The Perceptions of Female Middle-Level Managers Concerning Their Pay and the Pay of Their Superiors, Their Subordinates and Their Co-Workers

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THE PERCEPTIONS OF FEMALE MIDDLE-LEVEL MANAGERS CONCERNING THEIR PAY AND THE PAY OF THEIR SUPERIORS, THEIR SUBORDINATES AND THEIR CO-WORKERS

BY

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Researchers in industry have long been interested in the element of job satisfaction and the job dimensions which effect it. These job dimensions have been categorized as motivators (recognition, advancement, responsibility, and job challenge) and hygiene factors (working conditions, salary and benefits, and fellow workers) (Herzberg, Mausner, & Snyderman, 1959). It has been hypothesized that men and women attach different amounts of importance to these factors. Women supposedly value the hygiene factors more highly while men value the motivator factors more highly. This belief has various implications on the effect of such factors as pay, promotion, co-workers, and job level to the degree of job satisfaction expressed by males and females. Following this line of reasoning, women on the same job level as men may receive lower pay and have fewer promotional opportunities but be equally satisfied with their jobs as the males, providing there are satisfactory co-worker conditions since women value co-workers more highly than pay or promotion. However, this view was only partly supported in a study conducted by Shapiro and Stern (1975). Their data showed that non-professional women were more satisfied with their pay than non-professional men. However, professional men were more satisfied with their pay than professional women. This
study further showed that men were more satisfied with the work and promotion opportunities than women in both professional and nonprofessional occupations. This study's final conclusion was that total job satisfaction is higher for non-professional women than men, while total job satisfaction is higher for professional men than women.

Several explanations may be conjectured as to why this is so. The most viable one concerns the change in societal norms and the role of women in the world or work. Women have been involved in a consciousness-raising period which has changed their expectations and beliefs as to their abilities and worth in the professional world. The fact that women in non-professional jobs were more satisfied than the men may be due to the fact that these jobs are the more traditional types which women have been occupying for some time now. A plethora of research evidence exists which supports the fact that sex stereotypes currently exist in industry and organizations toward jobs which negatively effect pay, performance appraisals, and promotions for women (Skvorc, 1975; Patterson, 1975; Feather, 1975; Feather & Simon, 1975; O'Leary, 1974; and Bass, Krusell, & Alexander, 1971). Women are still outnumbered by men in the higher levels of organizations and professional occupations. Men in these professional occupations may not feel "threatened" by the presence of
women since women are still few in number and do not present a serious competitive threat to their job.

The above-mentioned results support research done by Hulin and Smith (1964), who found that in three out of four plants surveyed, women were significantly less satisfied than their male counterparts. This result was contributed to the lower job level, lower pay level, and the fewer promotional opportunities of the women. This cause-effect relationship is speculative at best since the majority of the research relating the effects of pay, job level, and promotion to level of job satisfaction has been conducted on males. This is because males occupy more management level positions than females. The results of Shapiro and Stern (1975) and Hulin and Smith (1964) follow Herzberg's Two Factor Theory of Motivation. This theory states that there are two sets of factors operating on people at work. One set of factors promotes satisfaction; these are called the motivators and include such things as recognition, advancement, responsibility, and job challenge. The other set of factors promotes dissatisfaction and are termed hygiene factors. These include working conditions, salary and benefits, and fellow workers. If, in fact, women do value the hygiene factors more than the motivators this can cause dissatisfaction when pay and promotional opportunities are felt to be inferior to those of men in
equal positions. This effect, however, is contradicted by Burke (1966) who found that both males and females tended to rank motivators more important than hygiene factors.

Another study concerned with the effects of various job and personal characteristics on job satisfaction revealed that older respondents were more satisfied with pay than younger respondents, higher paid respondents were more satisfied with pay than lower paid respondents, less educated respondents were more satisfied with pay than those with more education, and better rated performers were more satisfied with pay than lower rated performers (Schuster & Clark, 1970). Lawler and Porter (1963) similarly found that job level had little effect on the importance attached to pay or the satisfaction with pay. What was important was the level of pay. The results showed that higher paid managers attached less importance to pay and were more satisfied with their pay than lower paid managers on the same level. The issue that remains to be settled is whether these results apply to females the same as they do for males. In the study mentioned previously by Hulin and Smith (1964) they agree that the net result of studies on the effects of different conditions toward job satisfaction reveals that higher wages and higher job levels generally contribute to higher job
satisfaction. The relationship of the sex of the worker to job satisfaction is an additional topic to address. It can be seen from the discussion so far that there is no firmly established relationship between sex and job satisfaction across all types of occupations and all levels. However, based on the results of their study, Hulin and Smith (1964) conclude that sex is not the crucial factor leading to job satisfaction. They argue that when job level, pay level, promotional opportunities, and societal norms are held constant or partialled out, the differences in job satisfaction should disappear. This argument is supported by research conducted by Harlow (1979) who found that when management level was held constant, there was no difference in the level of job satisfaction between men and women. However, since women usually are paid less than men and occupy lower level jobs than men, it follows from the studies discussed above that women should be less satisfied with their pay and jobs than men.

The subject of job satisfaction in women is becoming an increasingly important issue today as more and more women enter the labor force. This increase in women returning to the job market is partially a result of changing societal norms on the role of women in society. Other interrelated economic, social, and political factors have caused the demand on women in the work force to rise.
Women represent a vast untapped resource of potential talent for filling the needs for effective management. The research literature in the past decade has been filled with numerous articles addressing various problems of women entering the work force. Some popular topics borne by the feminist movement are the need for proper training methods to make women competent for different jobs and equal pay for women when occupying these jobs. Studies on this subject have been conducted by Francis (1971), Mortimer (1973), Wainwright (1975), Dorling (1975), Glucklich, Hall, Povall, and Snell (1977), Farmer and Smith (1977), Wallington (1978), Barton (1980), Terborg (1977), and Kay (1972). Other articles address problems for the dual-career women (Fogarty, 1972) and steps companies can take to assist the female worker such as child-care centers and job sharing. Still other researchers have proposed step-by-step plans organizations may take to bring women's jobs and salaries in line with those of their male counterparts (Orth, 1971; Kay, 1972; Gordon & Strober, 1975).

Once a woman has successfully entered the job market and has overcome all the barriers getting there, her problems are not over. There are still even more obstacles that must be faced such as wage inequities, different promotional opportunities, negative perceptions about women's job attendance and capabilities, and attri-
butes suitable for being an effective manager. These problems exist mainly for those women who choose the "untraditional" female jobs which have been filled in the past by males. This is where the biggest problem lies since more women have begun to occupy these positions. Specifically, problems exist for women who choose to enter management careers. Here women may find themselves as supervisors over men and attending meetings where they very likely will be the only female present.

The first obstacle a woman in management must overcome involves the myths surrounding the disadvantages to hiring a woman. Numerous articles have been written which discuss the perceived attributes, attitudes and personal qualities women possess that make them different and less suitable for management careers than men (Porter & Henry, 1964; Bowman, Worthy, & Grerper, 1965; Buchanan, 1969; Orth, 1971; Hackamack & Solid, 1972; O'Leary, 1974; and Hennig, 1977). The fact that these misconceptions exist was illustrated by Schein (1973). She found that ratings by 300 male managers confirmed her hypothesis that successful managers are perceived to possess certain attitudes, characteristics, and temperaments more typically ascribed to men in general. There was a significant resemblance between the mean ratings of men and managers, but there was no resemblance between the mean rating of females and managers. An earlier study by Bowman (1964) supports the
results of Schein (1973). These perceptions could explain why men get promoted more often over women; men are regarded as possessing the qualities thought to be necessary for managers.

Some of the more common myths leveled against women in management are as follows (Burrow, 1976; Reif, Newstrom, & Monczka, 1975, pp. 5-6):

- women are too emotional to make the rational decisions of a manager
- women are sick or absent from work more than men
- women have a higher turnover rate than men
- women do not have the motivation to succeed because they do not have to work
- women do not have the capabilities necessary for scientific and technological skills.

However, research and documented performance of women in management positions are quickly dispelling these myths. Burrow (1976) states: "Biological and psychological studies reveal no basis in fact for assuming significant differences between men and women in those attributes necessary for good management performance" (p.6). Burrow's study further reveals that labor statistics show that illness and turnover rates are not significantly different for women or men. Regarding the issue of motivation, most women work because of their own economic need or because of the necessity of their skill as energy to the country's economy. A study conducted by Gordon and Strober
(1975) found that there are no differences between males and females in achievement motivation, intelligence, and learning. They also found little difference in social relations skills although women came out ahead in this area. This difference coincides with what Reif et al. (1975) found in their review of the literature; namely that the one difference found between men and women is the latter's greater concern for relationships among people. From their review the authors conclude that there are more similarities between men and women managers regarding their feelings about the organizational climate in which they work, and that many of the stereotypes of women who hold or aspire to responsible management positions are false. Differences do exist, but mostly in ways that would favor women being effective managers. This agrees with the research previously mentioned by Buchanan (1969).

The myths surrounding the unsuitability of women in management has been discussed above. Research by Crawford (1977) presents a more accurate portrayal of the profile of women in management. Her study revealed that women in management were usually the only child or the eldest child in their family, and these women typically had mothers who worked which served as a role model for them. This profile is similar to an earlier study conducted by Basil (1972). Besides describing the profile of women in middle management, these studies also attacked several of the myths
surrounding women managers listed earlier. In addition to those previously mentioned, Basil (1972) addressed the argument that women managers have insufficient mobility to relocate because of marital and/or family obligations. This argument may have some merit according to the results of Crawford (1977). Female respondents in her survey said that "the wife being asked to transfer" would present the biggest problem in their marriages (p. 107). As a result, companies may use this as an excuse for not training more females for managerial positions; women cannot accept transfers so why waste time and money training them. However, Basil (1972) astutely points out that while women may not have as much mobility for transfers, the attrition rate among men in training is great. So the author argues why waste time and money training men that will go to another company after they have been trained. As can be seen from this example there are pros and cons for training both men and women.

Basil (1972) also argues against the premise that people prefer working with male executives more than female executives. From his survey he concludes that companies which have had experience with successful female executives have a greater tendency to be favorable in their appraisal of women managers. The fact that there is little difference in or preference for male and female managers has been documented by research evidence. Burrow (1978)
found that respondents of both sexes indicated little or no difference between the sexes in management abilities. Furthermore, half of those who did report a difference indicated a preference for working with a female. This statistic lends support to dispelling the myth of the "rational verses emotional" distinction between men and women.

The controversy among studies shows some reporting a preference for working with male managers over female managers. Other studies, like the ones just mentioned above, show contrasting results. This discrepancy may be resolved if one notices that the studies in which no preference between male and female managers were reported were conducted on respondents who had experience in working with female managers. Thus the best way to overcome the myths surrounding female managers (stereotypes) is to give people experience in working with them.

It was previously mentioned that there are several obstacles a woman entering a management career must overcome. The first of these involved all the myths mentioned above which exist, but are slowly being dispelled. Other obstacles which are currently being dealt with are wage inequities, different promotional opportunities for men and women, and the effects these differences have on the job satisfaction and productivity of women in management. With the increase in the number of women working and the renewed
emphasis on equality between men and women, these problems have taken on a new level of importance.

The effect of wage inequities on the productivity of women may only be inferred from studies conducted predominantly on men. The majority of studies conducted in this area all found that hourly paid employees increase their productivity when pay is perceived as inequitably large than when identical pay is perceived as equitable. A piecework employee is less productive (to improve quality) when pay is perceived as inequitably large than when identical pay is perceived as equitable (Adams & Rosenbaum, 1962; Adams, 1963(a); Adams, 1963(b); Andrews, 1967). Weick (1966) says that the perceived input/output ratios of a person's co-workers will force that person to adjust his/her input/output ratio, thus determining productivity. Thus it may be postulated that a female manager may adjust her input/output ratio to that of her male counterparts in an attempt to achieve equal status. However, the female manager may perceive her inputs to be equal to those of her male co-workers but be receiving fewer outputs in return. Motivation theories argue that the female worker may then lower her inputs to be compatible with her outputs. This result is to the disadvantage of the company. Albeit most companies' hiring practices may look equal on the surface, most of the inequalities occur after the female manager is on the job. To prove
this point Terborg and Ilgen (1975) conducted a study in which subjects were given qualifications of job candidates and asked to hire people for jobs and assign their tasks and starting salaries. The results were that females were hired as frequently as an identically qualified male; however, the female was offered a significantly lower starting salary, assigned routine tasks more frequently than challenging ones, and was offered less of an increase in second-year salary which served to increase the initial discrepancy. Terborg and Ilgen (1975) go on in their article to cite references of discrimination in promotions, employee utilization, and employee development. Astin (1972) argues that females face inequalities in employment and career status even in the field of psychology. Finally, Malkiel and Malkiel (1973) report from their study that women in equal jobs as men receive equal pay, but women with equal characteristics to those of men do not get equal pay because women tend to be assigned to lower level jobs. This agrees with the experiment mentioned above by Terborg and Ilgen (1975).

Attention is now focused on those women who have succeeded in overcoming all the obstacles which stood in their way and have achieved a position as a middle-level manager with a company. Specifically, since women are increasing in numbers in management positions it would be insightful to know their feelings toward their pay and
and their perceptions of their pay as compared to their co-workers. According to Andrews and Henry (1963) how a person feels about pay depends on its absolute size and how it stacks up against those of the other people with whom a manager compares him or herself. They state that middle-level managers compared their pay to those at lower levels of management and that these managers were more dissatisfied with too small a difference between their pay and that of lower level managers than too large a difference between their pay and upper-level managers' pay.

Supporting this study is one done by Lawler and Porter (1963) who found no difference among managers at various levels in the importance attached to pay. They did, however, find that higher paid managers attached less importance to pay than lower paid managers at the same level. This could have an implication on the importance of pay for women if, in fact, they are receiving less pay than men at the same level. Lawler and Porter (1963) also found that managers' perceptions about how much pay they received were realistic with regard to actual pay, and that at any given management level, as pay increased, satisfaction with pay also increased.

In a study by Lawler (1965) the perceptions of managers toward the pay of their subordinates and the pay of their superiors was investigated by means of a questionnaire. He found that the managers perceived too
small a difference between their own pay and the pay of both their superiors and subordinates. As was pointed out in Andrews and Henry (1963), middle-level managers usually compare their pay with that of their subordinates (lower level managers) and that too small a difference in this comparison caused dissatisfaction. These facts coupled with Lawler's (1965) result that managers tend to over-estimate the pay of their subordinates may certainly lead to job dissatisfaction.

Thus the problem for companies regarding women managers' perceptions of their pay is two-fold. First, if women perceive these inequalities and the inequalities actually exist, the company should take steps to remedy the situation or risk losing a valuable employee plus face possible legal action. Second, if a woman perceives these inequalities and they do not actually exist, then the company should take steps to correct the perceptions of the female manager in order to keep the manager from becoming dissatisfied with her job which could result in a decrease in productivity or the loss of a valuable employee; both of which are costly outcomes for the company.

Since previous studies have investigated the perceptions of male managers toward their pay and the pay of their superiors and subordinates, the present study will investigate female middle-level managers' perceptions of,
and satisfaction with, their pay and their superiors' and subordinates' pay. From the literature reviewed, it is hypothesized that (1) female managers will feel their own pay is too low, as did the managers in Lawler's (1965) study; (2) female managers will feel there is too small a difference between their pay and that of their subordinates (Lawler, 1965); and (3) female managers will feel there is too large a difference between their pay and that of their superiors. This last hypothesis is contrary to the results of Lawler (1965). The perception of too large a difference between the managers' pay with that of their superiors is not expected to effect satisfaction, however, because it is postulated that female middle-level managers will compare their pay with that of their subordinates, as was found by Andrew and Henry's (1963) study of middle-level managers.

Another area which will be investigated is the female managers' perceptions of the difference in their pay and the pay of other managers at their own level. In the study by Lawler (1965) the managers tended to overestimate the pay of managers at their own level. If the pay for other managers at the same level are in fact equal, then the same results may be predicted for female managers as Lawler (1965) found with his sample; that is, the female managers will feel there is too large a difference between their pay and that of other managers at their own
level. However, the possibility exists that pay differentials are present for male and female managers at the same level. The female managers may be perceiving this difference, but the companies most likely are not admitting it. If there is an overestimate, this inaccurate perception could be a source of dissatisfaction for the female managers and for the managers in Lawler's (1965) study. It is possible that if managers had a more accurate perception of other managers' pay, they would be better satisfied with their own pay. The implication therefore is that companies should encourage open pay policies and eliminate pay secrecy if these inaccurate perceptions exist. These feelings of inequity between inputs and outputs could result in lower productivity as has been previously discussed (Adams & Rosenbaum, 1962).

With women increasing in numbers in the middle ranks of management, this is a very apropos study to conduct at this time. It is hoped that the results of this study may help present an accurate picture of the status of women in management and give companies some ideas of ways they may utilize their female resource to its fullest potential.
different from those of the female managers' responses. The student sample is expected to be naive in their perceptions of the pay conditions of female managers in business. The managerial sample is expected to show the pay situation as it currently exists while the student sample is expected to show a somewhat naive, optimistic situation which is perceived to exist by the college students.

With women increasing in numbers in the middle ranks of management, this is a very apropos study to conduct at this time. It is hoped that the results of this study may help present an accurate picture of the status of women in management and give companies some ideas of ways they may utilize their female resource to its fullest potential.
Method

Subjects

Subjects were 13 female middle-level managers in various types of businesses who were members of business women organizations. The women ranged in age from 20 to 60 years and the time in their current management position ranged from 1 month to 5½ years. A college student sample was also investigated which consisted of 24 female Junior and Senior class Business majors at a state university.

Questionnaires

The questionnaires used in this study derive their format from the one used by Lawler (1965).

The managerial questionnaire asked the managers to give two ratings on each of four statements regarding their pay on a seven point scale.

The instructions for this part of the questionnaire stated:

Listed below are four statements connected with the pay for your management position. For each question you will be asked to give two ratings.

a. How much of the characteristic is there now?
b. How much of the characteristic should there be?

For each item the respondents were asked to circle a number on a rating scale ranging from 1 to 7 with appropriate anchors provided for each rating on each statement.

The specific items for which the ratings were given were:
1. Pay for my current management position.

2. Difference between the pay for my management position and the pay of my subordinates one level below me.

3. Difference between the pay for my management position and the pay of my superiors one level above me.

4. Difference between the pay for my management position and the pay of other managers on my same level in my company.

For each item on the questionnaire, the "a" response was subtracted from the "b" response (b-a). When the "a" and "b" responses were equal (b-a=0) it was considered that the managers felt "satisfied" with that aspect of their pay. When the "b" response exceeded the "a" response (b-a > 0) it was considered that the managers felt there was "too little" of that aspect of their pay. When the "a" response exceeded the "b" response (b-a < 0) it was considered that the managers felt there was "too much" of that certain aspect of their pay.

The college student questionnaire asked the students to give two ratings on each of the three statements (numbers 2, 3, and 4 above) regarding their perceptions of the differences in the pay of female middle-level managers to that of their subordinates, superiors, and co-workers at the same managerial level.

The instructions for the college student questionnaire stated:
Listed below are three statements regarding your estimations of the pay for a female middle-level manager. For each statement you will be asked to give two ratings:

a. How much of the characteristic is there? (In your estimation.)
b. How much of the characteristic should there be? (In your estimation.)

For each item the respondents were asked to circle a number on a rating scale ranging from 1 to 7 with appropriate anchors provided for each rating on each statement.

The specific items for which the ratings were given were:

1. Estimate the difference between the pay for a female middle-level manager and the pay of her subordinates (male or female) one level below her.

2. Estimate the difference between the pay for a middle-level manager and the pay of her superiors (male or female) one level above her.

3. Estimate the difference between the pay for a female middle-level manager and the pay of other managers (male or female) on her same level.

For each item on the questionnaire, the "a" response was subtracted from the "b" response (b-a). When the "a" and "b" responses were equal (b-a=0) it was considered that the students felt "satisfied" with the perceived difference between a female middle-level manager's pay and the pay of her subordinates, superiors, and co-workers. When the "b" response exceeded the "a" response (b-a > 0) it was considered that the students perceived
there was "too little" of a difference between a female middle-level manager's pay and the pay of her subordinates, superiors, and co-workers. When the "a" response exceeded the "b" response \((b-a < 0)\) it was considered that the students perceived there was "too much" of a difference between a female middle-level manager's pay and the pay of her subordinates, superiors, and co-workers.

Procedure

Several business women's organizations were contacted by a letter describing the present study and asking for their club's participation. The experimenter visited the club meetings and distributed the questionnaires to those female members who volunteered to participate. The women were also asked to give their age and length of time in their current position. Originally 25 questionnaires were returned. However, 12 questionnaires had to be eliminated because the questionnaires were not answered completely, or the respondents did not fit the qualifications of a female middle-level manager needed to conduct the study. Specifically, the respondents did not have a subordinate at least one management level below them.

The college student sample was obtained by distributing the questionnaire in two business classes at a state university to the female members of the class who
volunteered to participate. Originally 25 questionnaires were returned, but one respondent expressed confusion over the meaning of the questions, so that questionnaire was marked and discarded before analysis began. The other college student respondents helped to try to explain the questions to the confused respondent, therefore it was insured that the rest of the respondents understood the questionnaire items.
Results

Managerial Sample

As noted earlier and in Lawler (1965), on the managerial questionnaire, satisfaction was measured by comparing the managers' answers to part "a" with their answer to part "b". When "a" and "b" were the same (b-a=0) it was considered that the managers were satisfied. When "b" exceeded "a" (b-a > 0) it was considered that the managers felt there was too little of the characteristic, and when "a" exceeded "b" (b-a < 0) it was considered that the managers felt there was too much of the characteristic. A table was compiled showing the percentage of responses of "Too Much", "Satisfied", "Too Little", the observed frequencies, and the expected frequencies for each of the four statements on the managerial questionnaire.

Chi square tests were conducted to test the significance of the difference between the observed frequencies and the expected frequencies as shown in Table 1. The frequencies of responses of "Too Much", "Satisfied", and "Too Little", as defined earlier, were entered into the
three "Observed" cells of the chi square table. The expected frequencies were calculated to be 4.33, which is equal to a random or chance distribution, for each of the three responses in the three "Expected" cells of the chi square table. The expected frequency for question four was calculated to be 4.00 since only 12 managers answered that question.

Table 1 shows the percentage of responses of "Too Much", "Satisfied", and "Too Little", the observed frequencies, and the expected frequencies for each of the four statements on the managerial questionnaire. Although a majority of the managers felt their own pay was too low as shown in Table 1, the chi square test proved to be non-significant, \( \chi^2(2) = 2.61, p > .05 \). Table 1 also shows that a majority of the managers felt satisfied with the difference between their pay and the pay of their subordinates, while the smallest amount (8%) felt there was too much of a difference. However, the chi square test proved to be non-significant, \( \chi^2(2) = 1.41, p > .05 \). Regarding the difference in pay between the managers' pay and their superiors' pay, Table 1 shows that a slight majority felt there was too much of a difference, while equal percentages reported feeling satisfied as reported feeling there was too little of a difference. Again, the chi square test proved to be non-significant, \( \chi^2(2) = .83, p > .05 \).
Regarding the difference in pay between the managers' pay and their co-workers' pay, Table 1 shows that equal percentages reported feeling there was too much of a difference as reported feeling satisfied. However, the chi square test proved to be non-significant, \( \chi^2(2) = .72, p > .05 \).

Pearson Product-Moment correlation coefficients between the managers' responses to the three items regarding upward pay differences, downward pay differences, and same level pay differences; and satisfaction with their pay, for the managerial sample, are shown in Table 2. The data show that there is a significant correlation for the female managers between their ratings on questions 1 and 2. In other words, for female managers there was a significant correlation between the satisfaction with their pay and satisfaction with the difference between their pay and their subordinates' pay, \( r(11) = .608, p < .05 \).

**College Student Sample**

Satisfaction was measured on the college student questionnaire in the same manner as discussed earlier for the managerial questionnaire (by comparing the students' answers to part "a" with their answers to part "b"). A table was compiled showing the percentage of responses of "Too Much", "Satisfied", "Too Little", the observed
frequencies, and the expected frequencies for each of
the three statements on the student questionnaire.

Chi square tests were conducted to test the
significance of the difference between the observed
frequencies and the expected frequencies as shown in
Table 3. The frequencies of responses of "Too Much", "Satisfied", and "Too Little", as defined earlier, were
entered into the three "Observed" cells of the chi square
table. The expected frequencies were calculated to be
8.00, which is equal to a random or chance distribution,
for each of the three responses in the three "Expected"
cells of the chi square table.

Table 3 shows the percentage of responses of "Too
Much", "Satisfied", "Too Little", the observed
frequencies, and the expected frequencies for each of the
three statements on the college students' questionnaire
concerning the perceived differences of the college
students in regard to the difference in pay between female
middle-level managers and their subordinates, superiors,
and co-workers. Although a majority of the students
perceived there was "too little" of a difference between
the pay of a female middle-level manager and her subordi-
nates as shown in Table 3, the chi square test proved to
be non-significant, $\chi^2(2) = 2.59, p > .05$. Table 3 also
shows that most of the students perceived a satisfactory
difference between the pay of a female middle-level manager and her superiors. However, the chi square test proved to be non-significant, $\chi^2(2) = .59$, $p > .05$.

Regarding the perceptions of the students concerning the difference between the pay of a female middle-level manager and her co-workers on the same level, Table 3 shows that equal percentages reported feeling there was "too much" of a difference as reported feeling "satisfied". But once again the chi square test proved to be non-significant, $\chi^2(2) = .25$, $p > .05$.

**Comparison of Managers' and Students' Responses**

Three two-tailed t-tests were performed to determine if there was a significant difference between the mean difference scores of the managers and the college students to the similar items on the two questionnaires. In other words, the "a" responses were subtracted from the "b" responses and a difference score for each question was found. These scores were averaged to find the mean response for each question. The means for questions 2, 3, and 4 on the managerial questionnaire were .62, -.38, and -.67, respectively. The means for questions 1, 2, and 3 on the college student questionnaire were .58, -.08, and -.29, respectively. The t-test between question 2 on the managerial questionnaire (difference in pay between current position and
subordinates) and question 1 on the students' questionnaire (difference in pay between female middle-level managers and subordinates) produced a $t(35) = .12$, $p > .05$. The t-test between question 3 on the managerial questionnaire (difference in pay between current position and superiors) and question 2 on the students' questionnaire (difference in pay between female middle-level managers and superiors) produced a $t(35) = -.59$, $p > .05$. The t-test between question 4 on the managerial questionnaire (difference in pay between current position and co-workers on same level) and question 3 on the students' questionnaire (difference in pay between female middle-level managers and other managers on the same level) produced a $t(34) = -.64$, $p > .05$. Thus, none of these mean group comparisons proved to be significant.
Discussion

From the chi square tests performed on the data contained in Table 1 it can be seen that the first hypothesis (female managers will feel their own pay is too low) was not supported even though 69% of the respondents felt they were getting paid too little compared to 23% who were satisfied with their own pay, and 8% who thought they were getting paid too much. As mentioned earlier, the chi square tests did not prove to be significant. This result may be attributed to the small sample size (n=13) that was used. Even though there was not a significant difference between the results mentioned above, they were similar to results found by Lawler (1965). A majority of managers in his private industry sample felt they were getting paid too little (67.3%) while 28.4% were satisfied with their pay and 4.3% felt they were getting paid too much.

Also possibly affected by the small sample size were hypotheses 2 and 3. Chi square tests did not show any significant difference in how the managers felt regarding the difference between their own pay and the
pay of their subordinates and superiors. Similarly chi square tests did not show any significant difference between the responses for how the managers felt about the difference in their pay and their co-workers' pay. Regarding hypothesis 2, results showed the female managers were predominately satisfied with the difference between their pay and their subordinates' pay. This result is contrary to hypothesis 2 although the difference between the percentage who were satisfied with this difference was not much larger than the percentage who thought there was too little of a difference between their pay and their subordinates' pay (54% and 38%, respectively). This result is contrary to Lawler (1965) and might be explained by the fact that the women were satisfied with any size difference that existed between their pay and their subordinates' pay while male managers felt a certain amount of pay differential must be present for the difference in pay to be equitable. A majority of the managers in Lawler's (1965) study reported feeling there was too little of a difference between their pay and their subordinates' pay (55%) while 35.5% felt satisfied with this difference and 9.5% felt there was too much of a difference between their own pay and their subordinates' pay.
Regarding hypothesis 3 (female managers will feel there is too large of a difference between their pay and that of their superiors) a majority of the female managers felt there was too much of a difference between their superiors' pay and their own pay. Although this result tended to support hypothesis 3, it is opposite to the result reported by Lawler (1965). Most of the managers in the private industry sample felt satisfied with the difference between their own pay and their superiors' pay, followed closely by 38% who felt there was too little of a difference and 20.1% who felt there was too much of a difference. If the results in the present study had produced a significant difference for hypothesis 3, it is reasoned that this result would not have had an effect on the level of dissatisfaction with the managers' own pay. This is due to the fact that managers tend to look downward for their pay comparisons (to their subordinates) instead of upward (to their superiors) (Lawler, 1965; and Andrews & Henry, 1963).

The results regarding the difference in pay between the managers and other managers on their same level found that an equal percentage felt "Satisfied" with any difference in pay as felt there was "Too Much" of a difference. It was stated previously that if the pay for other managers at the same level were in fact equal, then
the female managers would feel there was too large a difference between their pay and that of other managers at their level. However, the possibility exists that there is a difference between the pay of the female manager and other managers on the same level even though the work being performed is comparable. If this were true, female managers would be correct in their perception of too much difference in their pay and their co-workers' pay. In a private industry sample Lawler (1965) found the managers did not significantly overestimate the pay of other managers at their same level. It would be very interesting to measure the accuracy of the estimates of female managers to see how accurate their perceptions are of their own pay, their subordinates' pay, their superiors' pay, and their co-workers' pay. It is possible that if the female managers had an accurate perception of the pay of other managers in their company, they may be more satisfied with their own pay. It is more likely, however, that it would result in making the managers more dissatisfied because of pay inequities that actually exist.

The Pearson Product Moment correlations in Table 2 produced the expected results. Since the highest and only significant correlation was between managers' satisfaction with the difference between their pay and their subordinates' pay and the managers' satisfaction with their own
pay, item 2 on the questionnaire had the greatest correlation with pay satisfaction. Lawler (1965) found a similar result in his study of managers. In both the government and the private industry sample there was a significant correlation between the satisfaction with their pay and satisfaction with the difference between their pay and their subordinates' pay. Although it cannot be said these perceived differences caused dissatisfaction with pay, it may be said that these differences are related to dissatisfaction with pay because of the significant correlation. However, based upon the concept that managers evaluate their pay in terms of others' pay (Lanham, 1955), it does seem reasonable to conclude that these differences do influence managers' satisfaction with their own pay. Based on the present study and on Lawler (1965) and Andrews and Henry (1963) it appears that downward comparisons have the greatest impact on a manager's pay satisfaction. This satisfaction (or dissatisfaction) may be due to the distorted or inaccurate perceptions managers have of their comparison group. The female managers in the present study needed to be measured on the accuracy of their perceptions of other managers' pay to see if it is the actual size of a difference or the distorted size of a pay difference between their own pay and their
subordinates' pay which may cause them to be dissatisfied with their own pay. Lawler (1965) found that the managers in his samples tended to overestimate the level of pay of their subordinates. Since this is the comparison of pay most managers are likely to make it is reasonable to assume it could affect the satisfaction with one's own pay. If the managers had an accurate perception of other managers' pay they may be more satisfied with their own pay.

As mentioned earlier, none of the results in Table 3 regarding the college student sample produced any significant results. Here the sample size was larger than for the managerial sample (n=24). Similarly, the difference in mean responses between the managerial and student samples to the corresponding questions on the two questionnaires did not prove to be significantly different from each other. This shows that the college sample, which was thought to be somewhat naive, had an accurate perception of the pay of a female middle-level manager and how it compared to other managers on higher and lower managerial levels as well as to those of other managers on the same level as the female managers. These realistic perceptions should benefit the students when they enter the business world. They should
not be surprised by any pay differentials that may exist because they do not have distorted views of pay differentials that are present in businesses today.

The implication of this study is apparent since a significant correlation was found between the managers' satisfaction with the difference between their pay and their subordinates' pay and the managers' satisfaction with their own pay while considering the concept that workers evaluate their own pay in terms of other workers' pay. These two facts together provide the possibility that perceived differences in pay can cause dissatisfaction with pay. Since none of the other correlations proved to be significant, downward pay comparisons may have the greatest relationship with managers' satisfaction with pay (Lawler, 1965).

Other implications of this study are apparent if it were found that female managers were incorrectly perceiving the pay of their subordinates, superiors, and co-workers. Hopefully this difference in pay with co-workers does not actually exist, or else the female managers do have sufficient cause to be dissatisfied with their pay. This study was intended to investigate the question of perceptions of female managers toward the difference in their pay and that of their subordinates, superiors, and co-workers. These results may present a dilemma to
companies who employ women in their management positions. These companies need to take steps to correct any misperceptions which exist regarding differences in pay since dissatisfaction with pay may result in a manager being less productive or less motivated as discussed earlier.

Managers' perceptions of their pay and the pay of their subordinates, superiors, and co-workers is important since managers frequently evaluate the absolute and relative amounts of their pay. Lanham (1955) defined absolute pay as the actual rate which the employee earns. Most employees are satisfied with their absolute amount of pay as long as it is sufficient to meet his/her needs (i.e. pay bills, buy clothes, and buy food). Of course there is a natural desire for people to want more money in order to purchase more goods and services, but most people have a realistic perception of the limitations of pay they can and should receive. If an employee feels his/her pay is not in line with what he/she should be receiving (in terms of input and output) the employee may become dissatisfied with his/her pay. Lawler (1965) found that the managers in his study felt their own pay was too low.

Dissatisfaction with pay may also occur in regard to relative amounts of pay. Lanham (1955) defined relative pay as the rate earned by an employee in relation
to the rate earned by his/her co-workers. Lanham states that a worker may be satisfied with his/her absolute rate until it is learned that a fellow employee is receiving a higher rate for comparable work where there is no difference between the merit of work done or the length of time on the job. Employees are as much concerned with this relative amount of pay as they are with the absolute amount of pay. This concept has been supported by Andrews and Henry (1963) and Lawler (1965).

One of the sources of misperceptions with pay may be the policy of pay secrecy many companies use. The present study is proof that pay, and especially the pay of female managers, is a heavily guarded topic with most companies. Due to this kind of protection the sample size for the present study was somewhat small. It was discovered that while managers are willing to answer questions concerning their pay and the pay of other managers, the companies these managers work for are not as willing. These companies need to realize that the type of questions asked in the present study are the type of comparisons managers are making practically every day. Since so many misperceptions are made by the managers, companies should be aware of this and try to correct them. A large part of the problem is that companies realize their levels of pay for their female managers are
not equitable to the male managers' pay even though steps may be in progress to change these inequities. Therefore many companies felt threatened by the topic of the present study. Even though some female managers were questioned in the present study, the cooperation of companies would have made it possible to determine the accuracy of the perceptions of the female managers.

As discussed earlier, some of the results of this study are similar to those of Lawler (1965). The percent of managers in the present study who felt they were getting paid too little (69%) is close to the 67.3% of managers in Lawler's (1965) private industry sample who felt they were getting paid too little. A majority of the managers in Lawler's government sample (86%) also felt they were getting paid too little.

A majority of the female managers in the present study felt satisfied with the difference between their own pay and their subordinates' pay. However, a majority of managers in Lawler's private industry sample and government sample reported feeling there was too little of a difference between their pay and their subordinates' pay (55% and 65.8%, respectively). Apparently the managers in Lawler's samples thought the pay scales in their organizations were too compact because the managers in those samples felt there was too little
of a difference between their pay and their superiors' pay. Although Lawler made no comparison between managers and their co-workers, he did find some tendency for the managers in the government sample to overestimate the pay of other managers on their same management level.

In light of the similarities between the present study and the study of Lawler (1965) there are some suggestions for future research in this area. It would be interesting to investigate the similarity between a current sample of male middle-level managers to Lawler's samples studied in 1965. Some interesting results may be expected due to current economic conditions as compared to the conditions which existed during the time when Lawler's study was conducted. A study of this nature might result in the managers being more satisfied with their pay and with the differences between their pay and the pay of their superiors and subordinates than the managers in Lawler's study due to the present economic conditions. In addition to this, the proportions found in Lawler's study regarding responses of "Too Much", "Satisfied", and "Too Little" to the items on the questionnaire may be used as the expected frequencies in significance tests rather than using random distribution or chance frequencies as were used in the present study. Another interesting question is the type of similarities
that may be found between the female sample in the present study and a male sample studied closer in time than Lawler's study. This was the initial intent of the present study. However, due to certain circumstances, male and female samples could not be obtained and admittedly, only a small number of female managers were obtained. Perhaps with improved economic and social conditions this type of study may be a more viable possibility in the future.

It is reiterated here that the satisfaction of women on the job should be a growing concern for organizations today since women are occupying more management positions. Comparisons of the results of this study with those of Lawler (1965) should help present a strong case for the fact that women are not as dissimilar to men as was once believed. Therefore organizations should have the same concerns for their female managers as they do for their male managers if they desire to use their female managers to their fullest potential.
Table 1

Responses of the Managerial Sample to the Four Questions Concerned with Satisfaction with Pay.

<table>
<thead>
<tr>
<th>Questionnaire Item</th>
<th>% Too Much Obs.</th>
<th>Exp. Freq.</th>
<th>% Satisfied Obs.</th>
<th>Exp. Freq.</th>
<th>% Too Little Obs.</th>
<th>Exp. Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pay for my current position.</td>
<td>8</td>
<td>1</td>
<td>4.33</td>
<td>23</td>
<td>3</td>
<td>4.33</td>
</tr>
<tr>
<td>2. Difference between current position and subordinate.</td>
<td>8</td>
<td>1</td>
<td>4.33</td>
<td>54</td>
<td>7</td>
<td>4.33</td>
</tr>
<tr>
<td>3. Difference between current position and superior.</td>
<td>54</td>
<td>7</td>
<td>4.33</td>
<td>23</td>
<td>3</td>
<td>4.33</td>
</tr>
<tr>
<td>4. Difference between current position and others on same level in my company.</td>
<td>42</td>
<td>5</td>
<td>4.00</td>
<td>42</td>
<td>5</td>
<td>4.00</td>
</tr>
</tbody>
</table>
Table 2

Correlations between Satisfaction with Current Pay and Satisfaction with the Differences between Current and Subordinates' Pay, Own and Superiors' Pay, and Own and Managers' on Same Level Pay.

<table>
<thead>
<tr>
<th>Questionnaire Items</th>
<th>1. Pay for Position (b-a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Difference between current position and Subordinate (b-a).</td>
<td>.608**</td>
</tr>
<tr>
<td>3. Difference between current position and Superior (b-a).</td>
<td>-.34</td>
</tr>
<tr>
<td>4. Difference between current position and others on same level (b-a).</td>
<td>.129</td>
</tr>
</tbody>
</table>

** p < .05
## Table 3

Responses of the College Student Sample to the Three Questions Concerned with Perceptions of Differences in Pay.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Difference between female middle level manager and subordinate.</td>
<td>8.3 2 7.99</td>
<td>37.5 9 7.99</td>
<td>54.2 13 7.99</td>
</tr>
<tr>
<td>2. Difference between female middle level manager and superior.</td>
<td>29 7 7.99</td>
<td>45.8 11 7.99</td>
<td>25 6 7.99</td>
</tr>
<tr>
<td>3. Difference between female middle level manager and other managers on the same level.</td>
<td>37.5 9 7.99</td>
<td>37.5 9 7.99</td>
<td>25 6 7.99</td>
</tr>
</tbody>
</table>
References


Adams, J.S. Wage inequities, productivity and work quality. *Industrial Relations, 1963, 3-4*, 9-16. (a)


Lawler, E.E., III. Managers' perceptions of their subordinates' pay and of their superiors' pay. Personnel Psychology, 1965, 18, 413-422.


O'Leary, V.E. Some attitudinal barriers to occupational aspirations in women. Psychological Bulletin, 1974, 81, 809-826.


