all of our questions. Of those who did, there is the potential problem of self-report bias. Since we inquired about perceptions of gender and age, potentially socially-sensitive topics, respondents might adjust their actual perceptions and survey responses to more socially acceptable responses.

Another limitation was the time duration of our project. We conducted our study within a single semester, which created a specific, shortened timetable to analyze and interpret our results. With more time to conceptualize, operationalize, execute, and analyze our data, we might have foreseen or better confronted issues that arose.

Lastly, we underestimated the number of teams in which students have participated. Our response categories for our question on the number of teams were “0, 1-2, 3-4, 5-6, 7 or more.” Since many of our respondents (35.8%) selected the “7 or more” category, we have no idea whether most had exactly seven teams or fifteen teams, or even more. Expanding to include a wider range of response categories for team experience might have provided more insight into

how team experience affects preference of leadership styles or perceptions of gender and leadership styles.

As for future research, our first recommendation is that studies focus either on workplace or classroom teams to allow for more depth in the investigation. Differences in team settings change the nature of projects, and exploring those characteristics would advance knowledge of teams and leadership. Additionally, conducting an investigation specifically directed at participants with one type of team experience might have lessened issues with response rates. Our second suggestion is to investigate leadership amongst various student majors. Similarly to differences between classroom and workplace experiences, the experiences of teams within differing disciplines may vary due to the nature of the disciplines themselves. We believe that this investigation would be an interesting addition to knowledge about team leadership styles.

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