

Leadership style: the continuing gender debate

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Abstract

Leadership is one of the sustaining forces of organized societies and the term “leader” has been in the English language for centuries. It is not surprising then that after many years of studying the subject researchers have developed different theories that seek to explain the complex subject of leadership.

Over the past 30 years changes have taken place in the workplace, particularly with regard to greater gender diversity, that bring to light the importance of understanding the differences between genders. Although women now have gained increased access to lower and middle management positions, they are rarely seen in top leadership positions. Researchers believe it is becoming more important to understand any differences between genders that may exist in the work environment, especially in leadership roles.

The purpose of this study is to determine the leadership styles of maritime cadets at the California Maritime Academy and to determine the extent to which there are differences in leadership styles between genders. The Leadership Effectiveness and Adaptability Description (LEAD) questionnaire is used to determine the leadership style and style adaptability of the respondents. The data suggest that more than 72% of both men and women with a single primary leadership style were categorized as being both “high task” and “high relationship” oriented. Further, there was no statistically significant difference in the leadership style between genders.

Keywords: *Leadership, Gender, Situational Leadership, LEAD*

1 Introduction

Gender differences are the most basic differences between people and, generally speaking, all cultures differentiate how they organize their thinking about male and female behavior. Children, from a very early age, learn their gender role as part of the acculturation process (Nanda 2000). In some cultures girls may experience less active childhoods than boys and they may be taught to be reactive more often than proactive. Girls may learn to define themselves in terms of their relationships with others instead of their own achievements.

Boys, on the other hand, may lead a more active childhood and learn to become more task-oriented. They often are taught to be self-sufficient and independent (Carr-Ruffino 2002).

Western cultural values associated with gender include the idea that women embrace affiliation as the primary motivation and manner of relating to other people (Gardiner & Tiggemann 1999). Women are perceived as being more personal, communicative, and intuitive while men are perceived as being more self-focused, impersonal, and independent (Gardiner & Tiggemann 1999; van Engen et al. 2001; Carr-Ruffino 2002; Eagly & Karau 2002). Women tend to prefer a cooperative leadership style (Pratch & Jacobowitz 1996; Yammarino et al. 1997; Rosener 2000) while men prefer a more competitive leadership style (Eagly & Karau 2002; Vecchio 2002).

Based largely on the proffered stereotypical views of men and women in Western cultures, a myth persists that identifies men as being better leaders than women (Krug 1998). The next section of this paper will examine the concepts and constructs of leadership as they relate to gender in order to build a foundation upon which to examine if there are leadership differences between genders.

1.1 Gender Theories on Leadership

Two perspectives have dominated the discourse on gender differences in leadership. The first perspective consists of a collection of psychological theories that emphasize the differences in outlooks, attitudes, and values between men and women. Proponents of these theories argue that, “the central tendency is for women to demonstrate greater affiliation, attachment, cooperation, and nurturance, while men will tend to demonstrate more independent, instrumentally oriented, and competitive behavior” (Gentile 1996, p. 31).

Numerous studies have supported the idea that women tend to favor organizational approaches that are more inclusive (Rosenthal 1998). In fact, women tend to follow transformational leadership styles and use personal communications as a mechanism to build and reinforce relationships while men tend to be more hierarchical in their views of organizations and prefer task-oriented transactional leadership styles (Eagly et al. 1995; Gentile 1996).

One psychological theory that has evolved is the social-role theory. This theory suggests that people are expected to follow activities that are consistent with culturally defined gender roles (Eagly et al. 1995). Failure by a leader to act in a gender-consistent manner often results in pressure to conform and may even result in some prejudicial reactions by his or her followers (Eagly & Karau 2002). While this theory may be appealing because of its support of the normative social construct of gender behavior, it is a simplistic glimpse of

reality that relies on stereotypical views of gender and does not take into account important situational or contextual factors (Vecchio 2002).

Another psychological theory related to the social-role theory is the role-congruity theory. This theory suggests that followers have a predetermined, and often stereotypical, view in their minds of what attributes are required of a leader in a particular social role. If their stereotype view of the leader and the corresponding social role do not match, there is a potential for prejudice (Eagly & Karau 2002). The psychological theories, although intuitively appealing, are not able, by themselves, to explain all of the complexities of leadership.

The second perspective that dominates the discourse on gender differences in leadership, and the one of primary interest in this research, is the situational perspective. Advocates of the situational, or structural perspective (Eagly et al. 1995), believe that men and women will act in similar ways when put in a similar situation. That argument is based on the notion that any possible effects of gender cannot be isolated or studied independently of context or situational factors. In essence, the situational perspective suggests that either gender will perform in a similar fashion assuming each has similar opportunities, power, and resources (Gentile 1996).

Although some individual studies have found leadership differences between men and women, in the aggregate, there is no evidence to support the idea that either sex has a clear advantage in his/her role as a leader except in very specific fields (e.g. military) (Dobbins & Platz 1986; Izraeli 1987; Ragins 1991; Pratch & Jacobowitz 1996; Krug 1998; Vecchio 2002).

2 The Challenge

Maritime training programs, like those at the California Maritime Academy, emphasize the leadership component of that training. Although the maritime industry has traditionally been a male-dominated industry, over the last 30 years a growing number of women have entered the profession. Because more women are entering the work force, researchers such as Gentile (1996) believe it is becoming more important to understand any differences between genders that may exist in the work environment, especially in leadership roles. Therefore, the purpose of this study is to determine the leadership styles of maritime cadets at the California Maritime Academy and to determine if there are differences in the leadership style between men and women.

The theoretical foundation for this work is situational leadership theory. This theory suggests that leaders will behave in a similar manner in similar situations, regardless of gender (Eagly et al. 1995). Therefore, two separate null hypotheses will be tested. The first null hypothesis tested states that there are no leadership style differences between male and female maritime cadets and the second null hypothesis states that there are no leadership adaptability differences between male and female maritime cadets.

3 Methodology

Based on detailed work completed at Ohio State University, Hersey and Blanchard (1969) developed the life-cycle theory of leadership. The model of this theory, which considers situational factors, is depicted as a two-dimensional structure that describes leadership styles in terms of *task behavior* on the horizontal axis and *relationship behaviors* on the vertical axis. The quadrant characterized by high task behavior and low relationship behavior is descriptive of a telling (S1) leadership style; the quadrant characterized by high task behavior and high relationship behavior is descriptive of a selling (S2) leadership style; the quadrant characterized by low task behavior and high relationship behavior is descriptive of a participating (S3) leadership style; and the quadrant characterized by low task behavior and low relationship behavior is descriptive of a delegating (S4) leadership style (Hersey & Blanchard 1969).

The Leadership Effectiveness and Description (LEAD) questionnaire is a survey instrument that is based on situational leadership theory and the life-cycle theory of leadership (Hersey & Blanchard 1996). LEAD has been used successfully in many leadership research projects (Ates 2003) and it will be used in this study. The questionnaire is designed to measure self-perception of leadership style (S1-S4) and style adaptability (Hersey & Blanchard 1981).

Using the LEAD questionnaire, participants are asked to respond to 12 short leadership situations by choosing one of four behavioral alternative actions they think most closely characterizes their own behavior in that kind of situation (Ates 2003). Based on the response to each situation, it is possible to identify their primary (S1-S4) and secondary leadership style. In addition, using a point system that is incorporated into the scoring it is possible to determine the degree of adaptability and flexibility in the use of the leadership behavior. A high score category indicates that the leader accurately determines the ability and willingness of the follower for the current situation and is able to adjust their style accordingly. A moderate score category often indicates a tendency towards a pronounced primary leadership style with less flexibility to move into a secondary style. Finally, a low score category indicates an inability to diagnose task readiness and then to use appropriate leadership styles (Hersey 2005). The LEAD questionnaire has been found to have a reliability coefficient of .67 to .75 and moderate to high validity (Aphimonbute 1999; Ates 2003).

Due to the nature of the data gathered from the questionnaire, nonparametric tests are used to test the hypotheses. Although nonparametric test statistically are not as powerful as parametric tests for analysis because their underlying assumptions are less stringent (Cooper & Schindler 2003), nonetheless they do permit acceptable levels of analysis for categorical variables. The alpha level for all statistical tests of significance is set *a priori* at $\alpha = 0.05$.

The population for this study is a census of all enrolled cadets at the California Maritime Academy ($N = 693$). The California Maritime Academy is a campus of the California State University system and at the time of the study offered five undergraduate degree programs. All students, regardless of their academic major, participate in a leadership development program. In addition to earning an academic degree, students have the opportunity to earn United States Coast Guard licenses as either a deck or an engineering officer.

4 Results

The results of this study are generalized only for the cadets who volunteered to participate in the study. In total, 445 cadets participated ($n = 445$) and this represents 64% of the enrolled cadet population ($N = 693$). Approximately 15% of the entire cadet population is female and about the same proportion is present in the participants of this study. Participation by men ($n = 371$) and women ($n = 68$) as a percentage of enrolled cadets by gender is approximately the same at about 65%. When considering all of the demographic variables, the sample group accurately represents the enrolled cadet population.

To determine the leadership styles of maritime cadets at the California Maritime Academy and to determine if there is a difference in leadership style between men and women, the data that was gathered for leadership style and gender is used. Both leadership style (telling (S1), selling (S2), participating (S3), delegating (S4), and combined (C)) and gender (female, male) are nominal data. The “combined” category consists of those participants who scored equally high in at least two different leadership categories. In other words, these participants did not have a single primary style.

Table 1 shows a cross tabulation of leadership style and gender. By observation, it is possible to identify some apparent trends in the data. For example, the percentages, by gender, in each of the leadership style categories are approximately equal except for the leadership category S1 (telling). This leadership style category, which is characterized by high task orientation and low relationship orientation, is more heavily populated by men than women. Over 60% of the respondents are categorized as having a selling (S2) leadership style, which is characterized as having high task orientation as well as high relationship orientation. Finally, almost 80% of the participants have, as a primary leadership style, one that is characterized as having a high relationship orientation (S2 or S3).

Table 1

*Cross Tabulation of Leadership Style and Gender**(n = 439, with 6 missing)*

LEAD Primary Style		Gender		
		Female	Male	TOTAL
S1	Count	1	17	18
	<i>% within Style</i>	<i>5.6%</i>	<i>94.4%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>1.5%</i>	<i>4.6%</i>	<i>4.1%</i>
S2	Count	46	229	275
	<i>% within Style</i>	<i>16.7%</i>	<i>83.3%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>67.7%</i>	<i>61.7%</i>	<i>62.6%</i>
S3	Count	12	66	78
	<i>% within Style</i>	<i>15.4%</i>	<i>84.6%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>17.6%</i>	<i>17.8%</i>	<i>17.8%</i>
S4	Count	1	7	8
	<i>% within Style</i>	<i>12.5%</i>	<i>87.5%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>1.5%</i>	<i>1.9%</i>	<i>1.8%</i>
C	Count	8	52	60
	<i>% within Style</i>	<i>13.3%</i>	<i>86.7%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>11.7%</i>	<i>14.0%</i>	<i>13.7%</i>
TOTAL	Count	68	371	439
	<i>% within Style</i>	<i>15.5%</i>	<i>84.5%</i>	<i>100.0%</i>
	<i>% within Gender</i>	<i>100.0%</i>	<i>100.0%</i>	<i>100.0%</i>

2 cells have expected counts less than 5.

In this analysis, because the table is not a 2 x 2 table, the Cramér's V statistic is used. The Cramér's V value is .157 and the observed significance level is .367. Based on the observed significance level, and using a level of significance of $\alpha = 0.05$ for testing, the null hypothesis stating that there are no leadership style differences between male and female maritime cadets cannot be rejected.

The LEAD questionnaire also permits analysis of the participants' adaptability score. Participants' scores were categorized into either a low,

medium, or high adaptability category following the appropriate scoring mechanism and the results are shown in Table 2 as a cross tabulation of leadership adaptability category and gender. By observations it appears that the percentages, by gender, in each of the adaptability categories are approximately equal.

Table 2
Cross Tabulation of Adaptability Category and Gender
 (n = 439, with 6 missing)

LEAD Adaptability Category		Gender		
		Female	Male	TOTAL
Low	Count	25	159	184
	% within Category	13.6%	86.4%	100.0%
	% within Gender	36.8%	42.9%	41.9%
	Gender			
Medium	Count	41	200	241
	% within Category	17.0%	83.0%	100.0%
	% within Gender	60.3%	53.9%	54.9%
	Gender			
High	Count	2	12	14
	% within Category	14.3%	85.7%	100.0%
	% within Gender	2.9%	3.2%	3.2%
	Gender			
TOTAL	Count	68	371	439
	% within Category	15.5%	84.5%	100.0%
	% within Gender	100.0%	100.0%	100.0%
	Gender			

1 cell has an expected count less than 5.

In this analysis again, because the table is not a 2 x 2 table, the Cramér's V statistic is used. The Cramér's V value is .047 and the observed significance level is .621. Based on the observed significance level, and using a level of significance of $\alpha = 0.05$ for testing, the null hypothesis stating that there are no leadership adaptability differences between male and female maritime cadets cannot be rejected.

5. Discussion and conclusions

Western cultural values associated with gender have led to many stereotypical images of men and women. One such image is that women exhibit more relationship-oriented behaviors while men exhibit more task-oriented behaviors (Carr-Ruffino 2002). Using the LEAD instruments as the measuring tool, as was done in this study, this stereotypical image of men and women suggests that men typically would be expected to be found in the leadership category (S1) characterized by high task and low relationship orientation and that women would be expected to be found in the leadership category (S3) characterized by high relationship and low task orientation. The findings of this study do not support this stereotypical image of men and women. Although more men than women were found in the S1 category, the number was not statistically significant. In fact, there are stronger statistics to refute the stereotypical view. In this study more than 72% of both men and women with a single primary leadership style were categorized as being both high task and high relationship oriented. About 92% of the men with single primary leadership styles are categorized as having a high relationship orientation and about 78% of the women with a single primary leadership styles are categorized as having a high task orientation.

The situational perspective of leadership dominates the discourse on gender differences and it is that perspective that provided the theoretical foundation for this study. Advocates of the situational perspective of leadership believe that men and women will perform in a similar fashion assuming each has similar opportunities, power, and resources (Gentile 1996). In this study, each participant was asked to put themselves into the twelve situations created in the LEAD questionnaire and then to choose one of the four alternative actions for each situation. Based on the data, there is insufficient evidence to reject the hypothesis that there are no leadership style differences between genders. It appears that the maritime cadets, regardless of gender, would behave in a similar fashion assuming each has similar opportunities, power, and resources and this finding supports the situational leadership theory. There was also insufficient evidence to reject the null hypothesis stating that there are no leadership adaptability differences between male and female maritime cadets. Over 40% of the participants were categorized as being in the low adaptability category.

There may be many reasons for this including that fact that the participants are undergraduate students with little or no practical leadership experience.

As with many studies, although the primary research questions were answered, more questions came to light. This study considered all maritime cadets regardless of their class standing, academic major, age, or license status. Perhaps there are leadership differences if other confounding variables were considered. The results of this study apply to the maritime cadets and the California Maritime Academy. It would be interesting to conduct additional studies, at other maritime institutions, in the hopes of making these results more generalizable.

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