Order Number 9304650

Attributions about male and female leaders in organizations

Cohen-Kaner, Iris, Ph.D.

City University of New York, 1992

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

ATTRIBUTIONS ABOUT MALE AND FEMALE LEADERS IN ORGANIZATIONS

by

IRIS COHEN-KANER

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

1992

This manuscript has been read and accepted by the Graduate Faculty in Psychology in satisfaction of the dissertation requirements for the degree of Doctor of Philosophy.

8/31/92
Date

Walter Reichmann
Chair of Examining Committee

8/31/92
Date

Herbert B. Saltzstein
Executive Officer

Walter Reichman

Donna Thompson

Allen Kraut

Jeff Solomon

Bethanie Horowitz

Supervisory Committee

The City University of New York

Abstract

ATTRIBUTIONS ABOUT MALE AND FEMALE
LEADERS IN ORGANIZATIONS
by
IRIS COHEN-KANER

Adviser: Professor Walter Reichman

The purpose of the present study was to investigate the effect of sex-role stereotypes on attributions about male and female leadership effectiveness in the presence and absence of information about the leader. One hundred and eighty four (70 males and 109 females) employees from a large human services organization participated in the present study. Each of the subjects completed: (a) one version of Schein's Descriptive Index; (b) one version of the Male-Female Relations Questionnaire; and (c) one version of the Leadership Effectiveness Scenarios.

The results revealed that (a) men held more conservative views than women. They perceived successful managers as possessing characteristics that are more commonly associated with men than with women. Women, on the other hand, perceived successful managers as possessing

characteristics that are commonly associated with both men and women; (b) when information (leader's personal characteristic information and leader's behavioral information) was presented to subjects, the effect of their sex-role stereotypes on attributions about leadership effectiveness decreased, thus lending support to the argument that the availability of information about the leader affects attributions about leadership effectiveness.

The strengths and weaknesses of the present study are discussed, as well as the practical implications of its findings.

Acknowledgments

During my graduate studies, I valued the support and help that I was lucky to receive from many of my family members, faculty members and friends. Upon completion of my dissertation, I would like to thank all of these special individuals...

First, I would like to thank my husband, Shaul and my daughter, Sivan, who stood by me every step of the way. I thank them for their endless love, understanding and help.

I would also like to thank my loving and caring parents, Julian and Miriam, who believed in me from the day I was born, and who supported and respected my decisions in life. Even though we lived in two different continents during the past nine years, I always felt their unconditional love.

Many thanks to another part of my family, the Kaners, who waited and waited, patiently and lovingly, until both Shaul and I attained our academic goals.

To the Kronishes, who let us feel like a part of their warm and loving family every day of the year, I would also like to thank from the bottom of my heart.

I would also like to acknowledge and thank my dissertation committee members:

Walter Reichman. I could not have asked for a better person to be my chair. His continuous support and belief in me helped me get to where I am today. He was, is, and always will be, my role model as a dissertation chair, as a teacher and as a human being.

Donna Thompson. Her professional guidance and support meant a lot to me. Working together long-distance from California could have been very difficult, but it was not, thanks to her continuous flexibility and availability.

Allen Kraut. Speaking with him always made me feel in control because he knew exactly what to say. His knowledge in regard to the issue of diversity in the working place is unbelievable.

Jeff Solomon. One day I got his name from a friend, and from that day on, this friend is "number one" on my list. I have yet to meet a person who is as intellectual, understanding, supportive and considerate as he is.

Bethanie Horowitz. She is a woman who has it all: family and career. She was even promoted.... I appreciate the time she took to help me complete my dissertation.

From the bottom of my heart, I thank each one of you for everything....

TABLE OF CONTENTS

Table of Contents (Continued)

List of Tables

List of Figures

INTRODUCTION

In the early 60's and before, it was difficult to study gender issues in managerial positions, in the work place, due to the small number of women occupying these positions. Title VII of the Civil Rights Act of 1964, the federal legislation prohibiting sex discrimination in employment and promotion action, and the Equal Employment Opportunity Commission resulted in a steady increase in the number of women in managerial positions (Powell & Butterfield, 1982).

In 1991, 57 percent of women aged 16 and over were in the labor force, compared to 33.9 percent in 1930 and 43.3 percent in 1970 (U.S. Department of Labor, 1992). Recently, though, the percentage of women entering the work force dipped slightly. 74 percent of women aged 25 to 34 were in the labor force in 1990, compared with 72.8 percent in 1991 (U.S. Department of Labor, 1992). While the media generally attributed the decline to a decision made by mothers to stay home to take care of their children, most women blame the recession (Trend Letter, 1991). Forty-five percent of the civilian work force is female, up from 42 percent in 1980 (Bureau of Labor Statistics, 1991). While the labor force overall grows slowly, by only 1.6 million new workers a year, compared with 3 million

annually in the 1970's, female workers will account for two-thirds of the increase. As a matter of fact, by the year 2000, one in every two workers will be a female (National Commission on Working Women of Wider Opportunities for Women, 1992).

With this increase, researchers have started to study similarities and differences among male and female leaders. They were interested in a variety of issues, such as similarities and differences in behavior between male and female leaders, similarities and differences in perception among male and female leaders toward their followers, and similarities and differences in perception among followers toward their male and female leaders. (Bartol, 1978; Crocker & McGraw, 1984; Day & Stogdill, 1972; Forsyth, et al., 1985; Osborn & Vicars, 1976; Powell & Butterfield, 1982; Seifert & Miller, 1988).

The present research focuses on this last issue: the attribution process towards male and female leaders in organization. Attribution theory states that in order to understand what is happening to and around them, people develop their own internal "theories" of behavior. Lord (1985) applied the attribution theory in his social information processing theory (SIP). He believed that people make summary judgments about what is suitable for leadership. These summary judgments are based on the

observation of prototypical attributes, or they identify a leader from a label or other available cues. When leadership schema are created, they influence perceptions of the target person's traits and behaviors. These schema also leads to attributions of causality and responsibility for the group's performance. Thus, the attribution views in leadership theories emphasize that leadership effectiveness depends on whether subordinates attribute leader-like characteristics and qualities to the leader.

In order to understand better the attributions made towards male and female leaders, the present research also examines how common sex-role stereotypes are in our society. The issue of sex-role stereotypes cannot be ignored when one attempts to study attribution toward male and female leaders since stereotypes effect attribution.

Several key issues are raised in the present study. First, the similarities and/or differences between the attributions made by subordinates about male leaders compared to their attributions about female leaders. To investigate this issue, another one is going to be investigated: the presence of sex-role stereotypes in the American society today. To investigate these issues, the issue of equality between the sexes is going to be raised.

The Issue of Equality Between the Sexes.

In 1991, it has been reported, by U.S. News and World Report, that more than 60 percent of women in the work force are in low-paying clerical and sales jobs. The pay gap between men and women is still large. Overall, women now earn just 72 cents for every dollar men earn, compared with 64 cents ten years ago (U.S. News and World Report, 1991). As it has been suggested: "...not much progress since Moses decreed that a man between 20 and 60 was worth 50 silver shekels, while a woman of the same age was worth just 30 shekels." (p. 12).

True equality remains elusive not only in the case of salaries, but also in the distribution of women in the work place. Women held 35 percent of the 12.6 million executive, administrative, and managerial jobs in the United States (nearly double their share 15 years ago) (Naisbitt, 1988), in a survey conducted by Korn/Ferry International of vice-presidents above the middle management level at Fortune 500 companies. But it was also found that only 2 percent of women served as senior executives in 1986 (Korn/Ferry International, 1986). Catalyst found that in its survey of the CEO's and senior human resources executives of Fortune 500 and Service 500 companies, the women make up less than 5 percent of senior managers (Catalyst, 1991). Even though the percentage of women in

senior management (that at or above the level of vice president) positions has increased, this increase is not enough - the representation of women at this level increased only by 2 percent over a 10-year period. However, 68 percent of the companies surveyed believed that in the year 2000, women will make up 16 percent of the group (Korn/Ferry International, 1990).

Catalyst's survey results also show that women are still more likely to be found in functional areas that have been traditionally regarded as "female", so that women in senior management are more likely to be found in positions involving staff, such as Human Resources, Communications/Public Relations and Corporate Social Responsibility. They are less likely to be found in positions involving line responsibilities, such as Production, Plant Management, Purchasing and Quality Control (Catalyst, 1991). This fact limits women's advancement within companies, since historically, line positions "...have been viewed as routes to the top in corporations." (Catalyst, p. 7).

After facing all these facts, the issue that must be raised is about the elusiveness of true equality in the 90's. Many reasons were given to explain why women have not made it to the top. Some of these reasons are:

(a) self esteem -- women with low self esteem and with negative self-appraisals about their ability to make a contribution to the group's task are not likely to take leadership positions. If they do end up taking these positions, they are not likely to be satisfied (Stake, 1981, 1983; Stake & Stake, 1979);

(b) role conflict -- women are experiencing role conflict. Some believe that this conflict is a result of sex-role stereotypes (O'Leary & Depner, 1975; Powell & Butterfield, 1979); Schein, 1973, 1975; Stake, 1983), while others believe that it is a result of the multiple roles (wife, mother and employee) women have to take on themselves (Gordon & Hall, 1984; Hall, 1982). In any case, women who experience role conflict are not likely to desire leadership positions;

(c) achievement motivation -- people only engage in behaviors that are expected to be positively reinforced. Women who seek employment in a traditionally masculine position (i.e., leadership positions) are likely not to be reinforced. Thus, the end result is that women avoid these positions

(Snodgrass & Rosenthal, 1984; Stein, et al., 1971, 1973);

(d) fear of failure -- people who suffer from this fear are not likely to seek leadership positions. High fear of failure individuals (especially women) were found to be more likely to select cautiously low career goals (Burnstein, 1985; Littig, 1986);

(e) attribution theory -- women who occupy leadership positions are likely to be evaluated negatively by their subordinates, compared to male leaders (Adams, 1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Effertz, 1974; Rosen & Jerdee, 1973, 1974a; Schein, 1973). Thus, they are less likely to desire these positions.

The present research investigates the last issue raised. In applying attribution theory to sex differences, there are two issues that must be addressed. The first concerns sex-role stereotypes. It is important to look at sex-role stereotypes since they affect expectations. Expectations, in turn, affect the attributions (i.e., perceptions and evaluations) people make. The second issue concerns the effect that these stereotypes have on

attributions about leadership effectiveness of male and female leaders.

SEX-ROLE STEREOTYPES

The Early Development of Sex-Role Stereotypes

Kohlberg (1966) described children as active processors of the environment. According to him, they seek rules in order to make sense of their environment. If people can be classified on the basis of gender, then gender becomes a valuable organizing principle within which later behavior is interpreted and one own's behavior is selected. So, according to Kohlberg, children's early knowledge of adult sex-role stereotypes can be seen as part of their adaptation to the social world. How early does the knowledge of adult sex-role stereotypes come? Research concluded that evidence of sex-role stereotyping appears in children between 2.5 and 3.5 years old. Children at this age can reliably distinguish between objects associated with stereotypically sex-linked tasks, traits, activities, and future roles (Kuhn, et al., 1978). Another finding was that sex-role stereotyping increases with age (Cann & Garnett, 1984; Reis, et al., 1982). For example, six year old children are already able to attribute some behavioral

styles to females and other behavioral styles to men (Williams, et al., 1975).

Sex-Role Stereotypes Among Adults

The study of sex-role stereotypes among the adult population started in the 1970's. The general conclusion drawn from these studies was that sex-role stereotypes were very prevalent. Women were seen by both men and women as dependent, passive, fragile, non-aggressive, non-competitive, emotional, and unable to take risks. Men, on the other hand, were seen as independent, aggressive, dominant, competitive, assertive, rational, confident, emotionally controlled, and courageous (Bardwick & Douvan, 1972; Massengill & DiMarco, 1979; O'Leary & Depner, 1975; Powell & Butterfield, 1979; Schein, 1973, 1975). Notice that the female sex-role stereotype was not consistent with common and accepted leadership qualities, while the male sex-role stereotype was consistent with leadership qualities (Powell & Butterfield, 1979, Schein, 1973, 1975).

As a result of these sex-role stereotypes, employers expected different qualities from men and from women. Qualities that seemed to be important for males were persuasiveness, capability of withstanding a great deal of pressure, motivation, and aggressiveness. Qualities that seemed to be important for females were pleasant voice,

excellent clerical skills, high school diploma, computational skills, immaculate dress and person, and ability to express oneself well (Cecil, et al., 1973). Notice that a female was perceived as a clerical worker while a male was perceived as a manager. Thus, different images existed in our society in the 70's of what type of work is performed by males and females.

Most studies that investigated the issue of sex-role stereotypes used undergraduate or graduate students (Cecil, et al., 1973; Crocker & McGraw, 1984; O'Leary & Depner, 1975; Schein, 1975; Terborg & Ilgen, 1975). The problem of external validity must be raised here. That is, the problem of generalizing the findings obtained from a student population to other populations. Several investigators used managers as their sample and they found that managers perceived successful managers to have characteristics and attitudes attributed more commonly to men than to women (Bowman, et al., 1965; Brenner, 1970; Schein, 1973). There was some evidence, though, that reduction of the differential stereotypical perceptions of men and women as managers existed among older (49 years old and above) managers (Schein, 1973). Bass, Krusell, and Alexander (1971) found that women were not perceived by managers as less capable than men but that they still had negative perceptions of women as managers for three main

reasons. First, they believed that other men and women would prefer having male supervisors. (They even admitted that they would be uncomfortable with a woman manager.) Second, they perceived women as undependable, as a function of their "biological" and "personal" characteristics. Third, they perceived that having a woman as a colleague or boss upsets the traditional pattern of deference between men and women. In contemporary society, the distribution of power by gender favors male dominance. Women who move upward in an organizational structure upset this traditional balance of power and, in so doing, potentially pose a threat to men as well as to other women.

Putting all this together, one can conclude that in the 70's women were unlikely to be seen as leaders.

A lot has happened since the 1970's. Federal and state legislations prohibiting sex discrimination in employment and promotion action, together with the Equal Employment Opportunity Commission, resulted in expansion of job opportunities for women which, in turn, resulted in the increase in the number of women in managerial positions. The question here is: did this shift in public policy which resulted in an increase in the number of women in higher level positions and nontraditional jobs, contributed to a change in expectations, perceptions and, therefore, stereotypes amount people? There is some evidence that

indicates that nothing has changed, while another body of evidence shows that some change has occurred since the 70's.

In the 1980's, numerous researchers concluded from their studies that sex-role stereotypes are as prevalent today as they were ten years ago. Powell & Butterfield (1986) found that male and female undergraduate and part-time graduate business students continue to view the "good manager" in masculine terms. These findings were consistent with their previous findings (Powell & Butterfield, 1984). Powell & Butterfield claimed that the fact that the same results were obtained using different samples, different measurement scales and at different times, supports the external validity of the results. These results were also supported by other researchers, such as Sutton & Moore (1985). Even in neutral situations, sex-role stereotypes were prevalent. A man seated at the head of a table in a mixed-sex group was clearly seen as a leader of his group, while a woman occupying the same position was ignored (Porter, Geis & Jennings, 1983). Kanter (1977) argued that when members of a gender or ethnic category comprise less than 35 percent of a group (e.g., when they have solo status), perceptions of the solo status individuals by other group members are distorted. The consequences of having a solo status was studied by Crocker and McGraw (1984), who found that solo females are unlikely to be group leaders,

while solo males become group leaders. Geis, Boston and Hoffman (1985) studied leadership recognition as a function of performance. They found that when males and females performed equally, recognition of them was different: in the all-male authority group, subjects recognized only men as leaders, while in the all-female authority group, men and women received equal leadership recognition. The conclusion drawn from the data was that recognition was not a direct function of performance for either sex, but was influenced by evaluators' expectations, which were at least partly defined by the sex of the authority role models in the social environment. Recognizing this profound effect of sex-role stereotype in our society, Hollander (1985) wrote: "women . . . may need to be occupied as much with overcoming negative attitudes as with performing their jobs well" (p.519).

Eagly and Steffen (1984) offered an explanation of why sex-role stereotypes exist in our society. They wrote: "Because the content of gender stereotypes arises from perceivers' observation of people's activities and these activities are determined primarily by social roles, gender stereotypes . . . arise when women and men are observed typically to carry out different social roles" (p. 749). According to them, women and men are distributed differently into social roles. This difference is expressed in two

ways. First, most women occupy low positions in hierarchies of status and authority (Baron, 1977; Riger & Galligan, 1980), and second, significantly more women than men are seen as homemakers by both men and women, while significantly more men than women are seen in employee occupational roles (Eagly & Steffen, 1984; Eagly & Wood, 1982).

Cann and Siegfried (1987), using undergraduate students, found that the traits associated with successful managers were reliability, truthfulness, and efficiency. Notice that those traits are neutral traits, that is, they are not characteristic of only one sex (based on the sex-role stereotype research). Thus, the manager role would seem to require an androgynous style. These findings were in direct contradiction to the previous studies reported here in which only masculine traits were associated with a managerial role. But an important point is that even in this study in which subjects viewed successful managers as having neutral traits, still 80 percent of them preferred a male leader over a female leader. Thus, a bias still exists which places females in a disadvantaged position. The authors concluded by stating that "obviously, there is something about being a male, independent of stereotyped behavioral styles, that leads people to believe males will be superior managers. Perhaps it is not that males have

more perceived "strengths," but that they have fewer perceived weaknesses" (p. 407).

Another body of evidence indicates that there is one major change from the 1970's to the 1980's -- a change in women's attitudes. In the 80's, it seems that women shifted away from their traditional sex-role stereotypes of women and, as a result, they became more liberal compared to their counterparts in the 1970's. Dubno (1985) in a longitudinal study of MBA students, measured managerial attitudes toward women executives. He found that male MBA students had not changed their negative attitudes toward women managers since 1975. These findings are consistent with Powell & Butterfield's (1986) findings. Unlike Powell & Butterfield (who found that male, as well as female students, view the "good managers" in masculine terms), Dubno found that female students held positive attitudes toward women as managers. Thus, Dubno provided the first evidence that women in the 1980's shifted away from the traditional sex-role stereotypes of women that was held by them in the 70's.

These differences between men and women have been consistent in the literature. For example, in a recent study, Schein, Mueller and Jacobson (1989) used a student sample to demonstrate the relationship between sex-role stereotyping and characteristics needed for management

success. Their findings were consistent with Dubno's findings. Male students viewed a successful middle manager as one who should possess characteristics, attitudes and temperaments more commonly ascribed to men in general than to women in general. Thus, male students in 1989 held similar views to male students in the 1980's and 1970's. Female students, on the other hand, did not sex-type the managerial job. They believed that both men and women are likely to possess characteristics necessary for a successful middle manager. Thus, female students in 1989 hold different views from female students in the early 1980's and 1970's.

External validity to these results was provided by two studies that used different samples, at different settings, during different years. Brenner, Tomkiewicz and Schein (1989) used close to 600 managers of various departments within nine firms located in the northeastern United States. Heilman, et al. (1989) used a sample comprised of individuals from throughout the United States who came from a variety of departments within nine insurance companies. In both studies, the results confirmed previous results.

Schein and Mueller (in press) examined how common sex-role stereotypes are among men and women in the United States, Britain and West Germany. As was found in previous

studies, male students in the United States perceived a successful middle manager as possessing characteristics associated to men in general. But an important outcome of this study is that all of the male students in the study, within all three countries sex-typed the managerial job - for all of them to be a successful manager is to have masculine characteristics, attitudes, and temperaments. For female students, the researchers found a different pattern of results. Females in the United States did not sex-type the managerial position; "they see women and men as equally likely to possess characteristics necessary for managerial job success" (p. 12) - results that confirm previous findings. Female students in West Germany sex-typed the managerial position to almost the same degree as their male counterparts, that is, they believed they must have masculine characteristics in order to succeed as a manager. Finally, female students in Great Britain also sex-typed the managerial position, but to a lesser extent than their German female counterparts. Rustemeyer and Thrien (1989), two German researchers, also concluded from their research that both male students and male business executives sex-typed the managerial position. For them, to be a "good manager" is to have masculine traits. In a different study (Lii and Wong, 1982), it was concluded that Chinese students were more stereotypical than American students. It was also

concluded that within each country, female students were more liberal in their views than male students, again confirming previous findings.

One study (Smyth & McFarlane, 1985) investigated sex-role stereotyping by Canadian psychologists and psychiatrists. The results revealed that mature adults and males were considered more masculine and less emotional than mature females. Also, it was found that female respondents showed less sex-based bias in the perception of the targets than did male respondents. These results are consistent with Sherman, Koufacos & Kenworthy's (1978) conclusion that women therapists were better informed, more liberal, and less stereotyped in their attitudes compared to men therapists. Thus, sex-role stereotypes are prevalent across a range of different populations, including students, employees, employers, psychologists and psychiatrists.

To conclude, sex-role stereotypes are as prevalent today as they were ten years and twenty years ago. Some research has suggested that both men and women sex-type the managerial position, that is, both men and women perceive successful managers as possessing characteristics that are more commonly associated with men than with women. Other researchers believe that only men sex-type the managerial position, while women perceive successful managers as possessing characteristics that are commonly associated with

both men and women. Notice that in both arguments, men are seen as possessing traditional sex-role stereotypes, which lead to negative evaluation of women managers.

Morrison, White and Van Velsor (Psychology Today, 1987) interviewed employees in sixteen progressive organizations. They found out that the number one barrier that accounts for problems of advancement is prejudice. They also found out that female managers had to contradict the stereotypes that their male bosses and co-workers had about them. They had to be seen as "better than women" as a group. In their book Breaking The Glass Ceiling, these investigators write that in today's organizations, there is a glass ceiling (a transparent barrier) that keeps women from rising above a certain level in the organization. This ceiling is a result both of prejudice and of unreasonable expectations from women. Seventy-six executive women said they felt that men expect them to:

(1) take risks, but be consistently outstanding;

(2) be tough, but don't be macho;

(3) be ambitious, but don't expect equal treatment; and

(4) take responsibility, but follow others' advice.

In the 1991 Catalyst survey of CEO's and senior human resource executives of Fortune 500 and Service 500 companies, entry level women were perceived as comparable to men in interpersonal skill and client relations. However,

entry level women were perceived as less prepared, compared to men, in areas such as career commitment, risk-taking and initiative. If women are perceived as less committed to their careers and less likely to show initiative or take risks, even with all other skills being equal to men, women will be less likely to be advanced to higher position jobs. One final remark is that in this survey, the CEO's recognized the barriers to women's advancements within their companies. Eighty-one percent of them believed that the number one barrier is stereotypes.

Thus, stereotypes/prejudice is cited again in another survey as the number one barrier for women's advancements.

ATTRIBUTIONS OF LEADERSHIP EFFECTIVENESS ABOUT MALE AND FEMALE LEADERS

Since it is clear that sex-role stereotypes exist among all levels of employees, the next issue to be discussed is the effect that these sex-role stereotypes have on attributions about leadership effectiveness of male and female leaders. The issue is whether or not sex-role stereotypes work to create differences in group members' perceptions of the qualifications and effectiveness of male and female leaders. Research findings examining this issue are inconsistent. Some findings reported that female leaders were viewed differently than male leaders (Adams,

1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Efferts, 1974; Rosen & Jerdee, 1973, 1974a; Schein, 1973), while other findings found no differences in the attributions made toward male and female leaders (Bartol & Wortman, 1975; Butterfield & Powell, 1981; Day & Stogdill, 1972; Lee & Alvares, 1977; Stitt, et al., 1983).

Attribution theory states that in order to understand what is happening to and around them, people develop their own internal "theories" of behavior. Lord (1985) applied the attribution theory in his social information processing theory (SIP). He believed that people make summary judgments about what is suitable for leadership. These summary judgments are based on the observation of prototypical attributes, or they identify a leader from a label or other available cues. When leadership schema are created, they influence perceptions of the target person's traits and behaviors. These schema also leads to attributions of causality and responsibility for the group's performance. Thus, the attribution views in leadership theories emphasize that leadership effectiveness depends on whether subordinates attribute leader-like characteristics and qualities to the leader.

The research on female leaders has two major thrusts. One has examined how female leaders are similar or

different from male leaders in traits (such as intelligence, aggressiveness and independence), and behavior (task-oriented vs. relationship-oriented behaviors). This research has generally concluded that there are no significant differences between male and female leaders' traits and behaviors (Adams, 1978; Bartol, 1978; Bartol & Martin, 1986; Bass, 1981; Butterfield & Powell, 1981; Cullen & Perrene, 1981; Day & Stogdill, 1972; Dobbins & Platz, 1986; Lee & Alvares, 1977; Nieva & Gutek, 1981; Osborn & Vicars, 1976). Morrison, White and Van Velsor, on the other hand, in their interview of employees in sixteen progressive organizations, found that successful women were perceived differently than successful men. Successful women were cited more frequently than successful men as:

(1) having had help from above;

(2) being easy to be with; and

(3) being able to adapt.

Thus, they say it seems that women may have an advantage on men. Their behavior suggests that they can be as successful or even more successful than men (Morrison, et al., 1987).

The second thrust of research has examined attributions related to male versus female leaders. The present research concentrates on this issue. The research findings in this area are inconsistent. Some studies found

no differences in attributions about male and female leaders, while others found significant differences.

Similarity in Attributions About Male and Female Leaders.

Several studies found no differences in attribution toward male and female leaders (Bartol & Wortman, 1975; Butterfield & Powell, 1981; Day & Stogdill, 1972; Lee and Alvares, 1977; Stitt, et al., 1983). These studies used different samples (undergraduate students, graduate students, full-time employees, part-time employees), different settings (universities and organizations), different methods (laboratory experiments, questionnaires, and simulations) and were conducted at different times (throughout the 70's and 80's). These facts lend support to the external validity of the findings.

Day and Stogdill (1972) asked male and female civilian subordinates in the United States Air Force to evaluate their immediate leader, and found no differences in evaluation. The same findings were found with full-time service supervisory and non-supervisory employees of a large hospital (Bartol & Wortman, 1975).

Undergraduate students were used in a laboratory simulation study in which they had to set resistors in the proper way on a circuit board (Lee & Alvares, 1977). The findings of this study also indicate that there were no sex

differences in the descriptions and evaluations of leader's behavior. Two problems exist in regard to this simulation:

(a) it included a short duration task, and

(b) the task used does not represent industrial tasks in the organization.

Thus, it does not seem to be a very realistic simulation, so one should be cautious when generalizing these results to other settings.

Differences in Attributions About Male and Female Leaders

Many studies found differences in attribution about leadership effectiveness between male and female leaders (Adams, 1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Effertz, 1974; Rosen & Jerdee, 1973, 1974a; Schein, 1973). These studies are as diverse as the studies that found no differences in attribution. These studies also used different samples, different settings, different methods, and were conducted at different times.

Rosen and Jerdee (1973, 1974a), in one of the earliest studies in the area, used 158 (134 males and 24 females) undergraduate business students and 98 (83 males and 15 females) banking supervisors attending a management course to test two hypotheses. First, they hypothesized that subjects' evaluations of the leader's potential

effectiveness would generally be higher for male supervisors because culturally expected female behavior would be viewed as conflicting with role demands for leaders. They also hypothesized that there would be a sex-role interaction effect, with female leaders judged as more likely to succeed with certain leadership styles and male leaders with others. Both hypotheses were confirmed. Male leaders were viewed as more effective than female leaders. A reward style was rated as more effective for male leaders than for female leaders. The friendly-dependent style was rated more effective for supervisors of either sex when used with subordinates of the opposite sex. The similarity of ratings made by subjects of both sexes provides evidence that men and women share common perceptions and expectations regarding what is an appropriate behavior for male and female leaders. These perceptions and expectations influence their attributions, leading to different attributions of male and female leaders. In addition, the similarity between the ratings of bankers and students suggests that sex-role stereotypes may be widely held.

Rosen and Jerdee (1974b) investigated to what extent these attitudes influence the evaluation of female applicants for a variety of managerial jobs. They used 235 male undergraduate business students who were asked to consider a set of job descriptions and to evaluate an

applicant for each position. The results indicated that females were selected significantly less often than males for managerial positions. (Fifty-nine percent accepted females while 71 percent accepted males for managerial positions.) There was also a clear tendency to reject females for demanding conditions. (The rate of acceptance for female was only 46 percent in demanding conditions versus 72 percent in routine conditions.) Also, once in their managerial roles, females were rated lower than males. These results and the previous ones (Rosen & Jerdee, 1973, 1974) provide strong evidence that sex-role stereotypes have an important impact on expectations regarding the appropriateness of specific leadership behaviors. These expectations, in turn, have an important impact on selecting and evaluating female and male leaders. (Female applicants for managerial positions were evaluated as less acceptable than male applicants with identical qualifications.)

Other studies (Bartol & Butterfield, 1976; Halboun, et al., 1978; Schein, 1973) replicated Rosen & Jerdee's studies (1973, 1974a) and confirmed their results. But all these studies used samples consisting of a student population. Thus, the amount of generalization to other population is questionable. In Rosen & Jerdee's study (1974b), the sample consisted of only southern male business students, leading to limited external validity of the

obtained results. Also, all these studies were conducted in the laboratory, which again limits the external validity of the findings.

In contrast to Rosen and Jerdee, who concluded that female leaders are perceived as less effective than male leaders (e.g., they are judged more harshly than male leaders), Jacobson and Effertz hypothesized just the opposite -- that is, they hypothesized that followers of either sex will be more critical of a male leader than a female one. Their rationale was that since the male sex-role is consistent with leadership, subjects will expect more from a male in a position of leadership, and given equal performance by male and female leaders, the male will be subject to more criticism. (This argument was also raised by Terborg in 1977.) Seventy-two undergraduate students participated in a simulation. Four types of three-subject groups were used: male leaders with male followers, male leaders with female followers, female leaders with female followers, and female leaders with male followers. The groups had five minutes to complete their tasks. The hypothesis was confirmed. Male leaders were judged more harshly than female leaders. (When they were followers, males were judged more leniently then female followers.)

The researchers explained these results by claiming that when performance level does not meet expectations, the

leader is negatively evaluated (as was the case with male leaders), but when followers are surprised to see a behavior, they lower their standards of performance, leading to a positive evaluation (as was the case with female leaders). At this point, it should be mentioned that inconsistent results are found in the literature regarding attributions of male and female leaders, but this inconsistency includes results which indicate: (a) the same attributions are made toward male and female leaders or (b) male leaders are viewed as more effective than female leaders. Except Jacobson's and Effertz's study, no other study until today (laboratory or field study, using students or employees) found that female leaders are viewed as more effective than male leaders. Thus, Jacobson's and Effertz's results should be taken very cautiously. The major limitation of this study lies in the amount of generalization of the results. This was a simulation study where within five minutes the leader had to give his or her followers verbal instructions how to arrange a diagram. The amount of generalization for such a short duration simulation study using Introduction to Psychology students, who had the task of arranging a diagram, is questionable.

Deaux and Emsuiller (1974) conducted a study in which subjects used an audio tape to listen to the performance of another person. Then they were asked to

evaluate the person's performance. Regardless of the sex-type of the task, males were viewed as more skillful then females. When asked what attributed to the person's successful performance, subjects attributed females' success to chance (confirming again the existence of sex-role stereotypes in our society and their effect on attributions. Based on the sex-role stereotypes, females cannot be effective leaders, thus, if they do succeed, it is only based on chance and luck -- factors that are free to vary according to the attribution theory.)

Welsh's study (1979), however, which was similar to Deaux and Emsuiller's study, found that sex-role stereotype does not have an equal effect on males and females. He found that female subjects had a favorable evaluation of a female leader, while only male subjects evaluated the female leader as less successful than a male leader. Thus, Welsh's results indicated that males' perception of females as leaders was more traditional or conservative than females' perception of that role. This conservative role definition affected males' evaluation of females when they occupied a leadership role. Women, on the other hand, did not hold this conservative perception, and they were willing to endorse a more liberal role for women, such as the role of a leader. One reason for the inconsistent results might be that in Deaux and Emsuiller's study subjects listen to a

tape, while in Welsh's study, subjects viewed a videotape, thus having more "contact" with the leader. This leads to the possible explanation that sex differences are more likely to occur in situations where there is less contact between perceivers and leaders, since in these situations subjects are forced to rely on their sex-role stereotypes.

Ten years after Welsh's study, Ware, Cooper and Jerilyn (1989), using MBA students, reached the same conclusion Welsh did - females rated women as managers more favorably than did males. But these findings contradict other findings that found that both male and female MBA students preferred a male manager (Frank, 1988). More specifically, male students perceived women managers as being less knowledgeable and possessing poorer managerial skills than men managers. Although female students perceived men managers in a more positive light regarding competency, they still emphasized an interpersonal, rather than a task-oriented, behavior. Frank's conclusion was that perceptual stereotypes have not radically changed when compared to research conducted in the 1970's.

In another study (Forsyth, et al., 1985) it was found that both men and women believed that task skills were more important qualities for a leader to possess than socio-emotional skills and interpersonal skills. It was also found, in this study, that task skills were both attributed

to and claimed more frequently by men. Given these findings, Frank's findings in regard to his female sample is very important. These findings suggest that women perceive male leaders as more effective compared to female leaders, since they believe that female leaders do not have a desirable task abilities.

Differences vs. No Differences in Attributions About Male and Female Leaders.

As it has been shown, the findings regarding this controversy are complex and inconsistent. Table I presents a summary of some of the studies, that investigated attributions about male and female leaders, and their findings.

Project Athena (a wide spectrum assessment of introducing women to the U.S. Military Academy) reflects the complexity and variety of the results that exist in regard to this issue. Even though this project took place in the 70's, it is still considered to be one of the most important investigations regarding sex research since it included both laboratory and field studies which used West Point cadets. This investigation supplied the field with several important findings. First, it was found that West Point cadets were conservative in their general attitudes toward the role of women in society and were also conservative in their specific attitudes toward the suitability of women for the

Table I. Summary of Studies

Study	Subject	D.V.	I.V.	Results
Adams, 1978	406 subordinates of retail organizations	perceived leadership behavior	leader's sex	differences in perception about male and female leadership behaviors
Bartol & Butterfield 1976	112 undergraduate business students	perceived leadership behavior and effectiveness	leader's sex	differences in perception about leadership behavior and effectiveness of male and female leaders

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Bartol & Wortman, 1975	202 Full time civil service supervisory and non-supervisory employees of a large psychiatric hospital	perceived leadership behavior and subordinates' satisfaction	leader's sex	no differences in perception and in the satisfaction levels of subordinates
Butterfield & Powell, 1981	616 business students	perceived leadership behavior	leader's sex and group performance	leader's sex did not influence perception, while group performance did influence perception

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Day & Stogdill, 1972	73 civilian supervisors of the United States Air Force	perceived leadership behavior and effectiveness	leader's sex	no differences in perception of behavior and effectiveness of male and female leaders
Forsyth, et al., 1985	143 Introduction to Psychology students	leader's behavior and subordinates' perception of leadership effectiveness	leaders' perception of their abilities, group members' knowledge of their leader's abilities and specific skills needed by the leaders	male leaders behaved differently than female leaders. Also, they were perceived differently than female leaders

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Frank, 1988	202 undergraduate business students	perceived leadership effectiveness	leader's sex	differences in perception about male and female leaders
Haccoun, et al., 1978	600 blue-collar workers in a garment manufacturing company	perceived leadership effectiveness	leader's sex and leader's behavioral style	differences in perception about male and female leadership effectiveness, regardless of leadership behavioral style

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Jacobson & Effertz, 1974	72 Introduction to Psychology students	perceived leadership effectiveness	leader's sex	differences in perception about male and female leaders
Lee & Alvares, 1977	128 Introduction to Psychology students	perceived leadership behavior	leader's sex	no differences in the descriptions and evaluations of leader's behavior

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Rosen & Jerdee, 1973	158 undergraduate business students and 98 female banking supervisors	perceived leadership effectiveness	leader's sex and leader's behavioral style	inconsistent results: for some leadership styles, leader's sex did influence perception, while for other leadership styles, it did not influence perception

Table I. Summary of Studies (Continued)

Study	Subject	D.V.	I.V.	Results
Rosen & jerdee, 1974	235 undergraduate business students	evaluation of applicants	leader's sex and job demands	differences in evaluation about male and female applicants and job demands have differential effects on evaluations of male and female applicants
Stitt, et al., 1983	678 Introduction to Management students	subordinates' satisfaction and productivity	leader's sex	no differences in perception, satisfaction and productivity

military (Priest, Price & Vitters, 1977). Second, consistent with such attitudes, Rice, Yoder, Adams, Priest, and Price (1984) found significant cadet-sex effects in ratings of potential for military leadership. Male leaders were rated more favorably than female leaders by West Point cadets on the Leadership Evaluation System. In this study, both physical/athletic ability and academic performance in an engineering curriculum (i.e., traditional masculine domains) were found to be correlated with perceived leadership ability, thus, supporting the view that leadership was perceived to be a masculine realm. Third, not only attribution was affected by the sex of the leaders, but also group performance and morale were affected. Female-led groups were less productive and less satisfied than were male-led groups. But only 3 percent of the variance in group performance could be accounted for by the leader's sex (Rice, Bender & Vitters, 1980).

In this simulation study, first-year West Point cadets were assigned to one of 72 four-person groups. Each group worked 30 minutes on their first task (a structured task) and another 30 minutes on their second task (an unstructured task). One-half of the groups had male cadet leaders, while the other half had female cadet leaders. This simulation is an improvement over previous simulation studies (Bartol, 1974; Jacobson & Effertz, 1974; Lee &

Alvares, 1977) which used unrealistic tasks, such as identifying resistors and placing them on a circuit board, arranging dominoes, or using the Executive Game. This study used two different tasks: a structured task (to make a scale drawing of a building) and an unstructured task (writing a proposal documenting specific actions that the cadets should take when they became junior officers). Another improvement in this study was that the task did not take five or ten minutes as it did in other studies (Deaux & Emsuiller, 1974; Jacobson & Effertz, 1974) but an hour, giving the followers time to know their leader.

But this study also has several critical limitations. First, the independent variables (sex of the leader and attitudes of the followers) were measured rather than manipulated. As a result, the effect of these variables was open to a third variable interpretation, as is the characteristic of almost any correlational study compared to an experimental study. Second, no measure was taken in regard to leader's performance. It is assumed that male cadet leaders performed equal to female cadet leaders, but there is no basis for such an assumption. This leads to another interpretation of the results, i.e., group performance and morale differed not because of the difference in leader's sex but because of the difference in leader's performance. Third, the researchers did not

mention how many male cadets and how many female cadets were used as subjects. Their number might have an effect on the results obtained. If, for example, females have more liberal views than males (Welsh, 1979), then the percentage of female subjects participating in a study probably has an effect on the results. Finally, not all findings in Project Athena were consistent. Two field studies found that follower's ratings of their leaders were not influenced by leader's sex (Rice, Instone & Adams, 1984). No difference was found in spite of factors that would generally cause differences in attributions between male and female leaders. One of these factors is the masculine nature of the setting.

Hollander and Yoder (1980) and Braun (1979) suggested that the nature of a task is important in examining effects of leader sex. A masculine task might elicit different attributions than to a non-masculine task. (Females might be judged more harshly on a masculine task than on a non-masculine task, based on sex-role stereotypes.) Given this, it is significant that very small leader-sex differences were found in what would seem to be very masculine tasks and settings (i.e., physical and military training within a similar organization that explicitly prohibited the admission of females until recently).

Before drawing conclusions from Project Athena, several limitations should be mentioned. One of the strengths of field studies is that one can feel confident generalizing the result from the particular study (in contrast to laboratory studies in which the amount of generalization is questionable), thus achieving external validity. Paradoxically, this is exactly the problem in Project Athena; the amount of generalization is questionable because of the uniqueness of the sample and the setting used. First, about the sample used: The males and females used had comparable backgrounds and precisely equivalent roles. Few other organizations achieve the level of sexual equality on these variables. Second, about the uniqueness of the setting: In West Point, followers were extremely motivated and intelligent, they were exposed to very highly structured leader roles, they were also exposed to the idea of sexual equality, and finally they had constant contact with their leaders. All these variables must have had an impact on their attributions to their leaders.

The conclusions drawn from Project Athena are: (1) There are inconsistent results regarding the effect of leader's sex on the attributions about leadership effectiveness made by followers. One explanation for the inconsistent results is that those studies (done within Project Athena) confirming the sex-role congruency

hypothesis used large sample sizes. (For example, Rice, et al., 1984, used 1,187 subjects -- 1,096 males and 91 females.) This fact can cause effects of small magnitude to achieve statistically significant results. (2) None of the leader-sex effects reported account for much variance in criterion scores relevant to leadership. (3) Statistically significant leader sex effects for codes are found more frequently in the artificial laboratory setting.

The Effect of Attribution on Job Satisfaction

The effect of attribution on perceivers' satisfaction is an important one because job satisfaction may effect perceivers' performance, motivation and well-being in and out of the organization.

Schein (1973) and Terborg (1977) found that female leaders elicit lower followers' satisfaction than male leaders. Adams (1978) investigated this issue by using more than four hundred subordinates and supervisors in 24 units of one large retail organization. To eliminate internal validity problems, units headed by females and males were selected according to organizational unit similarity (size, location, and annual volume) and similarity of supervisor background characteristics (tenure, education, and age). All subordinates were at the same job level and had similar job responsibilities and duties. Adams also investigated if

job satisfaction and job problems were the same for subordinates who had male or female supervisors. The data revealed that no effects on job satisfaction or job problems were found related to the sex of the supervisor, thus confirming previous results (Bartol, 1974; Bartol & Wortman, 1975; Martin, 1972; Osborn & Vicars, 1976).

In regard to the attribution question, the data revealed that female supervisors were perceived differently than male supervisors. (They were perceived as exhibiting more considerate behavior than male supervisors.) These results are inconsistent with previous field study results (Bartol & Wortman, 1975; Butterfield & Powell, 1981; Day & Stogdill, 1972; Osborn & Vicars, 1976; Stitt, et al., 1983). One reason for this inconsistency might be that Adams was the only researcher who controlled some demographic and organizational variables. This fact might suggest that in the future more specific situational information (such as training, subordinate responses with previous supervisors, and work experiences and skills) needs to be included in investigation of attitudes toward male and female leaders.

The Effect of Situational Information on the Attribution Process

After surveying the literature, Hollander and Yoder (1980) concluded that situational factors should be taken into consideration when investigating attributions. They

concluded that some of these situational factors that contribute to the attributions made by followers toward their leaders are sex composition of the group and the nature of the group task (i.e., sex-typing of the task). In regard to the sex composition of the group, it is important to understand that leadership effectiveness involves a group process where both the leader and the followers influence one another. Thus, whether the group is a uni-sex group or a mixed group may have an effect on the attributions followers make towards their leaders. In regard to the nature of the group task, if the task is perceived to be either masculine or feminine, it may also have an effect on the attributions followers make towards their leaders. Hollander and Yoder criticized researchers for their failure to look at these contributing factors when investigating attributions of male and female leaders.

Dobbins and Platz (1986) reviewed 17 studies and found that in all of these studies male leaders were rated as more effective than female leaders. When they categorized the studies into laboratory and field studies and conducted separate meta-analyses on each category, they found out that male leaders were viewed as more effective than female leaders in laboratory settings, but that in field settings, leader sex did not influence perceived effectiveness.

Other literature reviews reached the same conclusion. The explanation offered for the differences noted between laboratory studies and field studies had to do with artifacts of laboratory research (Osborn & Vicars, 1976). In the laboratory setting, cues about the situation are weak compared to cues of leader sex. This may have forced the raters to rely on their sex-role stereotypes when evaluating their leader, thus, making different attributions of male and female leaders. In the field, on the other hand, raters had more information available to them about their leader, particularly when the leaders and followers under study had been involved in actual long-term, on-going work situations. Thus, gender became less salient, and other variables became more important when raters evaluated their leaders. Findings of different attributions about leadership effectiveness of male and female leaders disappeared when the influence of age, education, and experience of leaders and followers was controlled (Osborn & Vicars, 1976). They also disappeared when type of occupation, level within the organization, and extent of professional training were considered (Bartol, 1976; Brief & Oliver, 1976; Renurick & Tosi, 1978).

Most of the results that yielded differences in attributions of leadership effectiveness about male and female leaders came from laboratory settings (Bartol &

Butterfield, 1976; Deaux & Emsuiller, 1974; Deaux & Taynor, 1973; Haccoun, Haccoun & Sallay, 1978; Rosen & Jerdee, 1973, 1974; Welsh, 1979). On the other hand, most of the results that did not yield differences in attributions of male and female leadership came from field settings (Adams, 1978; Day & Stogdill, 1972; Osborn & Vicars, 1976; Petty & Bruning, 1980; Rice, Instone & Adams, 1984). The problem of external validity, which exists in all laboratory experiments, was mentioned before, and it was viewed also by Jacobson and Effertz (1974), who conducted a simulation study and found differences in attributions of male and female leaders. They explained their result by claiming that "the subordinates . . . were rating the leader in the absence of any comparison figures, and on a task with which they were not familiar, leaving more room for stereotyped perceptions to enter the picture than might be found had subjects had a better idea of what constituted good and bad performance" (pp. 393-394).

Osborn and Vickers (1976) added "artificial, short term laboratory situations tend to elicit subject responses based on readily available stereotypes, while long-term, real life, field settings include extensive inter-personal contact that provide subjects with a more realistic basis for their behavior . . ." (p. 447). The conclusions drawn from Project Athena tend to support this view, and most

researchers tend to agree with it (Jacobson & Effertz, 1974; Dobbins & Platz, 1986; Lee & Alvares, 1977; Powell & Butterfield, 1982; Rice, et al., 1980; Riger & Galligan, 1980; Smith, 1983; Terborg, et al., 1977). It seems that sex-role stereotypes are most salient in situations characterized by an absence of adequate information on which to judge the leader. Thus, differences in the amount of information about a leader may account for the conflicting findings obtained in laboratory and field setting. Differences in attribution of leadership effectiveness of male and female leaders occur only in situations in which little information about the female leader is provided. In these situations, perceivers use their readily available sex-role stereotype, and the result is that they view female leaders as less effective than male leaders (since the stereotypes about women have are not consistent with leadership qualities that are required in order for one to be an effective leader).

Several studies investigated this issue. That is, several studies investigated what type of information might minimize the effect of sex-role stereotypes on attributions. In one study (Locksley, et al., 1980), subjects were given a gender label and three specific accounts of either assertive or passive behavior. Then they were asked to make trait judgments of (a) supervisors about whom no information was

available besides gender, (b) supervisors about whom non-diagnostic behavioral information was available in addition to gender, and (c) supervisors about whom diagnostic behavioral information was available in addition to the gender. From what was said so far, it was expected that sex-role stereotypes would effect judgments of supervisors about whom only the gender information was available. It was also expected that a minimal amount of subjectively diagnostic and non-diagnostic behavioral information would be enough to weaken the effect of stereotypes in judgments about an individual. The results of this study confirmed these hypotheses. No effects of information about the supervisor's sex were found on subjects' inferences about the supervisor's personality traits. Subjects relied on the behavioral information to predict the supervisor's behavior in novel situations and to rate the target on a set of personality trait dimensions. These authors concluded their study by stating that "as soon as individuating, subjectively diagnostic characteristics of a person are known, stereotypes may have minimal, if any, impact on judgments of that person." (p. 830)

Deaux and Lewis (1984) conducted two experiments. In one, the situational factor that was manipulated was role information. That is, subjects received a booklet containing a male or a female target with one type of role

information (masculine, feminine, or mixed). In the second experiment, the stimulus information consisted of traits, rather than roles. In both experiments, subjects were asked to evaluate how masculine and feminine the target was. The results of both experiments confirmed Locksley, et al.'s (1980) conclusions. The effects of specific trait or role behavior information was greater than the effect of the gender information. Based on their findings, they concluded that "in most cases, the influence of gender can be outweighed by other information, such as role behaviors, traits, and the like." (p. 1002). Support for the findings that relevant information causes subjects to ignore or to minimize the effect of sex-role stereotypes or attribution also came from other studies (Gerber, 1988; Miller, 1986; Pratto & Bargh, 1991). Finally, a literature review was conducted (Swim, et al. 1989), which included 160 published articles. The stimulus materials in these articles were written work or art work, behavior, resumes, applications for jobs, or short biographies of the person. The results of this review confirmed previous findings. That is when information was presented about the target person, subjects did not appear to use their stereotypes. Also, there was some indication that women were rated less favorably than men when less information was presented. These findings that the amount of information provided may influence effect

size is consistent with previous review findings (Powell & Butterfield, 1982; Tosi & Einbender, 1985).

Deaux and Major (1987) proposed a complex model of gender and social interaction. It attempts to define those factors that critically influence the frequency and extent to which differences between women's and men's social behavior will occur (p. 371). The first assumption of this model is that perceivers have a set of beliefs about women and men (gender belief system), which manifests itself through sex-role stereotypes. These beliefs are organized in terms of schemata which effect the way experience is interpreted and evaluated. The authors asked the question: "Given that a perceiver has many possible schemata that can be used in a given situation, what factors are responsible for triggering a particular gender-related schema?" (p. 373). One of the sources of influence they identified was the situation. According to them, the situation can vary in the degree to which it makes gender-related issue salient. They believe, based on previous findings, that the more individuating information is available to the perceiver, the less the general categories (in this case, stereotypes) will be used.

Branscombe & Smith (1990) investigated how a particular type of schema (in their case, stereotypes) influences processing of information about a person from

that group, and how it might influence socially significant decision-making processes. They proposed a sequential model with four stages of the stereotyping process. The stages were: (1) the retrieval of stereotype information from memory, cued by the target person's physical appearance; (2) the integration of other available information with the retrieved stereotype into an overall impression of the target's personality; (3) the selection of decision rules or criteria by which to make the decision; and (4) the final decision to hire or not hire the target person. (p. 628). More specifically, in stage (1), the target's group membership activates the stereotype (or what Deaux & Major called the gender belief system or the schema) in the perceiver's memory. Evidence for this comes from previous research, too (Deaux & Major, 1987; Pratto & Bargh, 1991; Smith, 1990). In stage (2), the other available information is processed. Consistent with previous findings (Deaux & Lewis, 1984; Gerber, 1988; Hollander & Yoder, 1980; Locksley, et al., 1980; Miller, 1986; Petty & Bruning, 1980; Pratto & Bargh, 1991.) In stage (3), criteria are set for decisions to be made, and in stage (4), the decisions are made. Branscombe and Smith concluded, based on their findings, that "stereotype-based processes operate at several stage of impression formation and decision making." (p. 645).

PURPOSE

As it was discussed, there is no leadership without followship, since followers' perception is crucial in determining leadership effectiveness (Hollander, 1978). Several kinds of information affect followers' perception. One kind of information that has been investigated again and again is sex-role stereotype. Two issues are addressed. First, the prevalence of sex-role stereotypes today among men and women in the United States. And second, the effect of these stereotypes on attributions about leadership effectiveness in the presence of information about the leader.

The Prevalence of Sex-Role Stereotypes Among Men and Women in the United States.

From the vast amount of research in this area since the early 1970's, it is clear that sex-role stereotypes are prevalent, and that they lead to prejudice in attitudes and decision-making. In the 70's, research concluded that sex-role stereotypes exist both in men and in women. Warmth and expressiveness were believed to be more characteristic of women than men, while competence and rationality were believed to be more characteristic of men than women. In addition to these characteristics, other characteristics were ascribed to men and women. It was found that those

characteristics that were ascribed to men were consistent with common and accepted leadership qualities (such as independence and aggressiveness), while those characteristics that were ascribed to women were not consistent with common and acceptable leadership qualities (such as dependence and non-aggressiveness). As a result of these sex-role stereotypes, men were likely to be seen by men and women as leaders, while women were unlikely to be seen by men and women as leaders. (Bardwick & Douvan, 1972; Massengill & DiMarco, 1979; O'Leary & Depner, 1975; Powell & Butterfield, 1979; Schein, 1973, 1975). In the 80's, research results were much more diverse compared to the 70's. Several researchers concluded, based on their findings, that sex-role stereotypes were as prevalent in the 80's as they were in the 70's. They also concluded that both men and women hold stereotypical beliefs (Porter, et al., 1983; Powell & Butterfield, 1984, 1986; Sutton & Moore, 1985). Other researches concluded that there have been no changes in men's stereotypical attitudes since the 70's, but women did go through some changes in their attitudes (Brenner, et al., 1989; Dubno, 1985; Heilman, et al., 1989; Schein & Mueller, in press; Schein, et al., 1989; Smyth & McFarlane, 1985). These researchers concluded, based on their findings, that women in the 80's were more liberal in their views compared to women in the 70's. In regard to

leadership qualities, these researchers found that men in the 80's still sex-typed the managerial role; they believed that a successful manager should possess masculine characteristics, while women in the 80's did not sex-type the managerial role; they believed that a successful manager should possess characteristics ascribed to both men and women (Brenner, et al., 1989; Dubno, 1985; Heilman, et al., 1989; Schein & Mueller, in press; Schein, et al., 1989; Smyth & McFarlane, 1985).

Several problems exist in the majority of the studies that are reviewed here. The first major problem has to do with the external validity of the results obtained in these studies. Most of these studies used one kind of sample, i.e., student population. For example, Powell and Butterfield (1989, 1984), as well as Cecil, et al. (1973), used male and female undergraduate and part-time graduate business students. Others have used only male and female undergraduate students (Babladelis, et al., 1983; Cann & Siegfried, 1987; Crocker & McGraw, 1984; Geis, et al., 1985; as well as Lii & Wong, 1982; Porter, et al., 1983; Schein, et al., 1989). These students came from different universities, and were enrolled in different classes (some were enrolled in Industrial Psychology class (Cann & Siegfried, 1987), some in management class (Schein, et al., 1989), while the majority of them were enrolled in

Introduction to Psychology class). But, despite these differences, student population, overall, is a homogenous population: relatively young, educated people with relatively little work experience, thus limiting the extent to which these results, obtained from this kind of population, can be generalized to other populations.

The first purpose of the present study is to overcome the problem of the limited external validity of the results that were obtained from these studies. To overcome this major problem, the present study attempts to investigate the extent to which sex-role stereotypes exist today among men and women in our society by using employees as the sample, not students. But since only one organization is used in the present study, the sample may still be limited.

A second problem common to all previous studies is that all of them used only one scale to assess sex-role stereotypical attitudes. A lot of these studies used the 92-item Schein Descriptive Index (Brenner, et al., 1989; Heilman, et al., 1989; Schein, et al., in press, 1989, 1975, 1973), others have used Bem Sex-Role Inventory (Powell & Butterfield, 1989, 1985, 1977; Rustemeyer & Thrien, 1989); while still others have used the Sex-Role Stereotype Questionnaire that was constructed by Rosenkrantz, et al. (1986); Lii & Wong, 1982; Smyth & McFarlane, 1985).

The present study attempts to investigate the extent to which sex-role stereotypes are held by people in the United States by using two measuring instruments: the Schein Descriptive Index and the Male-Female Relations Questionnaire. These two instruments measure sex-role attitudes from two different aspects. The Schein Descriptive Index asks for a description of men in general, women in general and description of successful middle managers. By looking at the correlation between the descriptions of men and managers and between the descriptions of women and managers, one can learn about the extent to which sex-role stereotypes are common today in our society.

The Male-Female Relations Questionnaire attempts to investigate sex-role stereotypical attitudes by: (a) measuring the tendency of individuals to modify their behavior in situations containing implicit sex-role demands; (b) measuring the marital roles of each individual and his or her spouse; (c) measuring the unwillingness of men to express emotional upset; and (d) measuring women's liking of masculine, dominant men. By having two sets of results (one set from each instrument), the consistency and validity of the measuring instruments can be assessed. No study attempted to compare the commonly used Schein Descriptive Index to another instrument. It is believed by this

researcher that it is important to compare Schein's index to other instruments, since by doing so, one can conclude about the appropriateness of this index and about its consistency and validity. This information is especially important, since one cannot look at the validity of the 92-items in the index because they have not been scaled.

Comparing the two instruments is also important in regard to the Male-Female Relations Questionnaire. This scale was only used once, by Archer (1989), so no information about its consistency and validity exists. Archer believed that this instrument is potentially useful for assessing sex-role stereotypes. The present study may strengthen or weaken Archer's beliefs, depending on the results of the comparison between the two scales. Another point should be made here. Spence, et al. (1980), who developed the Male-Female Relations Questionnaire, compared this instrument to another one they developed (Attitudes toward Women Scale - AWS 1973). They found unusually high correlations of this instrument with the AWS. By comparing the Male-Female Relations Questionnaire scores to another scale's (Schein Descriptive Index) scores, as this study attempts to do, one can learn more about this overlooked instrument.

The Effect of Sex-Role Stereotypes on Attributions About Leadership Effectiveness.

The main purpose of the present study is to investigate the effect of sex-role stereotypes on attributions about leadership effectiveness in the presence of information about the leader. In the past, most of the investigators focused only on the effect of sex-role stereotypes on the attribution process. Inconsistent results were obtained. Some researchers concluded that sex-role stereotypes effect attribution about leadership effectiveness (Adams, 1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1983; Jacobson & Effertz, 1974; Rosen & Jerdee, 1973, 1974a; Schein, 1973), while others did not find such an effect (Bartol & Wortman, 1975; Butterfield & Powell, 1981; Day & Stogdill, 1972; Lee & Alvares 1977; Stitt, et al., 1983).

One explanation for these inconsistencies was that when no information was given about the leader, perceivers relied on their sex-role stereotypes when evaluating the target while, when target's information was available, perceivers relied on this information when evaluating the target, thus minimizing the effect of sex-role stereotypes on the evaluation process (Dobbins & Platz, 1986; Jacobson & Effertz, 1974; Osborn & Vicars, 1976; Powell & Butterfield, 1982). It was suggested by numerous researchers that when there is an attempt to investigate the effect of sex-role

stereotypes on attribution, situational factors should not be ignored because they might influence this effect (Deaux & Lewis, 1984; Hollander & Yoder, 1980; Locksley, et al., 1980; Swim, et al., 1989).

It is believed today that there is a great need to identify those cues in the situation that are most likely to make gender salient and those situational cues that are most likely to elicit differences in attributions about males and females. Different situational cues were investigated so far. One of them is sitting arrangements. In the absence of behavioral cues, it is believed that the physical positioning of persons in a group often identifies the leader. The results indicate that a man seated at the end of a table in a mixed-sex group was clearly seen as a leader of his group, while a woman occupying the same position was ignored (Porter, et al., 1983).

Another situational cue that was investigated is the physical appearance of the target person. It was found in the literature that physically attractive individuals are perceived as more successful, more intelligent and better educated than physically unattractive individuals (Bartol & Saxe, 1976; Bercheid & Walster, 1972; Dion, et al., 1972). In another study (Cherulnik, et al., 1990), students were shown slides of seniors who were classified as leaders and seniors who were classified as nonleaders. The results

revealed that leaders were judged more attractive than nonleaders (this difference was found to be greater for male targets than female targets). In another study (Lanier & Byrne, 1981), high school students associated professional career orientation with attractiveness for women.

Another cue that was investigated is the similarity and dissimilarity between the target person and the perceiver. Social psychologists found, again and again, that: (a) people tend to prefer their own group (the ingroup) (Locksley, et al., 1980); (b) they assume that the outgroup members are very similar to each other (Linville & Jones, 1980; Quattrone & Jones, 1980); and (c) they hold biased perceptions concerning the outgroup (Howard & Rothbart, 1980; Jones & Scott, 1979). Tsui & O'Reilly (1989) found that increased dissimilarities between subordinates and their leader's demographic characteristics (age, gender, race and education) was associated with lower effectiveness as perceived by leaders. It was also associated with increased ambiguity as experienced by subordinates.

Research by Borgida, Locksley and Brekke (1981) and Nisbett, Zukier & Lemley (1981) suggests that the effect of stereotypes on judgment may be radically decreased by providing the perceiver with additional information about the target individual, information that individuates

(describes in a personal way) the characteristics of the target person (Miller, 1982). This belief was repeated again recently by other researchers (Deaux & Lewis, 1984; Deaux & Majors, 1987; Locksley, et al., 1980).

The next issue to be considered would be what kind of additional information should be available to the perceiver. In the past, the informational cues that were investigated were leaders' traits (Locksley, et al, 1980) and leaders' role information (Deaux & Lewis, 1984).

It is believed by the present researcher that situational cues other than leader's traits and role information play a major role in effecting the attribution process and they should be investigated too. They are leader's personal characteristic information and leader's behavior. This study is the first attempt to find out the effect of sex-role stereotypes on the attribution about male and female leaders in the presence and absence of these two types of leader's information.

Finally, the present study extends the literature by examining how perceivers' demographics effect their attribution about leadership effectiveness. In the past, most researchers ignored this issue, and it is believed by this researcher that this issue should not be overlooked, since some of these demographics may have an impact on the attribution process.

The subjects' demographics that are investigated in the present study are:

(1) Gender - Inconsistent results exist in the literature in regard to the effect of subjects' sex on their attribution. Some investigators found no effect (Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Effertz, 1974), while others did find significant difference between male and female subjects, where female subjects evaluated female leaders more favorably than male subjects (Bartol, et al., 1976; Nelson, 1988; Peters, et al, 1974; Terborg, et al, 1977; Ware, et al., 1989; Welsh, 1979).

(2) Age - Very few studies looked at the age of the respondent, and here, too, there are inconsistent results. Schein (1973) found that older people (40 years old and older) are less stereotypical than younger people, while Nelson (1988) found the opposite, i.e., that younger people are more liberal than older people.

(3) Total full-time work experience - Schein (1973) noted that the correlation between age and experience was .76. Thus, she concluded that people with longer work experience have less

stereotypical attitudes compared to people with no or a little work experience.

(4) Full-time employment - Ware, Cooper and Jerilyn (1989) found that part-time workers had more favorable attitudes than full-time workers.

(5) Education - Only one study examined this issue. Roger, Studebaker and Jerilyn (1989) found that graduate students are more liberal in their attitudes compared to undergraduate students.

(6) Average annual income in the parental family - One study examined this point and found that people of higher social status have more liberal attitudes than people of lower status (Nelson, 1988).

(7) Marital status - One study examined this issue and found that there are no significant differences between people with different marital status (Ware, et al., 1989).

Other demographics were also investigated in the present study, but they were investigated purely on an exploratory basis; no studies examined the effect that these demographics have on attribution. These subjects' demographics are:

(1) Dual career family.

(2) Total years with the present organization.

(3) Position in the present organization.

(4) Annual salary in the present organization.

(5) How often did/do you work together with a male supervisor?

(6) How often did/do you work together with a female supervisor?

Hypotheses

One conclusion drawn from the literature is that in the 80's, men still held conservative views about women compared to women in the 70's. Thus, they still perceive a successful middle manager as possessing masculine characteristics. On the other hand, women in the 80's changed their attitudes from the 70's. In the 80's, women held more liberal attitudes toward women compared to women in the 70's. Thus, they now perceive a successful middle manager as possessing masculine and feminine characteristics. This conclusion was drawn from several studies (Brenner, et al., 1989 Dubno, 1985; Heilman, et al., 1989; Koufacos & Kenworthy, 1978; Schein & Mueller, in press; Schein, et al., 1989; Smyth & McFarlane, 1985) using different samples (undergraduate students, graduate students, managers and psychologists), in different settings (universities in the United States, a university in Britain, a university in Germany, and organizations in the United

States). This leads the present researcher to the first two hypotheses of the present study:

(1) Men will perceive successful managers as possessing characteristics that are more commonly associated with men than with women.

(2) Women will perceive successful managers as possessing characteristics that are commonly associated with both men and women.

Several investigators suggested that when there is no information about the leader, it forces raters to fill in the gap of missing information by relying on their sex-role stereotypes when evaluating their leader, thus making different attributions of male and female leaders. It has also been suggested that when raters have more information available to them about their leaders, gender becomes less salient and other variables become more important when raters perceive and evaluate their leaders (Deaux & Lewis, 1984; Deaux & Major, 1987; Jacobson & Effertz, 19874; Locksley, et al., 1980; Osborn & Vicars, 1976; Powell & Butterfield, 1982; Swim, et al., 1989). These findings lead to the third hypothesis in the present study:

(3) The effect of sex-role stereotypes on attributions about leadership effectiveness will depend on the availability of information about the leader. Specifically:

(a) The effect of sex-role stereotypes on attributions about leadership effectiveness will decrease when personal characteristics information about the leader is available.

(b) The effect of sex-role stereotypes on attributions about leadership effectiveness will decrease when behavioral information about the leader is available.

Before going on, several terms must be defined. The first term, of course, would be a "leader." Fiedler's (1967) definition is the most commonly used definition (Landy & Trumbo, 1980) and it is also used in the present study. According to this definition, a leader is "the individual in the group given the task of directing and coordinating task-relevant group activities, or who, in the absence of a designated leader, carries the primary responsibility for performing these functions in the group" (p. 8).

The second term that must be defined is "attribution." Briefly, attribution theory states that in order to understand what is happening to and around them, people develop their own internal "theories" of behavior. Such theories are especially important in making sense of cause-effect relationships. Task-relevant behaviors can be attributed to combinations of such factors as luck, effort,

ability, and task difficulty. Attribution theorists have further classified these factors as those which are fixed, such as intelligence, and those which are free to vary, such as luck (Weiner, et al., 1972). Kelley (1973) expanded on the basic attribution model and stated that when a person performs in a manner consistent with prior expectations, the outcome will be attributed primarily to fixed factors (e.g., ability or task difficulty). While in a situation in which a person performs in a manner that is inconsistent with prior expectations, the outcome will be attributed primarily to variable factors (e.g., luck). Jones and Davis (1965) complement this by making predictions about unexpected outcomes. They state that when a person's performance is not consistent with the expected performance, the outcome will be attributed primarily to factors which are free to vary (e.g., effort or luck). So, in short, attributions are perceptions and evaluations that people make in order to understand the world in which they live.

Leadership effectiveness is the term used to describe the outcome of leader's behavior. In order for leaders to be effective leaders, they and their followers must accomplish the recognized objectives.

In the present research, two sets of personal characteristic information are included: positive information and negative information about the leader

(achievement and ascriptive criteria are used for the personal characteristic information). Both sets of information included the following information:

(1) the leader is 35;

(2) is married;

(3) lives in the city; and

(4) has 10 years of work experience.

The following information distinguishes between leader's positive and negative information:

Positive Information	Negative Information
(1) finished his/her undergraduate studies with Honors;	(1) graduated high school with average grades;
(2) received a master's degree in Business;	(2) dropped out of college in his/her junior year;
(3) in the last 5 years, he/she has been the top manager of the marketing division of Ring Telephone Company.	(3) in the last 5 years, he/she has been promoted once to a first-level managerial position in the marketing division of of Ring Telephone Company.

Thus, the ascriptive criteria are fixed for both sets of personal characteristic information, while the achievement criteria vary between the two sets.

In the present study, there are also two sets of leadership behavior information: positive information and

negative information. Both sets include information about the leader's performance on the job. The positive information includes the following behaviors:

(1) holding individual and staff meetings;

(2) sending memos to the staff;

(3) setting specific goals for each department;

(4) setting specific individual goals; and

(5) developing new procedures in order to eliminate procedural confusion which had existed in the past.

The negative information includes the following behaviors:

(1) no personal contact with the staff (the only contact between the manager and the staff is through memos);

(2) egocentricism - thinks only about his/her success;

(3) demands the staff to work overtime, with no compensation; and

(4) does not set clear, specific goals.

Method

Design

The experimental design can be described as a 2 x 3 x 3 factorial design.

Independent Variables

The three independent variables were leader's sex, leader's personal characteristic information and leader's behavior. The sex of the leader includes a male leader and a female leader; leader's personal characteristic information includes positive information, negative information and no information; and leader's behavior includes positive behavior, negative behavior and no behavior.

Dependent Variable

The dependent variable was perceived leadership effectiveness. It was measured by using a questionnaire which consists of nine questions about leadership effectiveness (from Bartol & Butterfield, 1976 and Butterfield & Powell, 1981). A composite score (of the first eight questions) was taken and used to represent the perceived leadership effectiveness of each subject. The ninth question (an open-ended question) was used in order to understand better the rationale for the first eight answers.

Subjects

Participants in this study were 184 employees (70 males and 109 females) from a large not-for-profit human services organization located in New York City, Long Island and Westchester County. Employees were taken from different locations, different departments and different levels of the

organization. Their average age was between 31-40 years. Their total full time work experience ranged from under 1 year (11.7%) to over 15 years (34.2%). Full-time employees were 71.2% in this organization. Positions included support staff (18.3%), professional (31.5%), first level managers (23.6%), middle management (16.3%), and top management (5.4%).

Measuring Instruments

Two instruments were used, in the present study, to assess sex-role stereotypical attitudes. The first was Schein Descriptive Index (Appendix I). It consists of 92 items that are used to define sex-role stereotypes and the characteristics of successful managers. Three forms of index were used. Each contains the same 92 items, except that one form asks for a description of women in general (Women), one for a description of men in general (Men), and one for a description of successful middle managers (Managers). The ratings of the descriptive terms were made according to a 5-point scale, ranging from 1 (not characteristic) to 5 (characteristic), with a neutral rating of 3 (neither characteristic nor uncharacteristic). This scale has been used numerous times in the past with students' samples (Schein, et al., 1989; Schein, et al., in press) and with managements' sample (Brenner, et al., 1989; Heilman, et al., 1989). It has been used mostly in the

United States, but in at least one other study, it has been used also in Great Britain and West Germany (Schein, et al. in press).

In terms of the validity issue, the term "validity" does not apply for this instrument, since the 92 items have not been scaled (they have no value by themselves, so they are not scored individually). In other words, since the items are not scaled, the instrument does not measure a personality construct.

The second measuring instrument that was used in the present study is the Male-Female Relations Questionnaire (MFRQ - Spence, et al., 1980). It consists of 30 items divided into 3 scales:

(a) Social Interaction, which contains items that describe the individual's tendency to modify his or her behavior in social situations containing implicit sex-role demands. For example: "I don't have much respect for a man who allows himself to be led around by his wife or girlfriend, even if it's not done obviously."

(b) Marital Roles, which contains items concerning preferred relationships between the individual and his or her spouse. For example: "I think I (my husband) should be emotionally stronger and tougher than my wife (I am)."

(c) The third scale is unique to each sex. For males, the third scale, labeled Expressivity, contains items that describe unwillingness to express emotional upset overtly and to be thought of as sensitive. For example: "I wouldn't like other men to think of me as a very sensitive person." For females, the third scale, labeled Male Preference, contains items that describe liking for masculine, dominant men. For example, "I like men who act assertive and independent."

Appendix II includes the male form and the female form of this scale. The responses on this scale range from 1 (strongly agree) to 5 (strongly disagree). High scores on the MFRQ represent traditional gender-role responses, while low scores represent more liberal, non-traditional responses). This scale has been used only a few times in the past (Archer, 1989; Spence, et al., 1980). Archer (1989) concluded that the MFRQ is potentially useful for assessing personal preferences for role-related behaviors.

Spence, et al. (1980) found that the three subscales of the MFRQ showed unusually high correlations with the Attitude toward Women Scale (AWS): with the "Social Interaction" scale r = -.72 (men) and r = -.73 (women); with the "Marital Roles" scale r = -.74 (men) and r = -.75 (women); and with the male "Expressivity" scale r = -.49. A

lower correlation was found with the female "Male Preference" scale r = -.25 (higher scores on the MFRQ represent traditional gender-role responses, while higher scores on the AWS represent non-traditional attitudes). The MFRQ includes behavioral items, as well as work-related items. The present researcher believes that this scale uses realistic statements, thus giving it some face validity.

Procedure

In the present study three sets of materials were self-administered, given out all at once and returned all at once by the organization's internal mail system. These three sets of materials include: Schein's Descriptive Index, the Male-Female Relations Questionnaire, and the Leadership Effectiveness versions. With regard to Schein's Descriptive Index, each subject was randomly given one of the three versions (Women, Men, or Managers) of the scale. With regard to the Male-Female Relations Questionnaire, all subjects were given the first two scales, while the third scale was divided between the men and the women in the sample. Men received the Expressivity scale, while women received the Male Preference scale.

With respect to the Leadership Effectiveness versions, each subject randomly got one of the sixteen versions of the booklet. Each subject was instructed to read the following directions:

We would like to get your opinion about the appropriateness and effectiveness of a particular leadership behavior. Please read the following supervisory problem and indicate your opinions on the scale provided.

One of the sixteen versions that was presented after these directions is:

Version 1 (A male leader, with positive personal characteristic information and positive behavior):

John Green is 35, married, and lives in the city. He graduated with Honors in his undergraduate studies. He received his Master's degree in Business ten years ago. Since then he has been working in the marketing department of the Ring Telephone Company. Five years ago, he had been promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Mr. Green was not happy since he was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Mr. Green was interviewed. He came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional

workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after his arrival, Mr. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which he felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Mr. Green outlined what he expected from each staff member in the immediate future.

Within a few weeks, Mr. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also assigned various projects. He also distributed among the staff memos describing the specific department goals for the coming year. He then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, he began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Variations between the versions include changes in leader's gender (male or female), changes in the nature of leader's personal characteristic information (positive, negative or no information), and changes in the nature of

leader's behavior (positive, negative or no behavioral information). The differences between the versions are shown in Table II.

Appendix III includes all the sixteen versions that were presented to the subjects.

After each version, the following organization chart was presented to each subject:

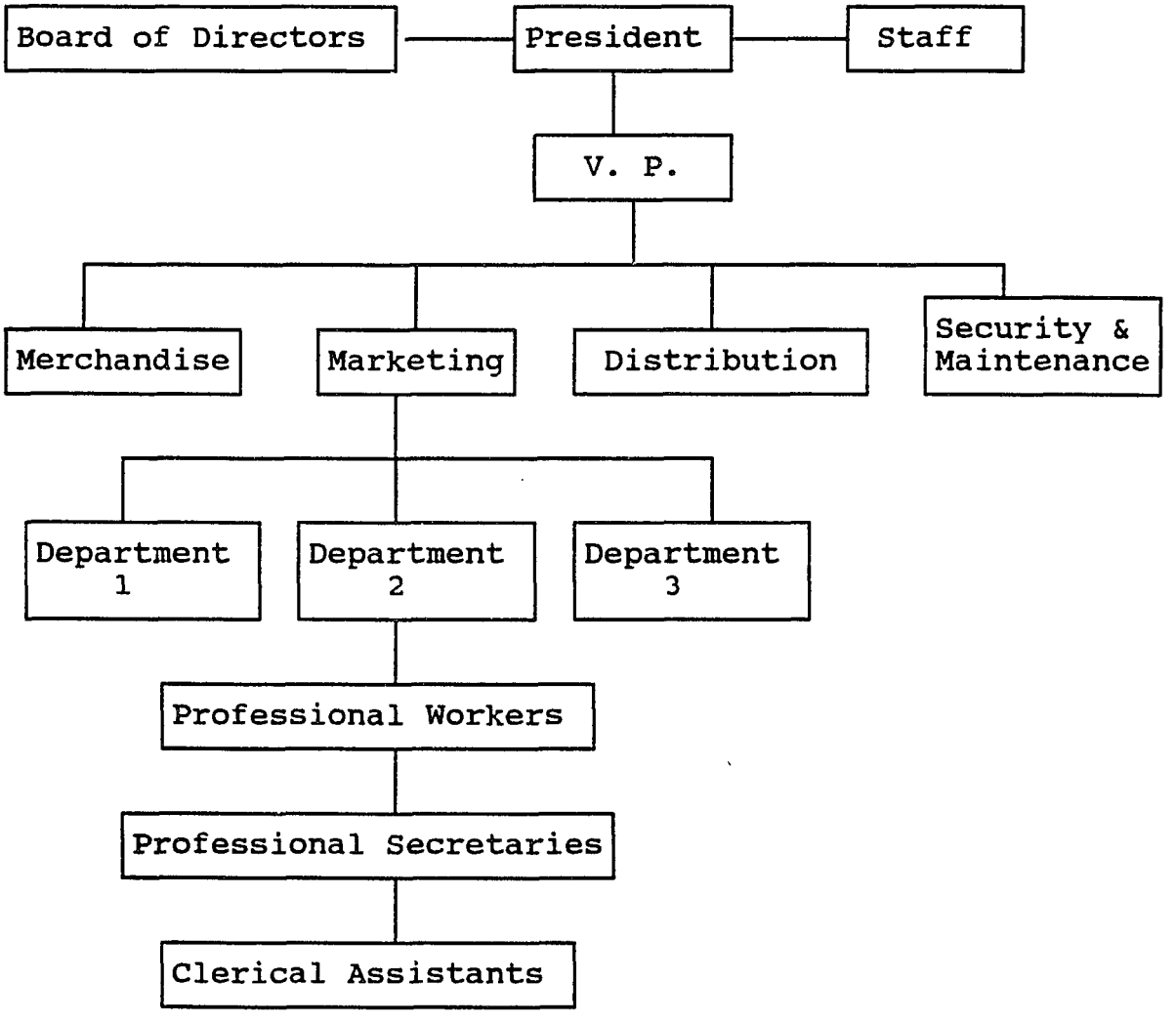


Table II. Differences Between the Sixteen Versions

	Leader's Behavior	Leader's Personal Characteristic Information	Leader's Gender
Version 1	Positive	Positive	Male
Version 2	Positive	Positive	Female
Version 3	Positive	Negative	Male
Version 4	Positive	Negative	Female
Version 5	Positive	No information	Male
Version 6	Positive	No information	Female
Version 7	Negative	Positive	Male
Version 8	Negative	Positive	Female

Table II. Differences Between the Sixteen Versions (Continued)

	Leader's Behavior	Leader's Personal Characteristic Information	Leader's Gender
Version 9	Negative	Negative	Male
Version 10	Negative	Negative	Female
Version 11	Negative	No information	Male
Version 12	Negative	No information	Female
Version 13	No Information	Positive	Male
Version 14	No Information	Positive	Female
Version 15	No Information	Negative	Male
Version 16	No Information	Negative	Female

Subjects then were instructed to answer the following two sets of questions.

The first set of questions were to assess perceived leadership effectiveness. The following questions were used:

(1) How productive do you think this department is now, (From 1 - "very productive" to 5 - "not at all productive").

(2) What will be the future productivity of this department under this manager? (from 1 - "very good" to 5 - "very bad").

(3) How satisfied do you think the employees in this department are now? (from 1 - "very satisfied" to 5 - "not at all satisfied").

(4) What will be the future satisfaction of this department under this manager? (from 1 - "very satisfied" to 5 - "not at all satisfied").

(5) To what extent do you think this manager should be considered for a raise or a promotion? (from 1 - "very much" to 5 - "very little").

(6) How do you think this manager's boss would evaluate his (her) behavior? (from 1 - "very effective" to 5 - "not at all effective").

(7) How would you like to work for this manager? (from 1 - "very much" to 5 - "not at all").

(8) All in all, how effective do you think this manager's behavior is? (from 1 - "very effective" to 5 - "not at all effective").

(9) What is (are) your reason(s) for answering Question (8) the way you did? (open-ended question).

The second set of questions was used to check the amount of subjects' recall of the factual information in the scenarios. The following questions were used:

(1) What was the highest education Mr. (Ms.) Green attended to and graduated from:

high school	college	graduate school	not known

(2) What was Mr. (Ms.) Green's position last year in the Ring Telephone Company?

clerk	first level manager	top manager	not known

(3) Was Mr. (Ms.) Green accepted for the managerial position at Edison Telephone Company?

yes	no	not known

(4) How did Mr. (Ms.) Green first contact his (her) employees?

called a staff meeting	sent memos to the staff	called the staff on the telephone	not known

(5) Did Mr. (Ms.) Green provide each of his (her) employees with a detailed description of each

employee's functions?

yes no not known

The first eight questions were used before, by other researchers, to determine leadership effectiveness (Bartol & Butterfield, 1976; Butterfield & Powell, 1981).

Demographic questions closed the questionnaires. These questions would include the following information about each subject: gender, age, education, average annual income in the parental family, marital status, dual-career family, total full-time work experience, total years with the present organization, full-time employment in the present organization, position in the present organization, annual salary and level of interaction with men and women superiors.

The rationale for choosing these demographic questions was given previously in this paper.

Half of the subjects were first given Schein's Descriptive Index and the MFRQ and then the scenario and the leadership effectiveness questionnaire, while the order was reversed with the other half. This was done in order to counterbalance tendencies of responses to one questionnaire to lead to some kind of bias in the responses to the following instrument.

Subjects' anonymity was protected, since they were asked not to fill out their names. Upon completion of the questionnaire, subjects were debriefed as to the actual nature of the study, and they were promised a summary of the findings at the end of the semester (Appendix IV).

Thus, the design used in this study is a between-subjects design. Each subject was confronted with only one version involving only one manager (a male for some subjects and a female for others). From the subjects' perspective, their task is to assess leadership effectiveness. On the cover sheet they got, it was written that the present study attempts to investigate perception of leadership effectiveness). They were ignorant as to the experiment's hypotheses that focuses on the sex variable, personal characteristic information variable and the behavioral variable. A between-subjects design was chosen for the following reasons: (1) the subject cannot perceive the nature of the manipulated variables, thus, he or she is less likely to find out about the real purpose of the study, and (2) carry-over effects which are very likely to occur in a within-subjects design, do not occur in a between-subjects design.

Pilot Studies

To make sure that what is considered by this researcher as positive personal characteristic information

is perceived by others as positive (and the same with negative information), and also to make sure that what is considered by this researcher as positive behavior is perceived by others as positive (and the same with negative behavior), 2 pilot studies were conducted prior to the beginning of the actual study.

In the first pilot study, 59 Introduction to Psychology students were randomly assigned to two groups: Group 1 (n=29) received the positive managerial behavioral scenario, while Group 2 (n=30) received the negative managerial behavioral scenario. Table III represents the t-test for the composite score (of the eight questions that represent leadership effectiveness).

The conclusion drawn from these results is that the leader in the positive scenario was perceived as significantly more effective than the leader in the negative scenario. A t-test was also taken for each of the eight questions that represent perceived leadership effectiveness. The results from this test revealed that each question was significantly different between the two groups.

In the second pilot study, 47 Introduction to Psychology students were randomly assigned to two groups: Group 1 (n=23) received the positive personal characteristic information scenario, while Group 2 (n=24) received the negative personal characteristic information scenario.

Table III. T-Test for the Composite Score

	Mean	SD	T	Significance of T
Group 1	2.2	.74	-5.05	.00
Group 2	3.4	1.04		

[a] score of 1 represents "very effective," while score of 5 represents "not at all effective."

Table IV presents the t-test for the composite score.

The conclusion drawn from these results is that the leader in the positive scenario was perceived to be significantly more effective than the leader in the negative scenario.

Statistical Analyses

With regard to the 92-item Schein Descriptive Index, an intraclass correlation coefficients (r') from two randomized-groups analyses of variances were computed in order to determine the degree of similarity between the descriptions of men and managers and between the descriptions of women and managers. The classes, or groups, were the 92 descriptive items. In the first analysis, the scores within each class were the mean item ratings of the descriptions of men and managers, and in the second analysis, they were the mean item ratings of the descriptions of women and managers (Brenner, et al., 1989; Schein, 1973, 1975; Schein & Mueller, in press). According to Hays (1963), the larger the value of r', the more similar observations in the same class tend to be. Thus, the smaller the within-item variability, relative to the between-item variability, the greater the similarity between the mean item ratings of either the descriptions of men and managers or those of women and managers.

Table IV. T-Test for the Composite Score

	Mean	SD	T	Significance of T
Group 1	2.3	.69	-3.54	.02
Group 2	2.8	.80		

[a] score of 1 represents "very effective," while score of 5 represents "not at all effective."

With regard to the Male-Female Relations Questionnaire (MFRQ), the questionnaire is divided into 3 independent scales: Social Interaction, Marital Roles, and a third scale unique to each sex. For males, the third scale is labeled Expressivity, and for females the third scale is labeled Male Preference. The responses to the statements that make up each scale were averaged in order to determine the total score for each individual on each scale. This total score represents how conservative/liberal the respondent is in his views.

With regard to the 16 versions, two analyses of variance were performed on the data: A 2 x 2 x 3 and a 2 x 3 x 2. This was done in order to determine whether leader's sex and/or leader's personal characteristic information and/or leader's behavioral information have an influence on the attribution toward male and female leaders. A 2 x 3 x 3 analysis of variance could not be performed, in this study, because of the missing information in one of the cells, as it is shown in Table V.

The following results were expected:

(1) A main effect for leader's behavior. A main effect for leader's behavior was expected regardless of leader's sex. So, under conditions of positive leadership behavior (Versions 1, 2, 3, 4, 5 and 6), it was expected that both male and female leaders

Table V. Analyses of Variance

Female Leader

Leader's Behavior	Leader's Personal Characteristic Information: Positive	Negative	No
Positive	(+)(+)	(+)(-)	(+)
Negative	(+)(-)	(-)(-)	(-)
No	(+)	(-)	/////

Male Leader

Leader's Behavior	Leader's Personal Characteristic Information: Positive	Negative	No
Positive	(+)(+)	(+)(-)	(+)
Negative	(-)(+)	(-)(-)	(-)
No	(+)	(-)	/////

will be perceived positively. Likewise, under conditions of negative leadership behavior (Versions 7, 8, 9, 10, 11 and 12), it was expected that both male and female leaders will be perceived negatively.

(2) A main effect for leader's personal characteristic information. A main effect for leader's personal characteristic information was expected regardless of leader's sex. So, under conditions of positive personal characteristics information (Versions 13 and 14), it was expected that both male and female leaders will be perceived positively. Likewise, under conditions of negative personal characteristics information (Versions 15 and 16), it was expected that both male and female leaders will be perceived negatively.

(3) No main effect for leader's sex. No main effect for leader's sex was expected because no differences in attributions were expected between male and female leaders. This point is interesting, since I did expect to find (from Schein Descriptive Index and the Male-Female Relations Questionnaire) sex-role stereotypical attitudes among men and women, but I also expected that the effect of these attitudes on attribution

of leadership effectiveness will disappear once other information is given about the leader.

(4) No interaction effect between leader's personal characteristic information and leader's behavior. No interaction effect between leader's personal characteristic information and leader's behavior was expected because the effect of the personal characteristic information was expected to depend on the nature of leader's behavior. In other words, when the personal characteristic information is positive and the behavior is also positive (Versions 1 and 2), the leader was expected to be perceived positively. When the personal characteristic information is negative and the behavior is positive (Versions 3 and 4), the leader was still expected to be perceived positively. But when the behavior is negative and the personal characteristic information is positive (Versions 7 and 8) or negative (Versions 9 and 10), the leader was expected to be perceived negatively. Thus, it was expected that the behavioral information will have a greater influence on the attribution, compared to the personal characteristic information, as it is shown in Table VI. The rationale for this expectation is that people can

Tale VI. Expected Results

Version	Leader's Behavior	Leader's Personal Characteristic	Predicted Evaluation
1	Positive	Positive	Positive
2	Positive	Positive	Positive
3	Positive	Negative	Positive
4	Positive	Negative	Positive
7	Negative	Positive	Negative
8	Negative	Positive	Negative
9	Negative	Negative	Negative
10	Negative	Negative	Negative

see behavior easily, and so they can evaluate it. Also, leader's behavior has a direct influence on people, more than leader's personal characteristics, thus, behavior, for them, is considered the "bottom line."

(5) No interaction effect between leader's sex and leader's behavior. No interaction effect was expected between leader's sex and leader's behavior because it was expected that when leader's behavior is positive and there is no information about the personal characteristics (Versions 5 and 6), the leader is going to be perceived positively, regardless of his/her sex. Likewise, when the behavior is negative and there is no information about leader's personal characteristics (Versions 11 and 12), the leader was expected to be perceived negatively, regardless of his/her sex. Table VII illustrates the expected results.

(6) No interaction effect between leader's sex and leader's personal characteristic information. No interaction effect was expected between leader's sex and leader's personal characteristic information because it was expected that when leader's personal characteristic information is positive and no information is available about

Table VII. Expected Results

Version	Leader's Behavior	Leader's Personal Characteristic	Predicted Evaluation
5	Positive	No Information	Positive
6	Positive	No Information	Positive
11	Negative	No Information	Negative
12	Negative	No Information	Negative

leader's behavior (Versions 13 and 14), the leader is going to be perceived positively, regardless of his/her sex. Likewise, when the information is negative and no information is available about leader's behavior (Versions 15 and 16), the leader is going to be perceived negatively, regardless of his/her sex. Table VIII illustrates the expected results.

A 2 x 2 x 3 and a 2 x 3 x 2 analyses of variance were used to test the effects of the experimental variables (leader's sex, leader's personal characteristic information and leader's behavior) on evaluations of leadership effectiveness.

A Sheffé test was used in order to determine the difference between the groups. Since the Sheffé test measures statistical differences between means, it was also used to determine what portion of the variance was due to leader's sex, what portion was due to leader's personal characteristic information and what portion was due to leader's behavior.

Finally, a multiple regression analysis was used to determine if subjects' demographic characteristics affect their attributions about male and female leaders. The demographic characteristics that were examined are rater's sex, age, education, average annual income in his/her

Table VIII. Expected Results

Version	Leader's Behavior	Leader's Personal Characteristic	Predicted Evaluation
13	No Information	Positive	Positive
14	No Information	Positive	Positive
15	No Information	Negative	Negative
16	No Information	Negative	Negative

parental family, marital status, dual career family, total full-time work experience, total years with the present organization, full-time employment, position in the organization, annual salary and level of interaction with male and female superiors.

RESULTS

In investigating sex-role stereotypes, two hypotheses were tested in the present study:

1. Men will perceive successful managers as possessing characteristics that are more commonly associated with men than with women.
2. Women will perceive successful managers as possessing characteristics that are commonly associated with both men and women.

Two instruments were used to test these hypotheses: Schein Descriptive Index and the Male-Female Relations Questionnaire (MFRQ).

Schein Descriptive Index

3 intraclass correlations coefficients (r′) were calculated: (1) r′ based on the data obtained from all respondents, (2) r′ based on the data obtained from male respondents, and (3) r′ based on the data obtained from female respondents. These intraclass correlation

coefficients (r′) are based on 6 Oneway ANOVAs that were computed. Based on the intraclass correlation coefficients, one can conclude about the resemblance in perception between men and managers and between women and managers. Table IX presents 2 Oneway ANOVAs (one for Men and Managers, and the other for Women and Managers) that were computed on the data taken from all respondents. The intraclass correlation coefficients (r′) were derived directly from the ANOVAs ($r' = \frac{MSB - MSW}{MSB + MSW}$) and are presented on the right side of the table

Table X presents 2 Oneway ANOVAs (one for Men and Managers and one for Women and Managers) that were computed on the data taken from male respondents. The value of r′ is presented on the right side of the table.

Table XI presents 2 Oneway ANOVAs (one for Males and Managers and one for Females and Managers) that were computed on the data taken from female respondents. The value of r′ is presented on the right side of the table.

As it can be seen from Tables X and XI, there is a significant difference between how male respondents perceive managers and how female respondents perceive managers. For the male respondents, there was a significant resemblance between the ratings of men and managers ($r' = .42$, $p < .00$), while there was a nonsignificant resemblance between the

Table IX. Analysis of Variance - All Respondents

Men and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	41.64	.46	3.15	.00	r' = .53
Within Groups	91	13.22	.14			
Total	182	54.87				

Women and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	30.82	.34	1.69	.01	r' = .26
Within Groups	91	18.18	.20			
Total	182	49.00				

Table X. Analysis of Variance - Male Respondents

Men and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	17.26	.44	2.46	.00	r'= .42
Within Groups	91	7.19	.18			
Total	182	24.45				

Women and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	9.46	.24	1.07	.42	r'= .02
Within Groups	91	9.08	.23			
Total	182	18.53				

Table XI. Analysis of Variance - Female Respondents

Men and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	17.93	.46	2.89	.00	r' = .48
Within Groups	91	6.35	.16			
Total	182	24.29				

Women and Managers

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	F Prob	Intraclass Correlation Coefficient
Between Groups	91	17.67	.45	2.29	.00	r' = .38
Within Groups	91	7.91	.20			
Total	182	25.58				

ratings of women and managers ($r' = .02$, $p < .42$). This finding confirms the first hypothesis in the present study that states that men will perceive successful managers as possessing characteristics that are more commonly associated with men than with women.

For the female respondents, there was also a significant resemblance between the ratings of men and managers ($r' = .48$, $p < .00$) and a significant resemblance between the ratings of women and managers ($r = .38$, $p < .00$). This finding confirms the second hypothesis presented in this study that states that women will perceive successful managers as possessing characteristics that are commonly associated with both men and with women.

Comparing the male respondents' and female respondents' results to the results that were obtained from all respondents, one can see that there is a difference in the intraclass correlation coefficient between the 3 groups. For all respondents, there was a significant correlation between the ratings of men and managers ($r' = .53$, $p < .00$) and between the ratings of women and managers ($r' = .26$, $p < .01$). Notice that the intraclass correlation coefficient is much higher for men and managers than for women and managers. Thus, for this group of respondents, managers were perceived closer to men than to women.

Male-Female Relations Questionnaire (MFRQ)

The Male-Female Relative Questionnaire was the second instrument used to assess sex-role stereotypical views. With regard to the Male-Female Relations Questionnaire (MFRQ), the Male Forms and the Female Forms were analyzed separately. Within each form, 3 separate averages were computed, one for each scale. Table XII presents all the averages that were computed.

In the MFRQ, a score of "1" represents the extreme sex-role traditional response, while a score of "5" represents the extreme liberal response. The purpose of the Social Interaction Scale is to assess men's and women's tendency to modify their behavior to conform to sex-role expectations in social interactions. On this scale, men scored closer to 1 ($m = 3.48$) compared to women ($m = 3.71$), but the difference between the two groups was not significant ($t = -1.00$, $df = 176$, $p > .05$).

The Marital Role Scale focuses mainly on the relative power in decision-making that the respondent preferred to be allocated to husband and wife. Some other items in this scale focus on the division of domestic responsibilities. Once again, as in the previous scale, in this scale men hold slightly more sex-role traditional views ($m = 3.48$) compared to women ($m = 3.65$), but the difference was not significant ($t = -.77$, $df = 176$, $p > .05$).

Table XII. Averages - Male and Female Forms

	Male Form	Female Form
Social Interaction	3.48	3.71
Marital Roles	3.48	3.65
Expressivity (Male)/ Male Preference (Female)	3.32	2.61

The only scale where women's scores represent a more sex-role traditional response compared to men's score is the third scale. For women the third scale, labeled Male Preference, contained items describing liking for masculine, dominant men, and the results showed that women, overall, do like men that are more masculine and dominant than feminine and passive ($m = 2.61$). For the men, the third scale, labeled Expressivity, contained items describing unwillingness to express emotional upset overtly and to be thought of as sensitive. In this scale men's responses were not as sex-role traditional as in previous scales. Here men scored on the average 3.32, which means that they do not want to be seen as sensitive, but they also do not want to be seen as insensitive. In this scale, the difference between men and women was significant ($t = 3.94$, $df = 176$, $p < .05$).

Perception of leadership Effectiveness

A third hypothesis was tested in the present study. It states that the effect of sex-role stereotypes on attributions about leadership effectiveness will depend on the availability of information about the leader. In order to test this hypothesis, 16 versions were given to subjects in which the information about the leader's gender, personal characteristics and behavior was manipulated.

Two 3-way ANOVAs were computed (a 2 x 2 x 3 and a 2 x 3 x 2) and are shown in Table XIII.

The results of the analyses of variance indicated:

1. A significant main effect for leader's behavior ($F = 74.94$, $df = 2$) and ($F = 193.12$, $df = 1$), thus supporting hypothesis 3b.
2. A significant main effect for leader's personal characteristic ($F = 17.45$, $df = 1$) and ($F = 8.70$, $df = 2$), thus supporting hypothesis 3a.
3. No main effect for leader's sex ($F = .82$, $p < .05$) and ($F = .43$, $p < .05$), thus supporting hypothesis 3.
4. No significant 2- or 3-way interactions, more specifically, no significant interaction between leader's sex and leader's behavior ($F = 1.50$, $p < .05$) and ($F = 3.63$, $p < .05$); no significant interaction between leader's sex and leader's personal characteristics ($F = .70$, $p < .05$) and ($F = .32$, $p < .05$); no significant interaction between leader's behavior and leader's personal characteristics ($F = .74$, $p < .05$); and ($F = 2.24$, $p < .05$); finally, no significant 3-way interaction between leader's sex, behavior and personal characteristics ($F = .05$, $p < .05$) and $F = .25$, $p < .05$).

Table XIII. Analysis of Variance

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects	110.11	4	27.53	43.40	.00
LDRSEX	.52	1	.52	.82	.37
LDRBEH	95.06	2	47.53	74.94	.00
LDRPERS	11.07	1	11.07	17.45	.00
2-way Interactions	3.22	5	.64	1.01	.41
LDRSEX LDRBEH	1.90	2	.95	1.50	.23
LDRSEX LDRPERS	.44	1	.44	.70	.40
LDRBEH LDRPERS	.94	2	.47	.74	.48
3-way Interactions	.07	2	.03	.05	.95
LDRSEX LDRBEH LDRPERS	.07	2	.03	.05	.95
Explained	113.40	11	10.31	16.25	.00
Residual	79.91	126	.63		
Total	193.31	137	1.41		

Table XIII. Analysis of Variance (Continued)

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects	125.32	4	31.33	54.21	.00
LDRSEX	.25	1	.25	.43	.51
LDRBEH	111.62	1	111.62	193.12	.00
LDRPERS	10.06	2	5.03	8.70	.00
2-way Interactions	4.78	5	.96	1.65	.15
LDRSEX LDRBEH	2.10	1	2.10	3.63	.06
LDRSEX LDRPERS	.37	2	.19	.32	.72
LDRBEH LDRPERS	2.59	2	1.30	2.24	.11
3-way Interactions	.29	2	.15	.25	.78
LDRSEX LDRBEH LDRPERS	.29	2	.15	.25	.78
Explained	130.40	11	11.85	20.51	.00
Residual	79.18	137	.58		
Total	209.58	148	1.42		

The Sheffè test which was used revealed that the composite scores of all 8 questions was significantly different at .05 level between:

a. version 1 (which includes positive leadership behavior) and versions 7, 9, 10, 11 (all 4 versions include negative leadership behavior);

b. version 2 (which includes positive leadership behavior) and versions 7, 9, 10, 11 (all 4 versions include negative leadership behavior);

c. version 3 (which includes positive leadership behavior) and versions 9, 10 ((both include negative leadership behavior);

d. version 4 (which includes positive leadership behavior) and versions 9, 10 (both include negative leadership behavior);

e. version 5 (which includes positive leadership behavior) and versions 9, 10 (both include negative leadership behavior);

f. version 6 (which includes positive leadership behavior) and versions 9, 10 (both include negative leadership behavior).

These findings support this researcher's expectations that behavioral information will have a greater

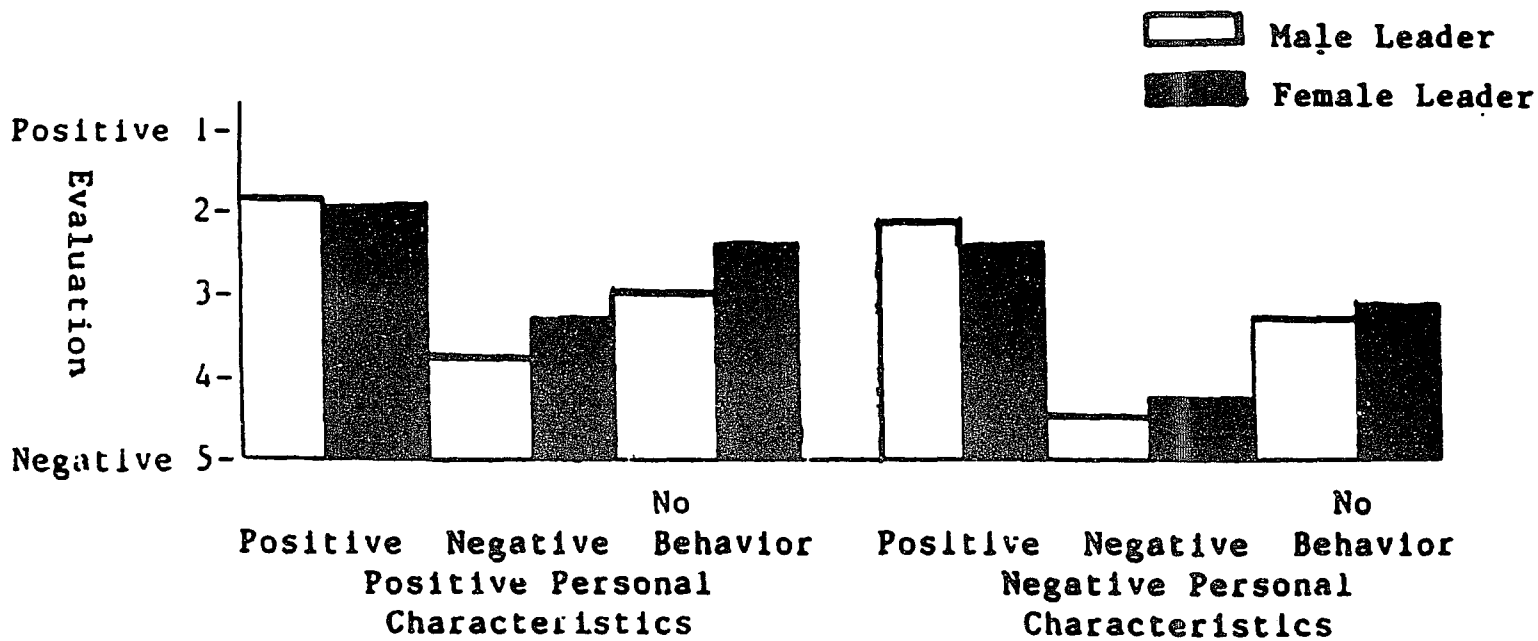
influence on the attribution, compared to leader's sex and leader's personal characteristic information.

Figure I presents the cell means of the interactions of leadership effectiveness. The following conclusions are drawn from these results:

1. Leader's gender did not influence perception of leadership effectiveness.
2. Leader's behavioral information had a great impact on perception of leadership effectiveness.
3. Leader's personal characteristic information had an impact on perception of leadership effectiveness.
4. The largest difference in evaluation between male and female leaders occurred when no information was available about the leader. Again supporting this researcher's belief that when no information is presented to perceivers about their leaders, it forces them to rely on their sex-role stereotypes when evaluating their leader, leading to differences in evaluation between male and female leaders.

Finally, a multiple regression analysis was performed to determine if subjects' demographic characteristics affect their attributions about male and female leaders. This analysis did not yield any significant results at the .05 level.

Figure I. Cell Means of the Interaction Between Leader's Sex, Behavior and Personal Characteristics.



DISCUSSION

The major purpose of the present study was to investigate if women as leaders are perceived and evaluated differently than men as leaders.

To investigate this issue, one needs to address first the issue of sex-role stereotypes. It is important to look at sex-role stereotypes because it affects expectations, and expectations affect attributions people make.

Sex-role Stereotypes

One of the most notable results of this study, with regard to sex-role stereotype, is the disparity between female respondents and male respondents concerning the issue of similarity between women and managers. The results that were obtained by using the Schein 92-item descriptive index, confirm the first two hypotheses of the present study. That is, men perceived successful managers as possessing characteristics that are more commonly associated with men than with women, while women perceived successful managers as possessing characteristics that are commonly associated with both men and women. These findings contradict some previous findings (Cann & Siegfried, 1987; Geis, et al., 1985; Porter, et al., 1983; Powell & Butterfield, 1979;

Powell & Butterfield, 1984, 1986; Schein, 1973, 1975; Sutton & Moore, 1985), but all of these previous findings were obtained by using students as the sample, thus limiting the external validity of these findings. In the present research, one hundred and eighty-four employees were used, who came from different departments and different levels in the organization. This fact lends support to the external validity of the present findings. Consistency and external validity of the present findings is enhanced also because of the fact that the present findings support other previous findings (Brenner, et al., 1989; Dubno, 1985; Heilman, et al., 1989; Schein, et al., 1989), who used different samples (students and employees), at different times in different settings.

An interesting point to be raised here is that even though the findings of the present study are consistent with previous findings, the intraclass correlation coefficients (r') obtained are different between the studies. Table XIV presents the comparison between the present study (1992), which used male and female employees, Brenner, et al.'s study (1989), which used male and female managers, Heilman, et al.'s study (1989), which used male employees, and Schein, et al.'s study (1989), which used male and female students.

Table XIV. Intraclass Coefficients Between Studies

	Men and Managers	Women and Managers
Male respondents	.42 (.72; .70; .54)	.02 (-.01; .11; -.24)
Female respondents	.48 (.59; .51; no data)	.38 (.52; .43; no data)

[a] Values in parentheses indicate corresponding results of Brenner, et al. (1989), Schein, et al. (1989) and Heilman, et al. (1989), respectively.

Table XIV reveals that:

1. When comparing men and managers:
   a. for male respondents: throughout all these studies, there is a close resemblance between the description of men and managers, but in the present study there seems to be a lesser tendency to perceive managers as close to men as they were perceived in previous studies. One possible explanation may be that even though men still hold on to sex-role stereotypes, which in turn leads them to sex-type the managerial role, they may not hold on to these stereotypes in such a rigorous manner as they did in the past.
   b. for female respondents: in all of these studies, they perceived some common characteristics between men and managers. In the present study, the resemblance is slightly lower than in previous studies.
2. When comparing women and managers:
   a. For male respondents: throughout all of these studies there is a nonsignificant resemblance between the ratings of women and managers. Male respondents in all studies do not view managers as possessing characteristics,

attitudes and temperaments ascribed to women.

b. For female respondents: in all studies there was a significant resemblance between the ratings of women and managers, but it seems that in the present study, the level of similarity is slightly lower. These results strongly confirm the argument that women in the 80's held more liberal views than women in the 70's.

Thus, it seems that in the present study men still hold sex-role stereotypical views about men, women and managers. As a result, they view managers as possessing characteristics, attitudes and temperaments more commonly associated to men than to women. Women, on the other hand, no longer sex-type the managerial job, so they view managers as possessing characteristics, attitudes and temperaments associated with both men and women. But even though it seems that women today are more liberal than men and are also more liberal than women in the 70's, still they perceive managers as more similar to men ($r' = .49$) than to women ($r' = .39$). Thus, it seems that it is very difficult to change completely the traditional sex-role stereotypical views that associate men with leadership positions, and not women.

The other instrument, that was used in the present study, to investigate sex-role stereotypes among men and women was the Male-Female Relations Questionnaire. This instrument yielded mostly non-significant differences between men and women, but the data pattern suggests that there was a tendency for men to be more conservative than women.

One explanation for the differences between the findings obtained from Schein's Descriptive Index and the findings obtained from the Male-Female Relations Questionnaire is that these two scales tap two different aspects of gender roles. Schein's Descriptive Index focuses on the work domain, while the Male-Female Relations Questionnaire focuses on the personal domain. Notice that in both scales a tendency for holding conservative views was found among the male sample, but it seems that men are more conservative when facing work issues, as opposed to personal issues. Women were found in both scales to hold more liberal views compared to men. Thus, they tend to be liberal when facing both work and personal issues. The other findings that were obtained from the Male-Female Relations Questionnaire (the third scale) revealed that the women in this sample like men who are masculine and dominant, and that the men in this sample do not want to be seen as sensitive and also do not want to be seen as insensitive.

After recognizing that the male respondents in the present study hold stereotypical attitudes, while the female respondents do not, especially with regard to work issues, the next issue to be considered is the effect that these attitudes had on the respondents' perception of leadership effectiveness in the presence of information about the leader.

Attribution of Leadership Effectiveness About Male and Female Leaders

The major purpose of the present study was to investigate whether female leaders are perceived and evaluated as male leaders. This is especially important for two main reasons:

1. If women leaders are perceived differently than men leaders, it may explain in part the discrimination that exists today against women leaders. As was mentioned before, in the introduction section of this paper, women make up less than 5 percent of senior managers, they are more likely to be found in jobs that traditionally have been regarded as "feminine," and they are less likely to be advanced (Catalyst, 1991).
2. The general consensus after reviewing the literature is that men and women who occupy leadership positions do not differ in their

interpersonal-oriented or task-oriented leadership styles (Adams, 1978; Bartol, 1978; Bartol & Martin, 1986; Bass, 1981; Butterfield & Powell, 1981; Cullen & Perrene, 1981; Day & Stogdill, 1972; Dobbins & Platz, 1986; Eagly & Johnson, 1989; Lee and Alvares, 1977; Nieva & Gutek, 1981; Osborn & Vicars, 1976; Petty & Bruning, 1980; Petty & Lee, 1975). Some researchers (Morrison, et al., 1987) even believe that women have an advantage over men because they adapt more easily than men and because it is easier to be with them as compared to being with men.

Accordingly, these researchers believe that women can be as successful or even more successful leaders compared to men. Since it seems that female leaders' overall behavior is like male leaders, it is logical to assume that they are rated equally. But this is not the case; female leaders consistently are rated lower than male leaders (Adams, 1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Effertz, 1974; Rosen & Jerdee, 1973, 1974a; Schein, 1973). One explanation for this finding is that women as leaders are perceived differently than men as leaders, which leads to differences in evaluations of male and female leaders.

As discussed before, Lord (1985) applied the attribution theory in his social information processing theory (SIP). He believed that people judge what is suitable and what is not suitable for leadership based on the observation of prototypical attributes. When leadership schema are created, they influence perception. According to this line of thinking, sex-role stereotypical attitudes affect attribution of leadership effectiveness. Thus, one would expect that the male sample in the present study which was found to hold sex-role stereotypical attitudes, will evaluate positively a male leader (since it is consistent with the common sex-role stereotype), while it will evaluate negatively a female leader (since women are not perceived as leaders). This expectation will be consistent with previous findings (Adams, 1978; Bartol & Butterfield, 1976; Deaux & Emsuiller, 1974; Forsyth, et al., 1985; Frank, 1988; Jacobson & Effertz, 1974; Rosen & Jerdee, 1973, 1974a; Schein 1973). On the other hand, since it was found that the female sample, in the present study, does not hold stereotypical attitudes, one would expect that it will evaluate positively both a male and a female leader.

But the relationship between attitudes and attribution is not so simple. It is recognized today that situational factors should be taken under consideration when investigating attributions (Deaux & Lewis, 1984; Dobbins &

Platz, 1986; Hollander & Yoder, 1980; Locksley, et al., 1980; Osborn & Vicars, 1976; Swim, et al., 1989). It is concluded by these researchers that when no information is presented about the target person (in this case a male or a female leader), raters are forced to fill in the gaps with some kind of available information. This information is taken by the rater from his or her pre-existing sex-role stereotypes, and since male sex-role stereotypes are consistent with leadership qualities and female sex-role stereotypes are not consistent with leadership qualities, male leaders are going to be evaluated positively, while female leaders are going to be evaluated negatively. But if, on the other hand, information is presented about the target person, raters do tend to use their stereotypes less in their attribution; they tend to base their attribution more on the information that is presented about the target person. This rationale led to the third hypothesis of the present study.

3. The effect of sex-role stereotypes on attributions about leadership effectiveness will depend on the availability of information about the leader. Specifically:

(a) The effect of sex-role stereotypes on attributions about leadership effectiveness will decrease

when personal characteristics information about the leader is available.

(b) The effect of sex-role stereotypes on attributions about leadership effectiveness will decrease when behavioral information about the leader is available.

The results of the present study confirm this third hypothesis, which confirms, in turn, the importance of presenting information to the raters in order to decrease the effect of sex-role stereotypes on attribution. These findings lend support to the argument that situational factors should not be ignored when investigating attributions (Deaux & Lewis, 1984; Dobbins & Platz, 1986; Hollander & Yoder, 1980; Locksley, et al., 1980; Swim, et al., 1984).

Even though the male respondents, in the present study, hold sex-role stereotypical attitudes, they perceived male and female leaders in a similar manner. Both male and female respondents' attributions about leadership effectiveness were based on the information available about the leader (i.e., leader's personal characteristic information and leader's behavior), not on the leader's sex. No main effect for leader's sex was found, in the present study, while a significant main effect was found for leader's personal characteristic and leader's behavior.

More specifically, when the leader's behavior was positive (versions 1, 2, 3, 4, 5, 6), he/she was perceived more positively compared to when the leader's behavior was negative (versions 7, 8, 9, 10, 11, 12). When asked for the reasons for their evaluations (question 9 in the Leadership Effectiveness versions), their most common responses were as follows:

a. For Positive Behavior Versions:
    1. he/she made it known to his/her staff what was and is expected of them (76%);
    2. he/she is efficient, highly organized, competent and goal directed (65%);
    3. he/she clarifies roles and responsibilities (52%);
    4. he/she uses good communication (51%).

b. For Negative Behavior Versions:
    1. he/she not showing any concern for workers; nor does he/she show any respect for them (88%);
    2. he/she does not communicate well; there is no personal contact with employees (63%);
    3. he/she is not involved at all with the workers (60%);
    4. he/she has unrealistic demands (58%).

Notice that even though these 12 versions include both a male and a female leader, both positive and negative personal characteristic information about the leader, the comments made by raters have focused only on the behavior of the leader. If the behavior was perceived as positive, the leader was evaluated positively; if the behavior was perceived as negative, the leader was evaluated negatively. The behavioral information had a greater influence on the attribution than leader's sex and leader's personal characteristic information. This confirms this researcher's expectations.

When the leader's personal characteristic information was positive (versions 13, 14), he/she was viewed positively while when it was negative (versions 15, 16), he/she was viewed negatively. When asked for the reasons for their evaluations, their most common responses were as follows:

a. for Positive personal Characteristic Versions:
    1. he/she has a lot of work experience and a Master's degree which should give him/her good background for success (55%);
    2. he/she seems to be well-liked and respected (41%);

b. for Negative Personal Characteristics Versions:

1. he/she has no college degree, thus he/she might be limited (60%);
2. he/she has been promoted only once, which shows that he/she might not have a great potential to be an effective leader (52%).

Notice that even though these 4 versions include both a male and a female leader, the comments made by raters have focused only on the nature of the leader's personal characteristics. If the characteristics were positive, the leader was evaluated positively. If the characteristics were negative, the leader was evaluated negatively. Leader's personal characteristic information had a greater influence on the attribution compared to leader's sex.

With regard to the effect of rater's demographic characteristics on attribution, no significant results were obtained. More specifically, rater's sex, age, education, average annual income in his/her parental family, marital status, dual career family, total full-time work experience, total years with the present organization, full-time employment, position in the organization, and annual salary did not have a significant influence on his/her attribution about leadership effectiveness. Another variable that did not have a significant effect on the attribution of leadership effectiveness is the level of interaction between the rater and his/her male and female superiors.

Bringing It All Together

Almost half of the civilian work force consists of women, but only 35 percent of them hold managerial jobs (Naisbitt, 1988), while less than 5 percent of them hold senior managerial jobs (Catalyst, 1991). The discrepancy between the representation of women in the general work force and between their representation in managerial positions is great. Some attribute these discrepancies to women's character in general. They believe that women don't have what it takes to be a manager. For example, they have fear of success, they experience role conflict, and finally, they are unwilling to take risks (Morrison & Von Glinow, 1990). Others attribute this discrepancy to external factors that are beyond women's control, mainly sex-role stereotypes. Women are seen as dependent, passive, fragile and non-aggressive, while men are seen as independent, active emotionally controlled, rational and aggressive (Bardwick & Douvan, 1972; Massengill & DiMarco, 1979; O'Leary & Depner, 1975; Powell & Butterfield, 1979; Schein, 1973, 1975). Female sex-role stereotypes are not consistent with common and acceptable leadership qualities, while male sex-role stereotypes are consistent with leadership qualities, thus leading to discrimination against women in leadership positions.

Some women who succeed to overcome these sex-role stereotype barriers become managers. The important question facing these women is whether they are perceived in the same way or differently, compared to male managers, by their followers. In the past, it was believed that sex-role stereotypes had a direct influence on the attribution people make about their leaders. Thus, if a person holds sex-role stereotypical attitudes, he/she is likely to evaluate a male leader positively and a female leader negatively, since male stereotype fits the managerial role, while female stereotype does not (Kelley, 1973; Lord, 1985). But, today, a more common belief is that situation factors will determine the extent to which sex-role stereotypes will affect attributions about leadership effectiveness. More specifically, it is believed that when there is no information about a leader, the rater is compelled to fill in the gap of missing information. He/she fills in the gap by relying on his/her readily available stereotypes, thus leading to different attributions about male and female leaders. On the other hand, when information does exist about the leader, the rater relies on this information, and not on the stereotypes, for the attribution (Deaux & Lewis, 1984; Deaux & Major, 1987; Dobbins & Platz, 1986; Locksley, et al., 1980; Osborn & Vicars, 1976).

The major purpose of the present study was to investigate the effect of two specific situation variables on attribution about leadership effectiveness of men and women. These variables are leader's behavior and leader's personal characteristics information. But before investigating this issue, another issue was investigated, i.e., the prevalence of sex-role stereotypes among men and women. This issue must be addressed first because of the potential influence that sex-role stereotypes have on attributions.

The findings of the present study with regard to sex-role stereotypes reveal that men still hold on to sex-role stereotypes, especially with regard to work issues, while women hold more liberal views. This difference in attitudes led men to perceive successful managers as possessing characteristics that are more commonly associated with men than women, while women perceived successful managers as possessing characteristics that are commonly associated with both men and women. These findings are consistent with previous findings (Brenner, et al., 1989; Schein, et al., 1989). The fact that different population was used in the present study (employees of a large organization located in New York City, Long island and Westchester), lends external validity to these findings.

After learning that the male respondents, in the present study, hold stereotypical attitudes while the female respondents do not, the issue of the effect of the attitudes on attribution about leadership effectiveness was investigated. As expected, the effect of sex-role stereotypes on attributions about leadership effectiveness depended on the availability of information about the leader. More specifically, when the raters were given information about the leader's personal characteristics and/or about the leader's behavior, the effect of sex-role stereotypes on the attribution decreased. These results confirm the belief that when one attempts to investigate attributions, one should take into consideration situational factors, such as the availability of information about the leader.

At this point, the strengths and weaknesses of the present research should be considered.

The strengths of the present research:

a. Most studies that investigated sex-role stereotypes used a student population as the sample. (Babladelis, et al., 1984, 1989; Cann & Siegfried, 1987; Cecil, et al., 1973; Crocker & McGraw, 1984; Geis, et al., 1985; Lii & Wong, 1982; Porter, et al., 1983; Powell & Butterfield, 1984, 1989; Schein, et al., 1989, 1975, 1973). This fact

limits the external validity of the results obtained in these studies. In the present study employees from different departments in a large organization were used as the sample.

b. Most of the studies that investigated sex-role stereotypes used only one scale. For example, the 92-item Schein Descriptive Index was the only instrument used in several studies (Brenner, et al., 1989; Heilman, et al., 1989; Schein, et al. in press, 1989, 1975, 1973). The present study, for the first time, used two measuring instruments: the Schein Descriptive Index and the male-Female Relations Questionnaire, enabling the researcher to tap two different domains in a person's life: his/her work domain and his/her personal domain.

c. The versions used to describe leadership effectiveness consisted of neutral settings, a neutral company and gave no information about the outcome of the leadership behavior. All of these factors are important because in the past, research found that these factors create bias in raters, thus confounding their responses (Seifert & Miller, 1988).

d. The present research represents one of the first attempts to investigate what <u>specific</u> situational

factors influence attribution. The present researcher concentrated on leader's behavior and leader's personal characteristics information.

Three major weaknesses exist in the present research:

a. Even though the sample used, in the present research, includes employees of a large organization, the readers should be cautioned in generalizing the results to other populations and settings since the people may still be limited, since only one organization was used.

b. In writing the sixteen managerial versions, the present researcher tried to be as realistic as possible, but no matter how realistic the versions were, there still is a difference between writing about a leadership behavior and observing a leadership behavior. Thus, future research should try to attempt to investigate the effect of leader's behavior on attribution by giving subjects the opportunity to interact with a real leader.

c. Finally, the present research investigated only two specific types of information that influence attribution about leadership effectiveness. Future research should investigate other types of information and other situational variables that

may influence perception and evaluation. The more we know about these variables, the more we will be able to decrease the effect of sex-role stereotypes on attribution about male an female leaders.

Overcoming the Barriers for Women's Advancement

If the United States would not have experienced a recession today, the job market would have experienced a shortage in labor due to the low birth rates following the end of the baby boom in 1964. After the recession ends, American companies are expected to experience difficulty in filling jobs in the next few years (Catalyst, 1992). To eliminate some of these difficulties, employees will need to retain skilled and valuable managers. As the proposition of women in management continues to go up (Korn/Ferry International, 1990), retaining female managers will be essential for organizational survival, growth effectiveness and success. But organizational effectiveness does not only depend on its managers' effective behavior, it also depends on the perception of followers about their managers. There is no leadership without followship; if followers do not accept and/or perceive the manager as effective, the manager is not going to be effective.

The present study provided an additional support to the belief that men still hold sex-role stereotypical attitudes. With these attitudes, they are less likely to

accept a female leader and are also less likely to perceive her as effective. Women, on the other hand, are changing. Today, they believe that a leader should have not only characteristics that are associated with men, but also characteristics that are associated with women.

Since half of the working force consists of men, and since the majority of top management positions are filled by men, our society needs to take action to insure that efficient, valuable and effective female leaders will be accepted, appreciated and perceived effectively by their followers.

The following are some strategies to insure advancement of women:

1. The law and the internal corporate changes designed to implement the law - Title VII of the Civil Rights Act of 1964 protects from discrimination in the work place. Although in theory the law applies to all levels, in practice it rarely reaches upper levels and opportunities for subtle discrimination are great. As a result, a new Civil Rights Act of 1991 was proposed. The new law makes it easier for employees to prove discrimination, making it easier for them to win. If they win, they can be awarded both punitive and compensatory damages. As a result of these changes, employers have a strong

incentive to avoid discrimination. (On the Line, 1992). In a separate action, the U.S. Department of Labor, in its 1991 Report on the Glass Ceiling Initiative, grants the Office of Federal Contract Compliance (OFCCP) the authority to conduct "Glass Ceiling Audits" to ensure that employers comply with anti-discrimination laws. If the OFCCP finds irregularities, it may give heavy fines to the organization (On the Line, 1992).

2. Human Resource Professionals (Catalyst, 1992) report some strategies for advancing women in the next five years. Some of these strategies, in order of importance, are: career development (49%), an early identification of high-potential women (21%), targeted recruitment (16%), career and family programs (12%), meeting EEO goals (12%), and job targeting for women (9%). These strategies suggest that companies should take a very general approach to developing women, rather than dealing with each specific barrier to women's advancement that the organization identifies.
3. Some believe that true equality can be achieved only if the differences between men and women are valued equally. For some, that means re-emphasizing women's traditional care-giving role in

the home; for others, it implies putting a greater focus on integrating "feminine" qualities like nurturing and sharing into the workplace (U.S. News and World Report, 91). DuPont, NYNEX and PepsiCo are examples of some of the firms that have instituted programs aimed at helping employees understand and value the differences between men and women.

4. Since people prefer to work with people who are similar to them, male managers prefer to work with other male managers. Studies have shown that top executives tend to promote in their own images, picking people much like themselves (MIS Week, 88). Or, as one executive man said, "Most men still find it easier to work with men. You joke about sports or whatever, and there's no sexual tension" (Executive Female, 1988, p.2). In order to overcome this problem, mentors and sponsors are used in different organizations. Cross-sex-mentor relationships are subjects to sexual innuendo, thus, most organizations prefer to avoid this kind of relationships. But, of course, if an organization uses mentoring or sponsoring, this organization already has to have female managers

who will function as mentors, sponsors or role-models.

5. Today more and more organizations, such as Kodak and GTE, are using training where the goal is to help managers work together within a diverse workplace and also to help them reduce discrimination (Morrison & Von Glinow, 1990).

6. According to the findings of the present study, women can reduce discrimination on an individual basis. That is, each female who acquires a managerial role and/or each female who is already in a managerial role, should concentrate on behaving effectively, because in the present study respondents did not evaluate their leader based on his/her gender, but based on his/her behavior. Morrison, White and Von Velsor add that "to be successful in upper management, women must constantly monitor their behavior, making sure they are neither too masculine nor too feminine" (Psychology Today, p.3). In a discussion that was sponsored by NAFE-National Association for Female Executives (Executive Female, 1988), other behavioral comments were made by different executives about women, such as: "Women have to learn how to stand their ground when arguing a

point. They get rattled too easily and back down" (p.5).

7. In the present study, not only leader's behavior was the basis for raters' attribution about leadership effectiveness, but also leader's personal characteristic information.

Thus, it is recommended by this researcher that before a female leader starts a new relationship with her followers, she should give them some positive background information about herself. This background information can come in many forms, such as a resume, short oral presentation of her biography, written work or art work (if it applies for the job).

It is also recommended by this researcher that both the organization and the women working in it should be responsible for eliminating sex-role stereotypes. The organization can, for example, distribute information about their female leaders, it can develop training programs to help people deal with the diversity in the workplace, and finally, it can encourage an organizational culture that will support female leadership. Female leaders, as mentioned before, also have the potential power to decrease sex-role stereotypes by (a) giving superiors and subordinates as much information as possible about

themselves, and (b) proving their abilities by behaving effectively.

CONCLUSION

Sex-role stereotypes serve as barriers for women who aspire leadership roles. In order to overcome these barriers, more extreme and less extreme solutions were offered, from new legislation to new education and training (Morrison & Von Glinow, 1990), from career development to mentoring and sponsoring (Catalyst, 1992), from restructuring the organization (Rosenbach & Taylor, 1989) to redefining feminine roles and leadership roles (Hollander & Yoder, 1980). These tasks take a long time and are very difficult and complex. Women who today aspire for managerial roles do not have the time and the resource to get involved in such elaborate activities. According to the findings in the present research, women do not need to go to such lengths to overcome these barriers -- what they need to do is to present their followers and superiors with positive background information about themselves and to exhibit effective leadership behavior. Raters relied on the leader's personal characteristics information and on his/her behavior when they evaluated him/her; they ignored his/her sex. To be an effective leader is a difficult task, but it

is easier than trying to restructure the organization or changing legislation, for example. Also, one has more control on his/her behavior than on the organization and/or the society in which he/she lives. If other studies confirm the present study's findings, then a simpler solution is offered to female leaders to overcome the societal barriers. Through giving followers some background personal information about the leader and through exhibiting effective behavior, female leaders will be able to decrease or even eliminate the influence of sex-role stereotypes on attributions about male and female leaders. It should be mentioned here that decreasing and/or eliminating sex-role stereotypes in organizations should be an effort that is shared by the female leaders and by the organization.

Further research should investigate what kind of organizational practices are likely to reduce sex-role stereotypes and their influence on attributions. Further research in a variety of organizations is also necessary in order to fully evaluate the impact of leader's personal characteristic information and leader's behavioral information on followers' attributions about male and female leaders in organizations.

APPENDIX III

Version 1 (A male leader, with positive personal characteristic information and positive behavior):

John Green is 35, married, and lives in the city. He graduated with Honors in his undergraduate studies. He received his Master's degree in Business ten years ago. Since then he has been working in the marketing department of the Ring Telephone Company. Five years ago, he had been promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Mr. Green was not happy since he was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Mr. Green was interviewed. He came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after his arrival, Mr. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which he felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Mr. Green outlined what he expected from each staff member in the immediate future.

Within a few weeks, Mr. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also assigned various projects. He also distributed among the staff memos describing the specific department goals for the coming year. He then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, he began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 2 (A female leader, with positive personal characteristic information and positive behavior):

Joan Green is 35, married, and lives in the city. She graduated with Honors in her undergraduate studies. She received her Master's degree in Business ten years ago. Since then, she has been working in the marketing department of the Ring Telephone Company. Five years ago, she had been

promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Ms. Green was not happy, since she was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Ms. Green was interviewed. She came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after her arrival, Ms. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which she felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Ms. Green outlined what she expected from each staff member in the immediate future.

Within a few weeks, Ms. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also

assigned various projects. She also distributed among the staff memos describing the specific department goals for the coming year. She then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, she began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 3 (A male leader, with negative personal characteristic information and positive behavior):

John Green is 35, married and lives in the city. He graduated high school with average grades. He dropped out of college in his junior year. For ten years he has been working in the marketing department of the Ring Telephone Company. In the last five years, he has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Mr. Green saw this opportunity for advancement and applied for the position. He was interviewed. Even though he did not have prior experience as a top manager, he was accepted for the job.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional

workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after his arrival, Mr. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which he felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Mr. Green outlined what he expected from each staff member in the immediate future.

Within a few weeks, Mr. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also assigned various projects. He also distributed among the staff memos describing the specific department goals for the coming year. He then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, he began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 4 (A female leader, with negative personal characteristic information and positive behavior):

Joan Green is 35, married and lives in the city. She graduated high school with average grades. She dropped

out of college in her junior year. For ten years she has been working in the marketing department of the Ring Telephone Company. In the last five years she has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Ms. Green saw this opportunity for advancement and applied for the position. She was interviewed. Even though she did not have prior experience as a top manager, she was accepted for the job.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after her arrival, Ms. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which she felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Ms. Green outlined what she expected from each staff member in the immediate future.

Within a few weeks, Ms. Green provided each member of the staff with a detailed description of the functions of

each position in the department. Each staff member was also assigned various projects. She also distributed among the staff memos describing the specific department goals for the coming year. She then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, she began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 5 (A male leader, with positive behavior and with no personal characteristic information):

John Green was interviewed for a managerial position in the marketing department of Edison Telephone Company. He was accepted for the job.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after his arrival, Mr. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which he felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated.

At this meeting, Mr. Green outlined what he expected from each staff member in the immediate future.

Within a few weeks, Mr. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also assigned various projects. He also distributed among the staff memos describing the specific department goals for the coming year. He then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, he began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 6 (A female leader, with positive behavior and with no personal characteristic information):

Joan Green was interviewed for a managerial position in the marketing department of Edison Telephone Company. She was accepted for the job.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

A week after her arrival, Ms. Green called a staff meeting, in which all 20 workers participated, to explain the general direction in which she felt the marketing department should move. After three days another meeting was held, in which only the professional staff participated. At this meeting, Ms. Green outlined what she expected from each staff member in the immediate future.

Within a few weeks, Ms. Green provided each member of the staff with a detailed description of the functions of each position in the department. Each staff member was also assigned various projects. She also distributed among the staff memos describing the specific department goals for the coming year. She then held individual meetings with each of the professional staff members to explain what their projects entailed and to give directions on how they should proceed. Finally, she began to develop new procedures for the department in order to eliminate some of the procedural confusion which had existed under the previous manager.

Version 7 (A male leader, with positive personal characteristic information and negative behavior):

John Green is 35, married, and lives in the city. He graduated with Honors in his undergraduate studies. He received his Master's degree in Business ten years ago. Since then, he has been working in the marketing department of the Ring Telephone Company. Seven years ago, he had been

promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Mr. Green was not happy, since he was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Mr. Green was interviewed. He came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of his arrival, Mr. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time he usually sat in his office, asking his secretary not to let anyone or anything interrupt his work. By the end of the first week, Mr. Green made his first contact with his staff by sending them a memo. In this memo he introduced himself. He also expressed his goal to update and reorganize the marketing department. Finally, he emphasized how anxious he was to do an outstanding job.

By the end of the second week of his arrival, Mr. Green sent another memo to his staff. In this memo, he first expressed again his desire to do an outstanding job. He then demanded his staff to put in a few hours on Saturdays, even though they were not eligible for overtime pay. Finally, Mr. Green asked for his staff to "just do your best".

Within the next few weeks, Mr. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 8 (A female leader, with positive personal characteristic information and negative behavior):

Joan Green is 35, married, and lives in the city. She graduated with Honors in her undergraduate studies. She received her Master's degree in Business ten years ago. Since then, she has been working in the marketing department of the Ring Telephone Company. Seven years ago, she had been promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Ms. Green was not happy since she was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and

the Company needed a new manager. Ms. Green was interviewed. She came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of her arrival, Ms. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time she usually sat in her office, asking her secretary not to let anyone or anything interrupt her work. By the end of the first week, Ms. Green made her first contact with her staff by sending them a memo. In this memo she introduced herself. She also expressed her goal to update and reorganize the marketing department. Finally, she emphasized how anxious she was to do an outstanding job.

By the end of the second week of her arrival, Ms. Green sent another memo to her staff. In this memo, she first expressed again her desire to do an outstanding job. She then demanded her staff to put in a few hours on

Saturdays, even though they were not eligible for overtime pay. Finally, Ms. Green asked for his staff to "just do your best".

Within the next few weeks, Ms. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 9 (A male leader, with negative personal characteristic information and negative behavior):

John Green is 35, married and lives in the city. He graduated high school with average grades. He dropped out of college in his junior year. For ten years he has been working in the marketing department of the Ring Telephone Company. In the last five years he has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Mr. Green saw this opportunity for advancement and applied for the position. He was interviewed. Even though he did not have prior experience as a manager, he was accepted for the job.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional

workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of his arrival, Mr. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time he usually sat in his office, asking his secretary not to let anyone or anything interrupt his work. By the end of the first week, Mr. Green made his first contact with his staff by sending them a memo. In this memo he introduced himself. He also expressed his goal to update and reorganize the marketing department. Finally, he emphasized how anxious he was to do an outstanding job.

By the end of the second week of his arrival, Mr. Green sent another memo to his staff. In this memo, he first expressed again his desire to do an outstanding job. He then demanded his staff to put in a few hours on Saturdays, even though they were not eligible for overtime pay. Finally, Mr. Green asked for his staff to "just do your best".

Within the next few weeks, Mr. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 10 (A female leader, with negative personal characteristic information and negative behavior):

Joan Green is 35, married and lives in the city. She graduated high school with average grades. She dropped out of college in her junior year. For ten years she has been working in the marketing department of the Ring Telephone Company. In the last five years she has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Ms. Green saw this opportunity for advancement and applied for the position. She was interviewed. Even though she did not have prior experience as a manager, she was accepted for the job.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of her arrival, Ms. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time she usually sat in her office, asking her secretary not to let anyone or anything interrupt her work. By the end of the first week,

Ms. Green made her first contact with her staff by sending them a memo. In this memo she introduced herself. She also expressed her goal to update and reorganize the marketing department. Finally, she emphasized how anxious she was to do an outstanding job.

By the end of the second week of her arrival, Ms. Green sent another memo to her staff. In this memo, she first expressed again her desire to do an outstanding job. She then demanded her staff to put in a few hours on Saturdays even though they were not eligible for overtime pay. Finally, Ms. Green asked for her staff to "just do your best".

Within the next few weeks, Ms. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 11 (A male leader, with negative behavior and with no personal characteristic information):

John Green was interviewed for a managerial position in the marketing department of Edison Telephone Company. He was accepted for the job.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional

workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of his arrival, Mr. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time he usually sat in his office, asking his secretary not to let anyone or anything interrupt his work. By the end of the first week, Mr. Green made his first contact with his staff by sending them a memo. In this memo he introduced himself. He also expressed his goal to update and reorganize the marketing department. Finally, he emphasized how anxious he was to do an outstanding job.

By the end of the second week of his arrival, Mr. Green sent another memo to his staff. In this memo, he first expressed again his desire to do an outstanding job. He then demanded his staff to put in a few hours on Saturdays, even though they were not eligible for overtime pay. Finally, Mr. Green asked for his staff to "just do your best".

Within the next few weeks, Mr. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 12 (A female leader, with negative behavior and with no personal characteristic information):

Joan Green was interviewed for a managerial position in the marketing department of Edison Telephone Company. She was accepted for the job.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

During the first week of her arrival, Ms. Green came in an hour early each morning and usually left an hour or two after quitting time. During this time she usually sat in her office, asking her secretary not to let anyone or anything interrupt her work. By the end of the first week, Ms. Green made her first contact with her staff by sending them a memo. In this memo she introduced herself. She also expressed her goal to update and reorganize the marketing department. Finally, she emphasized how anxious she was to do an outstanding job.

By the end of the second week of her arrival, Ms. Green sent another memo to her staff. In this memo, she first expressed again her desire to do an outstanding job. She then demanded her staff to put in a few hours on

Saturdays, even though they were not eligible for overtime pay. Finally, Ms. Green asked for his staff to "just do your best".

Within the next few weeks, Ms. Green frequently scheduled meetings with the staff members for Saturday morning, noting that the number of interruptions due to the telephone ringing and other factors was likely to be minimal.

Version 13 (A male leader, with positive personal characteristic information and with no behavioral information):

John Green is 35, married, and lives in the city. He graduated with Honors in his undergraduate studies. He received his Master's degree in Business ten years ago. Since then, he has been working in the marketing department of the Ring Telephone Company. Five years ago, he had been promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Mr. Green was not happy, since he was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Mr. Green was interviewed. He came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

Version 14 (A female leader, with positive personal characteristic information and with no behavioral information):

Joan Green is 35, married, and lives in the city. She graduated with Honors in her undergraduate studies. She received her Master's degree in Business ten years ago. Since then, she has been working in the marketing department of the Ring Telephone Company. Five years ago, she had been promoted to be the top manager in the marketing department of the Ring Telephone Company. Last year, the Telephone Company moved to a different location (in another city). Ms. Green was not happy since she was forced to commute for four hours each day. Meanwhile, one of the marketing managers of Edison Telephone Company retired and the Company needed a new manager. Ms. Green was interviewed. She came in with excellent recommendations and was the unanimous choice of those interviewing the job candidates.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this

time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

Version 15 (A male leader, with negative personal characteristic information and with no behavioral information):

John Green is 35, married and lives in the city. He graduated high school with average grades. He dropped out of college in his junior year. For ten years he has been working in the marketing department of the Ring Telephone Company. In the last five years, he has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Mr. Green saw this opportunity for advancement and applied for the position. He was interviewed. Even though he did not have prior experience as a top manager, he was accepted for the job.

His goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

Version 16 (A female leader, with negative personal characteristic information and with no behavioral information):

Joan Green is 35, married, and lives in the city. She graduated high school with average grades. She dropped out of college in her junior year. For ten years, she has been working in the marketing department of the Ring Telephone Company. In the last five years, she has been promoted once to a first level managerial position in the marketing department. Meanwhile, one of the top marketing managers of Edison Telephone Company retired, and the company needed a new manager. Ms. Green saw this opportunity for advancement and applied for the position. She was interviewed. Even though she did not have prior experience as a top manager, she was accepted for the job.

Her goal was to update and reorganize one of the marketing departments of Edison Telephone Company. At this time, this marketing department consisted of 12 professional workers (six males and six females), six professional secretaries (two males and four females), and two clerical assistants (both females).

APPENDIX IV - DEBRIEFING AND SUMMARY FINDINGS

Hello!

My name is Iris Cohen-Kaner. Remember me? I conducted a study about perception in the U.J.A. and you took part in it.

First of all, I would like to thank each one of you who took the time to fill out the questionnaire that was mailed to you. You helped me a great deal and the results of this study are very encouraging, thanks to you.

Let me tell you about the study. The name of the study is "Attributions About Male and Female Leaders in Organizations." The main purpose of this study was to investigate whether followers perceive a male leader in the same way they perceive a female leader. It is known that several kinds of information affect followers' perceptions. One kind of information is sex-role stereotypes. Thus, two issues were address in this study. First, the prevalence of sex-role stereotypes among men and women and, second, the effect of these stereotypes on attributions about leadership effectiveness.

Two instruments were used, in the present study, to assess sex-role stereotypical attitudes. The first was Schein Descriptive Index. It consists of 92 items that are used to define sex-role stereotypes and the characteristics of successful managers. Three forms of index were used. Each contains the same 92 items, except that one form asks for a description of women in general (Women), one for a description of men in general (Men), and one for a description of successful middle managers (Managers). Each participant in this study received only one of these three forms. The ratings of the descriptive terms were made according to a 5-point scale, ranging from 1 (not characteristic), to 5 (characteristic), with a neutral rating of 3 (neither characteristic nor uncharacteristic).

The second measuring instrument that was used in the present study is the Male-Female Relations Questionnaire (MFRQ - Spence, et al., 1980). It consists of 30 items divided into 3 scales: Social Interaction, which contains items that describe the individual's tendency to modify his or her behavior in social situations containing implicit sex-role demands; Marital Roles, which contains items concerning preferred relationships between the individual

and his or her spouse; and a third scale, which is unique to each sex. For males, the third scale, labeled Expressivity, contains items that describe unwillingness to express emotional upset overtly and to be thought of as sensitive; and for females, the third scale, labeled Male Preference, contains items that describe liking for masculine, dominant men. The responses on this scale range from 1 (strongly agree), to 5 (strongly disagree). High scores on the MFRQ represent traditional gender-role responses, while low scores represent more liberal responses).

A booklet entitled Leadership Effectiveness was given to each participant. Each participant randomly got one of the sixteen versions of the booklet. Three kinds of information were varied among the versions: leader's sex (male or female), leader's personal characteristics (positive, negative or no information) and leader's behavior (positive, negative or no information). At the end of the versions, nine questions were asked with regard to the effectiveness of the leader.

With regard to sex-role stereotypes, two findings were obtained in the present study:

(1) The men in the U.J.A. perceived successful managers as possessing characteristics that are more commonly associated with men than with women.

(2) The women in the U.J.A. perceived successful managers as possessing characteristics that are commonly associated with both men and women.

Thus, the men in the U.J.A. sex-typed the managerial role, while the women in this organization did not.

The next issue of investigation was to see how these findings affected the perception of leadership effectiveness. Several investigators suggested that when there is no information about the leader, it forces raters to fill out the gap of missing information by relying on their sex-role stereotypes when evaluating their leader, thus making different attributions of male and female leaders. It has also been suggested that when raters have more information available to them about their leader, gender becomes less salient and other variables become more important when raters perceive and evaluate their leaders.

The present research confirms this belief. That is, the effect of sex-role stereotypes on attribution about leadership effectiveness decreased when leader's personal characteristic information and leader's behavioral information were available. More specifically, when the leader's behavior was positive, the leader was perceived more positively than if the leader's behavior was negative, regardless of leader's sex. This was also the case with leader's personal characteristic information: when the information was positive, the leader was evaluated positively while, when it was negative, the leader was evaluated negatively; again leader's sex did not influence perception.

The results of the present study confirm the importance of presenting information to the raters in order to decrease the effect of sex-role stereotypes on attribution. Even though the male respondents, in the present study, hold sex-role stereotypical attitudes, they did not evaluate differently male and female leaders. Both male and female respondents' attributions about leadership effectiveness were based on the information available about the leader (i.e., leader's personal characteristic information and leader's behavior), not on the leader's sex.

One of the conclusions of the present study is that women can reduce discrimination on an individual basis. That is, each female who acquires a managerial role and/or each female who is already in a managerial role, should concentrate on behaving effectively, because in the present study respondents did not evaluate their leader based on his/her gender, but based on his/her behavior. Morrison, White and Von Velsor add that "to be successful in upper management, women must constantly monitor their behavior, making sure they are neither too masculine nor too feminine."

In the present study, not only leader's behavior was the basis for raters' attribution about leadership effectiveness, but also leader's personal characteristic information. Thus, it is recommended by this researcher that before a female leader starts a new relationship with her followers, she should give them some positive background information about herself. This background information can come in many forms, such as a resume, short oral presentation of her biography, written work or art work (if it applies to the job).

I hope that you have learned something new after participating in this study and after reading its results and conclusions. I can only hope that sex-role stereotypes will decrease in the future and that male and female managers will be evaluated based on their behavior and not on their gender.

Thanks again for your cooperation.

With great appreciation,

Iris Cohen-Kaner

REFERENCES

Adams, E.F. (1978) A Multivariate Study of Subordinate Perceptions of and Attitudes Toward Minority and Majority Managers. Journal of Applied Psychology, 63, 277-288.

Bardwick, J.M. & Douvan, E. (1972) Ambivalence: The Socialization of Women. In J.M. Bardwick (Ed.) Readings on the Psychology of Women. New York: Harper & Row.

Baron, A.S. (1977) Selection, Development and Socialization of Women into Management. Business Quarterly, 28. 61-67.

Bartol, D. & Saxe, L. (1976) Perceptions of Similarly and Dissimilarly Attractive Couples and Individuals. Journal of Personality and Social Psychology, 33, 722-781.

Bartol, K.M. (1974) Male Versus Female Leaders: The Effect of Leader Need for Dominance on Follower Satisfaction. Academy of Management Journal, 17, 225-233.

Bartol, K.M. (1976) Relationship of Sex and Professional Training Area to Job Orientation. Journal of Applied Psychology, 61, 368-370.

Bartol, K.M. & Butterfield, D.A. (1976) Sex Effects in Evaluating Leaders. Journal of Applied Psychology, 61, 446-454.

Bartol, K.M. & Martin, D.C. Women and Men in Task Groups. In R.D. Ashmore and F.K. DelBoca (eds.) Social Psychology of Female-Male Relations. Orlando, Florida: Academic Press. 1986

Bartol, K.M. & Wortman, M.S. (1975) Versus Female Leaders: Effects on Perceived Leader Behavior and Satisfaction in a Hospital. Personnel Psychology, 28, 533-547.

Bass, B.M. Stodgill's Handbook of Leadership: A Survey of Theory and Research. (rev. ed.) New York: Free Press. 1981

Bass, B.M., Krusell, S. & Alexander, R.H. (1971) Male Manager's Attitudes Toward Working Women. American Behavior Scientist, 15, 77-83.

Berschied, G. & Walster, G. (1972) Beauty and the Best. Psychology Today, 5, 42-45.

Bowman, G.W., Worthy, N.B., & Greyser, S.A. (1965) Are Women Executives People? Harvard Business Review, 43, 14-16.

Branscombe, N.R. & Smith, E.R. (1990) Gender and Racial Stereotypes in Impression Formation and Social Decision-Making Processes. Sex Roles, 22, 627-647.

Brenner, M.H. (1970) Management Development Activities for Women. Paper presented at the meeting of the American Psychological Association, Miami, September.

Brenner, O.C. & Tomkiewicz, J. & Schein, J.E. (1989) The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics Revised. Academy of Management Journal, 32, 662-669.

Brief, A.P. & Oliver, R.L. (1976) Male-Female Differences in Work Attitudes Among Retail Sales Managers. Journal of Applied Psychology, 61, 526-528.

Brown, S.M. (1979) Male Versus Female Leaders: A Comparison of Empirical Studies. Sex Roles, 5, 595-611.

Bureau of Labor Statistics, June 1991.

Burnstein, E. (1985). Fear of Failure, Achievement Motivation, and Aspiring to Prestigeful Occupations. Journal of Abnormal and Social Psychology, 90, 189-193.

Butterfield, D.A. & Powell, G.N. (1981) Effect of Group Performance, Leader Sex, and Rater Sex on Ratings of Leader Behavior. Organizational Behavior and Human Performance, 28, 129-141.

Cann, A. & Garnett, A.K. (1984). Sex Stereotype Impacts on Competence Rating by Children. Sex Roles, 11, 333-343.

Cann, A. & Siegfried, W.P. (1987) Sex Stereotypes and the Leadership Role. Sex Roles, 17, 401-408.

Catalyst, Women in Corporate Management: Results of a Catalyst Survey, 1991.

Cecil, E.A., Paul, R.J., & Olins, R.A. (1973) Perceived Importance of Selected Variables Used to Evaluate Male and Female Job Applicants. Personnel Psychology, 26, 397-404.

Cherulnik, P.D., Turno, L.C. & Wilderman, S.K. (1990) Physical Appearance and Leadership: Exploring the Role of Appearance-Based Attribution in Leader Emergence. Journal of Applied Social Psychology, 20, 1530-1539.

Crocker, J. & McGraw, K.M. (1984) What's Good for the Goose Is not Good for the Gander. American Behavioral Scientist, 27, 357-369.

Day, D.R. & Stogdill, R.M. (1972) Leader Behavior of Male and Female Supervisors: A Comparative Study. Personnel Psychology, 25, 353-360.

Deaux, K. & Emsuiller, T. (1974) Explanations of Successful Performance on Sex-Linked Tasks: What is Skill for the Male is Luck for the Female. Journal of Personality and Social Psychology, 29, 80-85.

Deaux, K. & Lewis, L. (1984) Structure of Gender Stereotypes: Interrelationships Among Components and Gender Label. Journal of Personality and Social Psychology, 46, 991-1004.

Deaux, K. & Major, B. (1987) Putting Gender Into Context: An Interactive Model of Gender-Related Behavior. Psychological Review, 94, 369-389.

Deaux, K. & Taynor, J. (1973) Evaluation of Male and Female Ability: Bias Works Two Ways. Psychological Reports, 32, 261-262.

Dion, K.K., Berscheid, E. & Walster, E. (1972) What Is Beautiful Is Good. Journal of Personality and Social Psychology, 24, 285-290.

Dobbins, G.H. & Platz, S.J. (1986) Sex Differences in Leadership: How Real Are They? Academy of Management Review, 11, 118-127.

Dubno, P. (1985) Attitudes Toward Women Executives: A Longitudinal Approach. Academy of Management Journal, 28, 235-239.

Eagly, A.H. & Johnson, B.T. (1989) Gender and Leadership Style: A Meta-Analysis (in press).

Eagly, A.H. & Steffen, V.J. (1984) Gender Stereotypes Stem from the Distribution of Women and Men into Social Roles. Journal of Personality and Social Psychology, 46, 735-754.

Eagly, A.H. & Steffen, V.J. (1988) A Note on Assessing Stereotypes. Personality & Social Psychology Bulletin, 14, 676-680.

Eagly, A.H. & Wood, W. (1982) Inferred Sex Differences in Status as Determinant of Gender Stereotypes about Gender Influence. Journal of Personality and Social Psychology, 43, 915-928.

Executive Female, Sep./Oct., 1988.

Fiedler, F.E. A Theory of Leadership Effectiveness. New York; McGraw-Hill. 1967

Forsyth, D.R., Schlenker, B.R., Leary, M.R. & McCown, N.E. (1985) Self-Presentational Determinants of Sex Differences in Leadership Behavior. Small Group Behavior, 16, 197-210.

Frank, E.J. (1988) Business Students' Perceptions of Women in Management. Sex Roles, 19, 107-117.

Geis, F.J., Boston, M.B. & Hoffman, N. (1985) Sex of Authority Role Models and Achievement by Men and Women: Leadership Performance and Recognition. Journal of Personality and Social Psychology, 49, 636-653.

Gerber, G.L. (1988) Leadership Roles and the Gender Stereotype Traits. Sex Roles, 18, 649-668.

Gerber, G.L. (1989) The More Positive Evaluation of Men Than Women on the Gender Stereotype Traits. Paper Presented at the Eastern Psychological Association Convention, April 1989, Boston, Massachusetts.

Gordon F.E. & Hall, D.T. (1984). Self Image and Stereotypes of Femininity: Their Relationship to Women's Role Conflicts and Coping. Journal of Applied Psychology, 59, 241-243.

Haccoun, D.M., Haccoun, R.R. & Sallay, G. (1978) Sex Differences in the Appropriateness of Supervisory Styles: A Management View. Journal of Applied Psychology, 63, 124-127.

Hall, D.T. (1982). A Model for Coping with Role Conflict: The Role Behavior of College Educated Women. Administrative Science Quarterly, 17, 471-486.

Heilman, M.E., Block, C.J., Martell, R.F. & Simon, M.C. (1989) Has Anything Changed? Current Characterizations of Men, Women, and Managers. Journal of Applied Psychology, 74, 935-942.

Hollander, E.P. Leaders, Groups and Influence. New York: Oxford University Press. 1964

Hollander, E.P. Leadership Dynamics: A Practical Guide to Effective Relationships. New York: Free Press. 1978

Hollander, E.P. Leadership and Power. In G. Lindzey & E. Aronson (Eds.). The Handbook of Social Psychology, 3d ed. New York: Random House. 1985

Hollander, E.P. & Yoder, J. (1980) Some Issues in Comparing Women and Men as Leaders. Basic and Applied Social Psychology, 1, 267-280.

Jacobson, M.B. & Efferty, J. (1974) Sex Roles and Leadership Perceptions of the Leaders and the Led. Organizational Behavior and Human Performance, 12, 383-396.

Jones, G.G. & Davis, K.E. (1965) From Acts to Dispositions: The Attribution Process in Person Perception. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology (Vol. 2), New York: Academic Press.

Kanter, R.M. Some Effects of Proportion on Group Life: Skewed Sex Ratios and Responses to Token Women. American Journal of Sociology, 82, 965-990. 1977

Kanter, R.M. (1977) Men and Women of the Corporation. New York: Basic Books.

Kelly, H.H. (1973) The Process of Causal Attribution. American Psychologist, 28, 107-128.

Korn/Ferry International, Korn/Ferry International's Executive Profile: A Survey of Corporate Leaders in the Eighties, 1986.

Korn/Ferry International, Korn/Ferry International's Executive Profile: A Decade of Change in Corporate Leadership, 1990.

Kuhn, D., Nash, S.C. & Brucken, L. (1978) Sex Role Concepts of Two- and Three-Year Olds. Child Development, 49, 455-451.

Landy, F.J. & Trumbo, D.A. (1980) Psychology of Work Behavior (rev. ed.) Illinois: The Dorsey Press.

Lanier, H.B. & Byrne, J. (1981) How High School Students View Women: The Relationship Between Perceived Attractiveness, Occupation, and Education. Sex Roles, 7, 145-148.

Lee, D.M. & Alvares, K.M. (1977) Effects of Sex on Descriptions and Evaluations of Supervisory Behavior in a Simulated Industrial Setting. Journal of Applied Psychology, 62, 405-410.

Lii, S.Y. & Wong, S.Y. (1982) A Cross-Cultural Study on Sex-Role Stereotypes and Social Desirability. Sex Roles, 8, 481-490.

Littig, L.W. (1986). Effects of Anxiety on Real and Ideal Vocational Aspiration among Grammar School Boys. Nature, 305, 1214-1215.

Locksley, A., Borgida, E., Brekke, J. & Hepburn, C. (1980) Sex Stereotypes and Social Judgment. Journal of Personality and Social Psychology, 39, 821-831.

Lord, R.G. (1985) An Information Processing Approach to Social Perceptions, Leadership and Behavioral Measurement in Organizations. In B.M. Show and L.L. Cummings (eds.) Research in Organizational Behavior, 7, 87-128.

Lord, R.G., DeVader, C.L. & Alliger, G.M. (1986). A Meta-Analysis of the Relation Between Personality Traits and Leadership Perceptions: An Application of Validity Generalization Procedures. Journal of Applied Psychology, 71, 402-410.

Lord, R.G., Phillips, J.S. & Rush, M.C. (1980) Effects of Sex and Personality on Perceptions of Emergent Leadership, Influence, and Social Power. Journal of Applied Psychology, 65, 176-183.

Martin, C.R. (1972) Support of Women's Lib: Management Performance. The Southern Journal of Business, 7, 17-28.

Massengill, D. & DiMarco, M. (1979) Sex-Role Stereotypes and Requisite Management Characteristics: A Current Replication. Sex Roles, 5, 561-576.

Miller, A.G. Historical and Contemporary Perceptives on Stereotyping. In A.G. Miller (ed.) In the Eye of the Beholder: Contemporary Issues in Stereotyping. 1982

Miller, C.T. (1987) Categorization and Stereotypes About Men and Women. Personality and Social Psychology Bulletin, 12, 501-512.

MIS WEEK. How Do You Manage? 10/3/88

Morrison, A.M. & Von Glinow, M.A. (1990) Women and Minority in Management. Ameican Psychologist, 45, 200-208.

Morrison, A.M. White, R.P. Van Velsor, E. & The Center for Creative Leadership Breaking the Glass Ceiling. 1987

Naisbitt, J., Trend Letter, May 1988.

National Commission on Working Women of Wider Opportunities for Women, "Women Work and the Future" Fact Sheet, January 1992.

Nelson, M.C. (1988) Reliability, Validity and Cross-Cultural Comparisons for the Simplified Attitudes Toward Women Scale. Sex Roles, 18, 289-296.

Nieva, V.F. & Gutek, B.A. Women and Work: A Psychological Perspective. New York: Praeger. 1981

Nisbett, R.E., Zukier, H. & Lemeley, R.E. (1981) The Dilution Effect: Nondiagnostic Information Weakens the Implications of Diagnostic Information. Cognitive Psychology, 13, 248-277.

O'Leary, J.E. & Depner, C.E. (1975) College Males' Ideal Female: Change in Sex-Role Stereotypes. The Journal of Social Psychology, 95, 139-40.

Osborn, R.N. & Vicars, W.M. (1976) Sex Stereotypes: An Artifact in Leader Behavior and Subordinate Satisfaction Analysis? Academy of Management Journal, 19, 439-449.

Petty, M.M. & Bruning, N.S. (1980) A Comparison of the Relationships between Subordinates' Perceptions of Supervisory Behavior and Measures of Subordinates' Job Satisfaction for Male and Female Leaders. Academy of Management Journal, 23, 717-725.

Petty, M.M. & Lee, G.K. (1975) Moderating Effects of Sex of Supervisor and Subordinate on Relationships Between Supervisory Behavior and Subordinate Satisfaction. Journal of Applied Psychology, 60, 624-628.

Petty, M.M. & Miles, R.H. (1976) Leader Sex-Role Stereotyping in a Female Dominated Work Culture. Personnel Psychology, 29, 393-424.

Porter, N., Geis, F.L. & Jennings, J. (1983) Are Women Invisible as Leaders? Sex Roles, 9, 1035-1049.

Powell, G.M. & Butterfield, D.A. (1979) The "Good Manager": Masculine or Androgynous? Academy of Management Journal, 22, 395-403.

Powell, G.M. & Butterfield, D.A. (1980) The Female Leader: Attributional Effects of a Group Performance. Psychological Reports, 47, 891-897.

Powell, G.M. & Butterfield, D.A. (1982) Sex, Attributions, and Leadership: A Brief Review. Psychological Reports, 51, 1171-1174.

Powell, G.M. & Butterfield, D.A. (1984) If "Good Managers" Are Masculine, What Are "Bad Managers?" Sex Roles, 10, 477-484.

Powell, G.M. & Butterfield, D.A. (1984) The Female Lender and the "High-High" Effective Leader Stereotype. The Journal of Psychology, 117, 71-76.

Powell, G.M. & Butterfield, D.A. (1989) The "Good Manager": Does Androgyny Fare Better in the 1980's? Group and Organization Studies, 14, 216-233.

Pratto, F. & Bargh, J.A. (1991) Stereotyping Based on Apparently Individuating Information: Trait and Global Components of Sex Stereotypes Under Attention Overload. Journal of Experimental Social Psychology, 27, 26-47.

Psychology Today, August, 1987.

Reis, H.T. & Wright, S. (1982) Knowledge of Sex-Role Stereotypes in Children Aged 3 to 5. Sex Roles, 8, 1049-1056.

Renwick, P.A. & Tosi, H. (1978) The Effects of Sex, Marital Status and Educational Background on Selection Decisions. Academy of Management Journal, 21, 93-103.

Rice, R.W., Bender, L.R. & Vitters, A.G. (1980) Leader Sex, Follower Attitudes Toward Women, and Leadership Effectiveness: A Laboratory Experiment. Organizational Behavior and Human Performance, 25, 46-78.

Rice, R.W., Instone, D. & Adams, J. (1984) Leader Sex, Leader Success, and Leadership Process: Two Field Studies. Journal of Applied Psychology, 69, 12-31.

Rice, R.W., Yoder, J.D., Adams, J. Priest, R.F. & Prince, H.T. (1984) Leadership Ratings for Male and Female Military Cadets. Sex Roles, 10, 885-901.

Riger, S. & Galligan, P. (1980) Women in Management: An Exploration of Competing Paradigms. American Psychologist, 35, 902-910.

Rosen, B. & Jerdee, T.H. (1973) The Influence of Sex-Role Stereotypes on the Evaluation of Male and Female Supervisory Behavior. Journal of Applied Psychology, 57, 44-48.

Rosen, B. & Jerdee, T.H. (1974a) Influence of Sex Role Stereotypes on Personnel Decisions. Journal of Applied Psychology, 59, 9-14.

Rosen, B. & Jerdee, T.H. (1974b) Effects of Applicant's Sex and Difficulty of Job on Evaluations of Candidates for Managerial Positions. Journal of Applied Psychology, 59, 511-512.

Rosen, B. & Mericle, M.F. (1979) Influence of Strong Versus Weak Fair Employment Policies and Applicant's Sex on Selection Decisions and Salary Recommendations in a Management Simulation. Journal of Applied Psychology, 64, 435-439.

Rosenbach, W.E. & Taylor, R.L. Contemporary Issues in Leadership. Westview Press, Inc. 1989

Rustmeyer, R. & Thrien, S. (1989) The Female Manager - The Male Manager: How Feminine Can You Be -- How Masculine Can you Be? Zeitschrift-fur-Arbeits-und-Organisations-Psychologie, 33, 108-116.

Schein, J.E. (1975) The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics Among Female Managers. Journal of Applied Psychology, 60, 340-44.

Schein, J.E. (1973) The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics. Journal of Applied Psychology, 57, 95-100.

Schein, J.E. & Mueller, R. (in press) Sex Role Stereotyping & Requisite Management Characteristics: A Cross Cultural Look. Journal of Organizational Behavior.

Schein, J.E., Mueller, R. & Jacobson, C. (1989) The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics Among College Students. Sex Roles, 20, 103-110.

Schriesheim, C.A. & Murphy, C.J. (1976) Relations Between Leader Behavior and Subordinate Satisfaction and Performance: A Test of Some Situational Moderators, Journal of Applied Psychology, 61, 634-641.

Seifert, C. & Miller, C.E. (1988) Subordinates Perceptions of Leaders in Task Performing Dyads: Effects of Sex of Leader and Subordinate, Method of Leader Selection, and Performance Feedback. Sex Roles, 19, 13-28.

Sherman, J., Koufacos, C. & Kenworthy, J.A. (1978) Therapists: Their Attitudes and Information About Women. Psychology of Women Quarterly, 2, 299-303.

Smith, H.W. (1983) The Relative Efficacy of Simulation Experiments. Journal of Vocational Behavior, 22, 96-104.

Smyth, M. & MacFarlane, G. (1985) Sex-Role Stereotyping by Psychologists and Psychiatrists: A Future Analysis. International Journal of Women's Studies, 8, 130-139.

Snodgrass, S.E. & Rosenthal, R. (1984). Females in Charge: Effects of Sex of Subordinates and Romantic Attachment Status upon Self-Ratings of Dominance. Journal of Personality, 52, 355-371.

Solomon, E.G., Bishop, R.C. & Bresser, R.K. (1986) Organization Moderators of Gender Differences in Career Development: A Facet Classification. Journal of Vocational Behavior, 29, 27-41.

Stake, J.E. (1981). Promoting Leadership Behaviors in Low Performance-Self-Esteem Women in Task-Oriented Mixed-Sex Dyads. Journal of Personality, 49, 401-414.

Stake, J.E. (1983). Situation and Person-Centered Approaches to Promoting Leadership Behavior in Low Performance Self-Esteem Women. Journal of Personality, 55, 62-77.

Stake, J.E. & Stake, M.N. (1979). Performance Self-Esteem and Dominance in Mixed-Sex Dyads. Journal of Personality, 47, 71-84.

Stein, A.H. & Bailey, M.M. (1973). The Socialization of Achievement Orientation in Females. Psychological Bulletin, 80, 345-366.

Stein, A.H., Pohly, S.R., & Mueller, E. (1971). The Influence of Masculine, Feminine, and Neutral Tasks in Children's Achievement Behavior, Expectancies of Success and Attainment Values. Child Development, 42, 195-207.

Stitt, C., Schmidt, S., Price, K. & Kipnis, D. (1983) Sex of Leader, Leader Behavior, and Subordinate Satisfaction, Sex Roles, 9, 31-42.

Sutton, C.D. & Moore, K.K. (1985) Executive Women - 20 Years Later. Harvard Business Review, 42-66.

Swim, J., Borgida, E., Maruyama, G. & Myers, D.G. (1989) Joan McKay versus J. McKay: Do Gender Stereotypes Bias Evaluation? Psychological Bulletin, 105, 409-429.

Taylor, M.S. & Ilgen, D.R. (1981) Sex Discrimination Against Women in Initial Placement Decisions: A Laboratory Investigation. Academy of Management Journal, 24, 859-865.

Terborg, J.R. (1977) Women in Management: A Research Review. Journal of Applied Psychology, 62, 647-664.

Terborg, J.R. & Ilgen, D.R. (1975) A Theoretical Approach to Sex Discrimination in Traditionally Masculine Occupations. Organizational Behavior and Human Performance, 13, 352-76.

Terborg, J.R., Peters, L.H., Ilgen, D.R. & Smith, F. (1977) Organizational and Personal Correlates of Attitudes Toward Women in Management. Academy of Management Journal, 20, 89-100.

Tosi, H.L. & Einbender, S.W. (1985) The Effects of the Type and the Amount of Information in Sex Discrimination Research: A Meta-Analysis. Academy of Management Journal, 28, 712-723.

Trend Letter, July 18, 1991.

Tsui, A.S. & O'Reilly, C.A. III (1989) Beyond Simple Demographic Effects: The Importance of Relational Demography in Superior-Subordinate Dyads. Academy of Management Journal, 32, 402-423.

U.S. Department of Labor, Bureau of Labor Statistics (1992).

U.S. News and World Report, June 17, 1991.

Ware, R., Cooper, S. & Jerilyn, J. (1989) Attitudes Toward Women as Managers With Regard to Sex, Education, Work and Marital Status. Psychological Reports, 65, 347-350.

Ware, R., Studebaker, C. & Jerilyn J. (1989) Attitudes Toward Women as Managers With Regard to Sex, Education, Work and Marital Status. Psychological Reports, 65, 347-352.

Weiner, B., Heckhausen, H., Mezer, W., & Cook, R.E. (1972) Causal Ascriptions and Achievement Behavior: A Conceptual Analysis of Effort and Reanalysis of Locus of Control. Journal of Personality and Social Psychology, 21, 239-248.

Welsh, M.C. (1979) Attitudinal Measures and Evaluation on Male and Female in Leadership Roles. Psychological Reports, 45, 19-22.

Williams, J.E., Bennett, S.M. & Best, D.L. (1975). Awareness and Expression of Sex-Stereotypes in Young Children. Developmental Psychology, 11, 635-642.