I, Charmane Harrison, hereby submit this work as part of the requirements for the degree of:

*Master of Arts*

in:

*Psychology*

It is entitled:

*The Relationship Between Group Climate, Innovation, and Leader Gender*

*This work and its defense approved by:*

*Chair:* Edward Klein

Steven Howe

Robert Stutz
The Relationship Between Group Climate, Innovation, and Leader Gender

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by
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Abstract

There has been an increase in the use of work teams and managerial training programs in today’s businesses in order to increase innovation. A team climate that is conducive to participation is imperative to creating innovative processes and products. As more women are represented in managerial positions, there is a need to understand the impact of gender in managerial training programs and on team climate. The present study examined 183 middle-management employees (70% male, 29% female) from a Fortune 500 company training program who participated in a small group experience that focused on active listening skills and problem solving. It was hypothesized that female team members who had a female leader would have a greater positive change in their perception of the level of team engagement as measured by the Group Climate Questionnaire (GCQ-S; MacKenzie, 1983), and would rate the group experience as more helpful. No support was found for the hypotheses.
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Chapter 1
Introduction

_Innovation and Teams_

Intense competition from overseas and domestic companies has resulted in a highly competitive market. Innovation has become necessary for a company’s growth and survival (Roffe, 1999). In team-based organizations, teams can be breeding grounds of creativity and innovation by extracting expertise from individuals with different skills, perspectives, and backgrounds (Bain, Mann, & Pirola-Merlo, 2001). Therefore, teams can provide the ideal condition for innovation by generating new and useful products and processes (Lipman-Blumen & Leavitt, 1999).

_Team Climate_

A team’s ability to cultivate innovation can be affected by many factors such as the team’s climate and leadership. Teamwork entails psychological processes that can influence evaluation, acceptance, and implementation of new ideas (Bain et. al., 2001). For the purpose of this paper, _team climate_ will refer to the set of norms, attitudes, and expectations that individuals perceive to operate in a specific social context (Schneider, 1990). It is dependent upon group members having shared experiences (Anderson & West, 1998). Thus, team climate affects organizational productivity and well-being by influencing organizational processes such as problem solving, decision making, and communication (Isakensen, & Lauer, K., 2002). In other words, a team’s climate can be seen as an intervening variable that affects organizational and psychological processes that, in turn, affect the overall productivity of an organization (Isakensen & Lauer, 2002). Bain et. al. (2001) suggests that team climate affects innovation in a variety of
ways. For instance, team climate may allow the team to be more innovative as a unit, or it can increase the innovativeness of individuals within the team. Also, the effects of innovation may be immediately noticeable, or may emerge in longer term projects, and increase the overall number of innovative products.

Teams that provide a climate in which ideas can be supported and appreciated without fear of harsh criticism may result in a nurturing environment that in turn fosters innovation. For instance, idea support influences the degree to which a climate supports innovation (Isakensen, S.G. & Lauer, K., 2002). Idea support, according to these researchers, refers to the process in which novel ideas are considered and advocated by the team. In the ideal supportive climate, ideas are received in a thoughtful and professional manner by teammates. Team members listen to each other and encourage initiatives. The team atmosphere is constructive and positive.

Similarly, West (1990) proposes the concept of participative safety, which is defined as a psychological process where involvement in decision-making is motivated and reinforced in an environment that is perceived as non-threatening or nonjudgmental. This supportive environment is imperative to innovation, West (1990) suggests, because the more people participate in decision-making through sharing information, the more likely they are to invest in the outcomes of those decisions, and to recommend ideas for new and improved ways of working. For instance in an empirical study of top management teams in hospitals, West & Anderson (1996) found that participation significantly predicted the number of innovations introduced by top management teams. Lawler & Hackman, (1969) also demonstrated that high levels of participation in decision making were associated with less resistance to change, which in turn resulted in a greater likelihood of innovations being implemented.
Research and Development Teams

Teams in research and development (R&D) sectors have a specific purpose, which is to produce novel and creative innovations in science and technology (Bain, Mann, & Pirola-Merlo, 2001). In addition, Bain et al. state that in order for R&D work to be innovative, it must satisfy the particular and specific innovation requirements specified by the customer in terms of solving a specific problem and meeting performance criteria. An innovative team climate can also influence a team’s performance (Bain, et al). For example, R&D team performance involves adhering to budgets and timelines, problem solving, maintaining proper scientific procedures and safety standards, and improving the overall skills of team members. R&D teams also require input from different members and different areas of knowledge. Further, these teams usually interact to share and develop ideas, as well as to integrate different components of a task that were developed independently (Pirola-Merlo, & Mann, 2004). Teams with members who are highly engaged or reinforce participation are more likely to be successful (Bain, Mann, & Pirola-Merlo, 2001). Specifically, engagement in the process of problem solving and decision making improves the likelihood of acceptance and implementation of new ideas (Lipman-Blumen & Leavitt, 1999).

Work teams for the most part have an individual who is designated as the leader or manager. Because managers are in the position of leading the team, they can play an important role in shaping the team climate. Therefore, it is necessary to understand how leader characteristics can assist or harm the team climate.

Leadership
Leadership also affects team climate, which in turn influences participation. Today’s CEOs face the challenge of selecting managers who possess the leadership skills necessary to inspire others to lead an innovation initiative (Deschamps, 2005). Successful leaders encourage new ideas, as well as provide support and encouragement. They must be able to manage team member differences while providing a climate that encourages participation from everyone (Isaksen & Lauer, 2002).

Until the early nineteen seventies, most small group research and theory ignored gender as a factor or variable that could affect small group dynamics (Reed, 1981). One simple explanation for this is that early research tended to be conducted by male researchers who enlisted male participants (Klein, Kossek, & Astrachan, 1992). Furthermore, there was a lack of research on gender and management because traditionally upper management was a male domain. However, with the women’s movement in the nineteen sixties and seventies, the U.S saw an increase in female participation in leadership positions. Researchers became interested in men’s and women’s perceptions and behaviors in group settings. Gender issues have since been considered an important factor in understanding group behavior and leadership, especially since they may lead to significant applications in the workplace (Mayes, 1979).

*Female Advantage*

Given that historically, leadership was considered a masculine enterprise, the majority of theories of leadership focused on the desirability of stereotypically masculine qualities in leaders (Eagly & Carli, 2003). Researchers such as Broverman, Vogel, Clarkson, and Rosenkrantz (1972) found that people characterized most leadership behaviors as masculine. In addition Powell and Butterfield (1979, 1989) found that both women and men described good managers as possessing
masculine characteristics such as assertiveness, independence, and willingness to take risks. However, the increase in female leaders has been accompanied by changes in theories and practice (Eagly & Carli, 2003). Powell (1990) reported a greater emphasis in management on traditionally feminine characteristics such as compassion, sensitivity to the needs of others, and understanding. He cites several researchers (e.g., Grant, 1988; Helgesen, 1990; Loden, 1985; Rosener, 1990, 1995) who have argued that organizations need to place greater emphasis on feminine characteristics associated with women managers (e.g., caring, compassionate, understanding, collaborative) to be successful in an increasingly diverse and competitive economic environment.

Sex stereotypes refer to the psychological characteristics or behavioral traits that are believed to characterize men and women (Williams & Best, 1990). Research on sex stereotypes demonstrates that women are considered to have more communal qualities, such as being more gentle, kinder, supportive, expressive, affectionate, and tactful, while men have more agentic qualities, such as being more assertive, competitive, daring, and courageous (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972, & Williams & Best, 1990). According to Scott & Brown (2007) the female communal stereotypes refer to an interpersonally sensitive orientation in which the individual is both concerned with the welfare of others and the connection they make with others. This is consistent with the idea that women are assumed to be helpful, kind, and sympathetic, as well as motivated by stronger needs for nurturance, and affiliation (Williams & Best, 1990). In contrast, agentic/instrumental stereotype describes a self-interested, task focused orientation in which men are believed to strive to master, dominate, and control the self and the environment (Scott & Brown, 2007). Agentic characteristics were first defined by Balkan...
as the desire for autonomy and self-efficacy. Therefore men are stereotypically believed to be independent, ambitious, competent, and competitive and motivated by needs for dominance, autonomy, aggression, achievement, and endurance (Williams & Best, 1990). Nevertheless, contemporary approaches to leadership recommend a reduction in hierarchy and place the leader more in the role of coach (Eagly & Carli, 2003). Furthermore the more recent views of effective leadership encourage teamwork and collaboration and emphasize the ability to empower, support, and engage team members, which Eagly & Carli (2003) argue are stereotypically more feminine qualities. Therefore, the authors argue that the contemporary views of effective leadership are more congruent with the female gender role in a managerial context.

Eagly and Carli (2003) cite numerous trade books and newspaper and magazine articles that declare that female leaders have the advantage in the new global economy. Yet the researchers also report that there are several empirical studies or reviews that demonstrate that gender is not related to leadership style or effectiveness (e.g., Butterfield and Grinnell, 1999; Dobbins & Platz, 1986 Wajcman, 1996). Furthermore, claims of a gender advantage by journalists and trade book authors are often critiqued for their lack of objectivity and faulty methodology by academic researchers, (Eagly, & Johnson, 1990 & Vecchio, 2003). Eagly and Johnson (1990) state that authors such as Loden (1985) write books for managers and the general public based on their conclusions that are mostly derived from their own experience in organizations, or interviews with managers. Eagly and Johnson (1990) also state that empirical research in women and male leadership style has also been prone to error (e.g., Bartol and Martin, 1986; Dobbins & Platz, 1986) because of the use of small sample sizes and selection
issues. Specifically these researchers did not report the criteria by which they selected their samples.

Despite the empirical evidence, Eagly and Carli (2003) report that it is probable that stereotypically feminine characteristics of cooperation, mentoring, and collaboration are important to leadership, specifically in certain contexts. Eagly et al. (1995) conducted a meta-analysis that compared the effectiveness of male and female leaders. The study found that women were relatively less effective in leadership roles defined in masculine terms and more effective in roles defined in feminine terms. Specifically, the study found that women were less effective than men in military organizations, which is a traditionally masculine environment, but more effective than men in educational, governmental, and social service organizations. In addition, when compared to men, women were particularly more effective in middle-level leadership positions, as opposed to line or supervisory positions. Eagly et al. (1995) concluded that this particular finding supported Paolillo (1981), who described middle management positions as favoring interpersonal skills that were considered more feminine. In addition, Eagly et al. (1995) utilized several measures of leader roles' congruity with the male and female gender role, and found that the reported evaluations of effectiveness for female leaders were lower for the roles rated as more congruent with the male gender role. Subsequently the evaluations for female leaders were higher for the roles rated as more congruent with the female gender role.

*Same Gender Effect*

A few studies have also examined the interaction between the sex of the leader and the sex of the team or group member in an organizational setting. These studies have suggested that a female subordinate with a female leader is more likely to obtain a positive outcome. For
instance Klein, et al. (1992) studied gender effects in leadership education and found that the most positive experience occurred for female participants with female leaders in a leadership training context. The investigators suggested that the female participants felt understood, supported, and comfortable with a woman leader in a small group discussion. The researchers proposed that women who had women leaders felt more empowered by seeing women like themselves in positions of power (Klein, et.al., 1992). This is consistent with Reed (1981) who also reported that women managers identified with and felt empowered when they were in groups facilitated by females. Subsequently, Klein, et al. (1992) found that women who had male leaders reported the least positive reaction to the group experience. The researchers stated that the women with male leaders felt more isolated and less engaged which led to less positive reactions.

There has also been an increase in the use of work teams in almost every industry and much attention has been paid to teams from academia to the popular press because of the potential importance of teams for successful organizational functioning (Heilman, 2005). As a result, there is a greater interest in developing strategies to improve the functioning of teams particularly in the arena of innovation (Isaksen & Lauer, 2002). Training programs are perceived as a direct process for stimulating innovation and vital for nurturing an innovative culture (Roffe, 1999) and as the global competition increases more and more organizations are supporting management training. And as more women are represented in managerial positions, there is also a greater need to understand the impact of gender in managerial training programs. Specifically, the research question of interest in this study is whether the sex of the facilitator of a team in a managerial training program will influence the perceived level of team engagement.
Current Study

The present study utilizes existing data for a larger investigation, approved by the University of Cincinnati Institutional Review Board, evaluating the general success of a management-training program in innovation implemented by the a Fortune 500 company’s research and development division.

Following a change in leadership, the organization’s once neglected R&D training was recreated with a new emphasis on providing training classes to strengthen employee’s skills. As a result, the corporation developed a week long training conference in innovation. Part of the week-long training conference required employees to participate in a small group experience that stressed utilizing active listening skills, understanding the process of problem solving, and reducing emotional involvement when one is problem solving.

As mentioned previously one possible explanation for conflicting findings about whether men and women actually lead differently is poor methodology. The current study also attempted to correct for some of the faulty methodology and extend upon Eagly et. al. (2003) by examining whether a female advantage did exist in a task where the role of the leader was to encourage teamwork, support, and engage team members, which Eagly & Carli (2003) state are stereotypically feminine qualities. Additionally this study was conducted in the backdrop of a managerial training program for innovation. This setting is important because as mentioned previously teams that contain members who are highly engaged are more likely to accept and implement innovative ideas. Therefore this was a setting that promoted collaboration and a supportive environment.
Vecchio (2003) discussed a variety of concerns with Eagly et al.’s (2003) study. One issue was that many of the samples used in the meta-analyses had participants with title of “manager”, yet readers do not know if the functional specialty and level were comparable. Therefore, the differences between the sexes found in Eagly et al.’s (2003) findings may have been a result of variation in job levels and tasks. The present study only used middle managers from the same organization. Therefore all of the managers shared the same job level, definition, and were chosen by organizations according to the same set of organizational criteria.

This field study is an effort to examine whether a leader’s gender will influence the team climate as perceived by the team members, and their evaluation of the small group experience. This investigation is interested if the gender of the leader will influence female team member’s perception of the group engagement level and if these female members are more likely to evaluate the small group experience more positively.

**Hypothesis 1.** Female team members who had a female leader will have a greater positive change in their perception of the level of engagement as measured by the Group Climate Questionnaire (GCQ-S; MacKenzie, 1983) than male team members who had a male or female leader, or female team members who had a male leader.

**Hypothesis 2.** Female team members who had a female leader will rate the small group experience as more helpful than male team members who had a female or male leader, and female team members who had a male leader.

**Hypothesis 3.** Team members who had a greater positive difference in their perception of the engagement level of the group will evaluate the small group experience as more helpful as measured by the Lead Team Evaluation.
Chapter 2

Methods

Participants

The team members consisted of 183 middle-management employees (70% male, 29% female) of a Fortune 500 company that participated in one of six residential, management-training programs from January 2004 to January 2006. The study was conducted pursuant to the ethical guidelines set by the American Psychological Association. The present study utilizes the existing data from a larger investigation, approved by the University of Cincinnati Institutional Review Board.

Leaders and Lead Teams

Each team had a leader. Twenty teams were led by a woman and 20 teams were led by a man, for a total of 40 teams over the span of the six conferences. There were six to seven groups per conference and between five to seven team members per team. There were one to three female participants per team.

Instruments

Demographic Questionnaire. Background information was collected by the corporation through an internal corporate website. The corporation collected demographic and professional data on all participants in the training program. Demographic data included: age range, gender, race, country of origin, country of workplace, discipline (manager or scientist), and primary language. The demographic data also included job title, work role, number of years working for the corporation, and number of years at current corporate level.
Group Climate Questionnaire. The Group Climate Questionnaire – Short Form (GCQ-S; MacKenzie, 1983) was selected by the organization to assess the group climate that resulted from the Lead Team experience. The Group Climate Questionnaire (GCQ-S; MacKenzie, 1983) is one of the most commonly used measures of group processes in the group psychotherapy literature (Johnson, Pulsipher, Ferrin, Burlingame, Davies, & Gleave, 2006). The GCQ-S has been utilized by researchers to assess group process and group differences in both outpatient group therapy and personal growth groups (Kanas & Ziegler, 1984; Kivlighan & Goldfine, 1991; & MacKenzie, Dies, Coche, Rutan, et.al, 1987). The group climate is defined as a member’s perception of the group environment (MacKenzie, 1983).

The instrument is composed of three factor-analytically derived subscales: Engagement, Avoidance, and Conflict. The extent to which members avoid responsibility for the group change process is measured by the Avoidance subscale. The Conflict scale measures distrust and conflict between members. However, this study only focused on the engagement scale since the primary purpose of this study was to assess participation. The Engagement scale measures the degree of perceived group cohesion, importance of the group to members, and their sense of participation. The items are rated by group participants on a seven-point Likert-type scale ranging from not at all to extremely. Kivlighan and Goldfine’s (1991) examined the psychometric properties of the GCQ-S and reported alpha coefficients ranging from .88 to .94 for the three subscales, with engagement having the alpha of .94. Johnson et. al. (2006) cited a recent review (Johnson, in press) that concluded that high levels of engagement in group therapy were predictive of positive outcomes at both group and individual levels.
Lead Team Evaluation. The Lead Team Evaluation was used to assess how helpful the team members perceived the Lead Team experience. This instrument contains five items and is rated by group participants on a five-point Likert-type scale ranging from strongly disagree to strongly agree. The item used from the lead team evaluation was, “The lead team experience has been helpful overall.”

Procedure

The research methodology and design was for the most part determined by the corporation. How the participants were chosen to participate in the training program is unknown. The number of teams and number of members in each group depended upon the number of participants in each of the training programs. The team members were assigned to teams contingent upon gender, race, and country of origin, and department that the employees were from in order to create a diverse team composition. The corporate designers of the experience also took care to make certain that no two members of any one team knew one another. Each team was then randomly assigned to group leaders. All participants were assigned an identification number and their names removed from the data.

Demographic information was collected prior to participation in one of the six, five-day, training programs. Prior to attending the conference, all of the participants were asked to describe a problem that was significant, current and unresolved at work that they would later present to their team at the conference.

The GCQ data were collected following the first and final sessions of the team experience, which occurred midway through each five-day training program. Although the week long training conference was primarily focused on innovation, part of the week-long training
conference required employees to participate in a small group (lead team) experience that stressed the use of active listening skills and the understanding the complexity and emotional involvement in problem solving. The focus of this study was the lead team experience. The entire lead team experience took place over two days, where there were two sessions per a day that each lasted approximately three hours. The lead team evaluation of the group process was also completed at the last session of the small group experience.

During the lead team experience, team members were asked to present to their team an unresolved problem they were experiencing at work. Some examples of the unresolved problems presented included personal issues (e.g., feelings of inadequacy), not getting along with coworkers, technical problems (not having the appropriate material to complete a project), or issues with organizational policies. The purpose of the group experience was to allow employees to develop their active listening skills and to assist group members in remaining objective and reduce emotional involvement when attempting to help someone else understand a problem.

Each team member was given 45 minutes to present his or her problem. The team member who presented the problem was called a Seeker. The Seeker presented information about the problem and the source of the information. Specifically the Seeker presented what he or she had seen and heard, and what others had reported about the particular problem. The Seeker attempted to distinguish between facts, opinions, and feelings and discussed what the information meant and how he or she felt about it. The Seeker then tried to distinguish where he or she needed help (e.g., defining the problem, finding the solution, or handling his or her feelings about the problem).
Another team member was asked to be a *Helper*. A Helper assisted the seeker with his or her problem. The Helper’s role was to help the *Seeker* with defining the problem and understanding the situation. The rest of the team members were called Observers and they later led a discussion of what was observed and learned from the presentation of the problem. This interaction was repeated until all participants had a chance to address their problems. All of the teams had a designated leader. The leader was expected to coach, observe and listen carefully to the helper/seeker discussion and assist the Seeker and Helper interaction when needed.
Chapter 3

Results

The design of the study entailed team members nested within lead teams, and lead teams nested within conferences. Therefore, managers that were in the same team would have the same exposure to the group experience; as a result their responses would not be independent of each other. Thus, hierarchical linear modeling (HLM) techniques were used to analyze the data. The model used had three levels, where the participants were treated as the first level unit of analysis. The second level units were the teams. The third level units were the conferences.

This study modeled engagement (pre-test and post-test) as an outcome dependent upon the gender of the participants and the gender of the leaders. The HLM analyses were implemented through PROC MIXED in SAS. Preliminary analyses examined whether demographic factors of the managers such as age, race, years at the corporation, and years at level should be included in the model. Also considered were leader demographics, such as whether the leader was an employee of the corporation, and if there was a difference among individual leader’s team engagement and lead evaluation reports. In the end, many of these variables did not improve the model and were omitted. The final model included the following variables: gender of the leader and managers, years at level for the managers, engagement, and lead team evaluation reports. Cases were omitted listwise if they were missing the gender of the manager or both dependent variables. Thus, thirty-eight cases were omitted from the final analysis.
Team Engagement

A repeated measures analysis with random effects for participants, leaders, and teams that indicated there was a significant overall increase in engagement levels from time one to time two. On average, over all conferences, teams, and gender conditions, perceived engagement level of the group after the lead team experience was significantly higher than the perceived engagement level prior to the lead team experience. In addition, there was a significant difference in the average manager’s perceived team engagement level when they had less than a year’s experience at their current managerial level, as compared to those who had been at their current managerial level over a year. Managers with less than a year’s experience at their current level reported significantly higher perceptions of team engagement levels than managers who had more than one year’s experience at their current level across the six conferences. Male managers on average reported significantly higher perceived team engagement levels than female managers over the total of the six conferences.

The two way interaction of member gender and leader gender as measured by the Group Climate Questionnaire (GCQ-S; MacKenzie, 1983) was not significant. There was also no evidence of a three way interaction between a member’s gender, a leader’s gender, and manager’s reported level of engagement from time one to time two. Therefore female managers that had a female leader did not have a greater increase in engagement levels from time one to time two than female or male managers with a male leader, or male leaders with a female leader. See Table 1 for all ANOVA results and Table 2 for descriptives of significant effects.
Table 1

*HLM Summary for Engagement*

<table>
<thead>
<tr>
<th>Effect</th>
<th>F (1, 319)</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Time</td>
<td>24.86</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Years at level</td>
<td>15.77</td>
<td>0.001</td>
</tr>
<tr>
<td>Gender of Manager</td>
<td>4.55</td>
<td>0.03</td>
</tr>
<tr>
<td>Gender of Leader</td>
<td>0.02</td>
<td>0.89</td>
</tr>
<tr>
<td>Time x Gender</td>
<td>0.62</td>
<td>0.43</td>
</tr>
<tr>
<td>Time x Gender of Leader</td>
<td>0.29</td>
<td>0.59</td>
</tr>
<tr>
<td>Time x Gender of Manager x Gender of Leader</td>
<td>0.01</td>
<td>0.92</td>
</tr>
</tbody>
</table>

Table 2

*Comparison of Mean Engagement Levels for Significant Effects*

<table>
<thead>
<tr>
<th>Category</th>
<th>M</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1</td>
<td>20.17</td>
<td>0.84</td>
</tr>
<tr>
<td>Time 2</td>
<td>24.47</td>
<td>0.84</td>
</tr>
<tr>
<td>&gt; 1 year experience</td>
<td>25.04</td>
<td>1.31</td>
</tr>
<tr>
<td>&lt; 1 year experience</td>
<td>19.60</td>
<td>0.53</td>
</tr>
<tr>
<td>Male Manager</td>
<td>23.26</td>
<td>0.80</td>
</tr>
<tr>
<td>Female Manager</td>
<td>21.38</td>
<td>0.90</td>
</tr>
</tbody>
</table>
Lead Team Evaluation

Concerning the lead team evaluation, there was no significant difference among female and male managers in terms of how helpful they found the group experience. There was also no significant difference among participants who had a male or female leader. Nor was there a significant interaction between the gender of the manager and gender of the leader and their reports of how helpful they found the overall experience. Thus male and female leaders reported similar ratings of how helpful they perceived the group experience regardless of the gender of their team leader (Table 3).

Table 3

**Lead Team Evaluation HLM Summary**

<table>
<thead>
<tr>
<th></th>
<th>$F$ (1, 16)</th>
<th>$p$</th>
</tr>
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<tbody>
<tr>
<td>Years at Level</td>
<td>$= .32$</td>
<td>$0.58$</td>
</tr>
<tr>
<td>Gender of Manager</td>
<td>$= .94$</td>
<td>$0.34$</td>
</tr>
<tr>
<td>Gender of Leader</td>
<td>$= 1.08$</td>
<td>$0.31$</td>
</tr>
<tr>
<td>Gender of Manager x Leader</td>
<td>$= .77$</td>
<td>$0.39$</td>
</tr>
</tbody>
</table>

The final hypothesis was that team members who had a greater positive difference in their perception of the engagement level of the group would evaluate the small group experience as more helpful as measured by the Lead Team Evaluation. In order to examine this hypothesis a Pearson product moment correlation was conducted between the manager’s ratings of the lead team experience and their perception of their team’s engagement level. A correlation for the data revealed that the manager’s evaluation of the lead team experience was significantly related to
their perception of their team’s engagement level, $r = .298, p < .000$. Therefore, there was support for hypothesis three, as a managers reporting of the team engagement level increased, so did their evaluation of the lead team experience.
Chapter 4

Discussion

This study sought to determine whether the sex of the leader would interact with sex of the team member’s in determining perceived team engagement. I proposed that female team members who had a female leader would have the greatest positive change in their perception of the level of engagement as measured by the Group Climate Questionnaire (GCQ-S; MacKenzie, 1983) than male team members who had a female leader or male leader and female team members who had a male leader. I also proposed that female team members who had a female leader would rate the small group experience as more helpful than male team members who had a male or female leader, and female members who had a male leader. The third and final hypothesis examined whether team members who had a greater positive difference in their perception of the engagement level of the group will evaluate the small group experience as more helpful as measured by the Lead Team Evaluation. Support was only found for the third hypothesis.

Controlling for the job type and level might have led to the inability to find a difference between male and female leaders. For instance individual self selection, organizational selection, and organizational socialization can be confounding factors when attempting to study sex/gender issues in an organizational setting (Vecchio, 2003). Eagly and Johnson (1990) also had suggested that there may not be a difference in female and male leadership styles when men and women occupy the same managerial roles because these managerial positions provide guidelines about the conduct of behavior. Therefore managers become socialized into their roles quickly after they get hired. In addition, male and female managers usually are chosen by organizations according
to the same set of organizational criteria. This could be possible explanations why men and women who occupy the same position to not differ in leadership style (Graen, 1976; Terborg, 1977; Wanous, 1977).

No interaction was found between the sex of the leader, and sex of the team member perception of team engagement. Eagly and Carli (2003) report that when managers display warmth and supportiveness there is a strong relationship with positive subordinate responses. Furthermore Klein, et al. (1992) reported that female participants felt more supported with women leaders in a small group discussion. However neither sex manager was influenced by the sex of the facilitator nor were their ratings of how helpful they found the group significantly different. Vecchio (2003) states that subordinates generally desire warmth and supportiveness from their supervisors, regardless of the supervisor’s sex. It is possible that all of the leaders were equally supportive and as a result the managers felt equally engaged with either sex leader. But it is also just as possible that the managers regardless of sex expected this supportive behavior from both male and female leaders. Therefore females wouldn’t necessarily have an advantage if the same behavior was expected from male leaders as well.

Findings of this study are consistent with Terborg (1977) who found that when pertinent variables such as type of job, sex composition of subordinates, and tenure are taken into consideration, there are few differences in how subordinates react to women or men leaders. Terborg (1977) suggests that effects associated with the sex of the leader are not related to sex per se, but to the situations of the leaders. Vecchio (2003) also suggested that tenure within job category should be taken into account because sex is likely to be confounded with a generational cohort. This study did take job tenure into account and did indeed find that managers who had
less than a year experience were more likely to perceive the team climate as more engaging after the group experience. However it should be noted that this could be a spurious result due to small sample size. There were only 12 managers from the 186 participants that had less than one years experience. Nevertheless a manager’s years at level did not interact with the sex of the manager.

The only sex difference found in this investigation was that males reported a greater increase in perceived engagement levels regardless of the sex of the leader. A possible explanation is that since the number of men greatly outnumbered the women, men might have felt more comfortable in the training setting. This could have resulted in men reporting their team climate as more engaging. Klein, et al. (1992) found a similar result in their investigation of a leadership program. The researcher’s explanation was that since the majority of members were men, it was reflective of their work environment, therefore they felt more relaxed and reported more positive reactions to the training program. The authors suggest that women might not have been as comfortable because they were in the minority in their teams and the overall training program.

Overall, the managers reported higher engagement levels after the lead team experience and managers that had a greater positive difference in their perception of the engagement level of the group did evaluate the small group experience as more helpful. Glew, O'Leary-Kelly, Griffin, and Van Fleet, (1995) state that performance and satisfaction are the most commonly studied outcomes of participation . This finding was not surprising and was therefore consistent with the research that proposes that participation can lead to significant effects on performance and satisfaction (Wagner, 1994; Miller & Monge, 1986; Wagner & Gooding, 1987b; Spector,1986).
A limitation of this study is that it relied on self reports. Unfortunately subordinates self reports normally serve as criteria in leader/gender research. Therefore instead of actually measuring engagement this study was assessing manager’s perception of the team climate. A recommendation that Vecchio (2003) makes is to include objective measures of outcomes to assess leader effectiveness. Some objective measures future research on leader/gender research could include were quantity of output, efficiency, and completion time (Vecchio, 2003).

Another limitation of this study was that it did not obtain assessments of gender role behavior for the leaders. Vecchio (2003) reported that it would be valuable to obtain assessments of gender role behavior for leaders in order to estimate more accurately whether it is leader biological sex or gender role that is a more important factor on assessments of leadership. A problem with leader/gender research is that many researchers often measure sex and label it gender, rather than measure gender role behavior (Vecchio, 2003). Although this study did control for leader demographics, the leader’s sex not gender role was the independent variable.

In conclusion, the increased call for feminine leadership (Helgesen, 1990; Loden, 1985; Rosener, 1990, 1995) suggests that organizations benefit when their managers display a high amount of feminine characteristics. Today’s workplace is characterized by an increased emphasis on self-management, empowerment, continuous improvement, and organizational learning (Powell, et. al., 2002). It has been suggested that organizations that are continually able to transform themselves will have the best chance of survival. Being a good manager has become less about competitiveness, aggression, and task orientation and more about good communication, coaching and people skills, and being intuitive and flexible (Cooper & Lewis, 1999).
Traditionally these characteristics would be considered feminine. It is likely that managers, regardless of their gender will have to respond to these changing demands in order to be successful. This will make it increasingly difficult to discriminate between male and female leadership, and even more difficult to tell if one sex is more effective than the other. It can be concluded from this study that men and women leaders were similarly effective in providing a climate conducive to participation or engagement in this study and similarly as effective in leading a group experience on active listening skills and the understanding the complexity and emotional involvement in problem solving.
References


Lipman-Blumen, J., & Leavitt, H. (1999). Hot groups: Seeding them, feeding them, and using
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