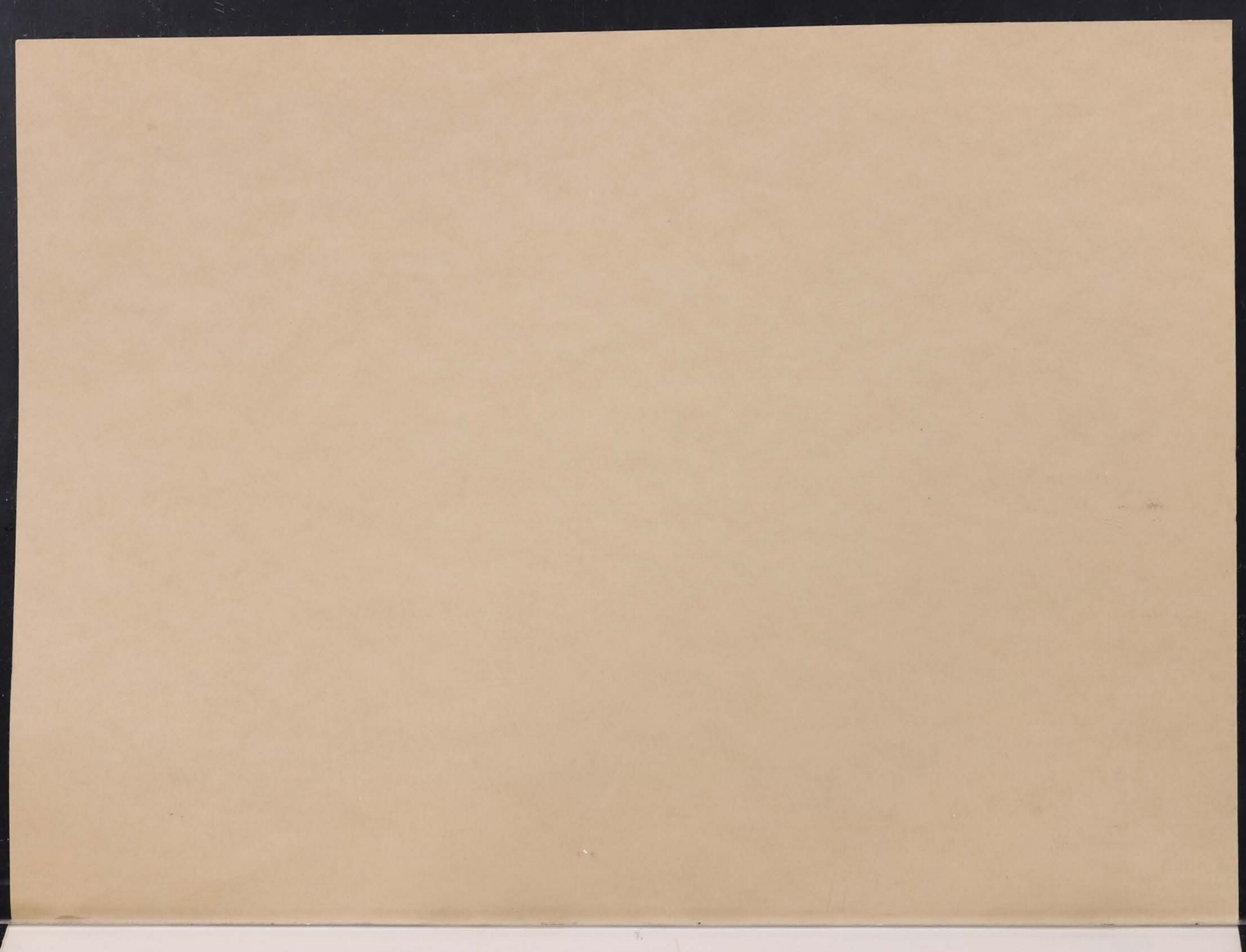


WOMEN
ADVANCING
IN BUSINESS:
the role of
management seminars

iowa commission
on the status of women
1978



WOMEN ADVANCING IN BUSINESS :

THE ROLE OF MANAGEMENT SEMINARS

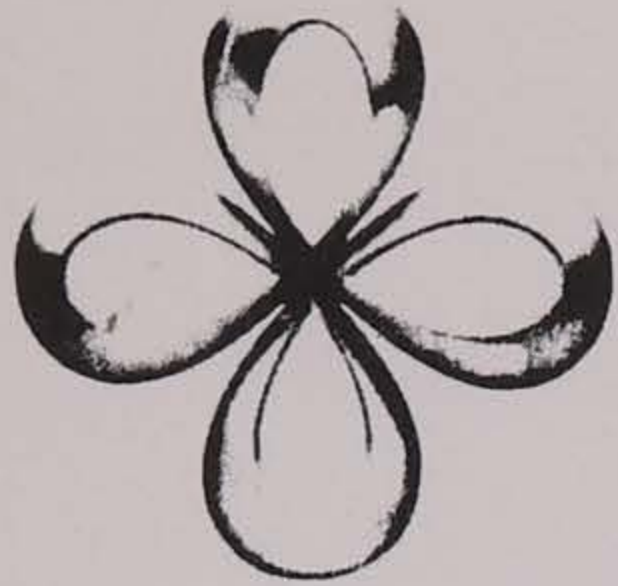
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Iowa
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IOWA COMMISSION ON THE STATUS OF WOMEN

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ROBERT D. RAY
GOVERNOR

PHYLLIS HOWLETT
CHAIRPERSON

May 1, 1978

SUE FOLLON
EXECUTIVE DIRECTOR

The Honorable Robert D. Ray
Office of the Governor
State Capitol Building
Des Moines, Iowa 50319

Dear Governor Ray:

It is with pleasure that we, the Iowa Commission on the Status of Women, present this comprehensive study, *Women Advancing in Business: The Role of Management Seminars*. This study, made possible by a Comprehensive Employment and Training Act grant, is a result of two years of research and evaluation of various management seminars. It is expected that the information in this report will provide data relating to the significance of management seminars for women employed in the private sector. It is hoped that this report will be used by the employer in determining the impact of various seminars in assisting women to achieve their full potential in the work force.

We wish to express our appreciation for the assistance given the Commission by the Office of the Governor in seeking and receiving funding for the research and in disseminating the results of the study.

The Commission sincerely hopes that this study will be given careful consideration as we pledge our continued efforts toward equality of opportunity.

Sincerely,

Phyllis Howlett
Chairperson

Sue Follon
Executive Director

PH:SF:jb



AN EQUAL OPPORTUNITY EMPLOYER



ACKNOWLEDGEMENTS

We owe a special debt to those companies which allowed their employees to attend the seminars we studied on company time. We are also grateful to all the employees who voluntarily participated in the study and who so willingly completed our questionnaires.

A special group of people have our deep appreciation for volunteering their time and energies off and on for the past three years, the members of the Advisory Task Force to the Project. They are Ed Anson, Fran Calhoon, Betty Durden, Tom Ferratt, Ed Lewis, Mary Riche-Warren, Dal Schroeder, Keith Schroeder, Larry Short, Will Smith, Betty Talkington, and Fran Van Winkle.

We are also most appreciative of the help received from the state Office for Planning and Programming, especially to Bob Tyson, Director, Walt Salomon, and Dave Lyon. We would also like to thank the Manpower Services Council for their continued support.

ABSTRACT

Purpose

The purpose of this research was to evaluate the effects of six different training seminars on the advancement of female employees into management and supervisory positions. The study was federally funded and conducted under the auspices of the Iowa Commission on the Status of Women during the period from September 1976 through May 1978.

Methodology

Five different management training seminars were conducted by this Project and attended by 150 women from ten large Des Moines companies. These five training seminars included Achievement Motivation, Assertion Training, Management Task Skills, Management Communication Skills, and Combination Management Task and Communication Skills. Eighteen women were randomly selected from each company to participate in this research. Criteria for selection were: 1) completion of at least one year of college, 2) aspiration to a supervisory or managerial position, and 3) employment in no higher than a first line supervisory position. These eighteen women were then randomly selected to attend one of the five seminars or serve as control group members.

Each of the seminars was evaluated by testing the reactions of the participants to the seminar, the tangible results of the seminars, and the behavioral changes of the participants as indicated by their supervisors. The primary emphasis, however, was on the tangible results of the seminars which included the seminars' effect on the advancement of participants. The main variables tested under this heading were the increase in pay, increase in authority, and the number of promotions.

All three variable were tested before and one year after the seminars were conducted and compared to the control group.

The sixth seminar conducted by this study was the Supervisor Awareness Seminar. Eighteen male and female supervisors from four Des Moines firms participated in this seminar. In addition, a case study of a Des Moines company where a majority of management had previously attended various sessions of the Supervisor Awareness Seminar was completed. The primary variable tested for this seminar was the participants' change in attitudes toward women in business as compared to the established attitudes of control group members.

Results

The findings from this research indicated that the women enjoyed the seminars and that they learned some new skills and techniques which they were able to apply to their work and personal lives. The acquired skills most frequently used by the participants included time management, assertion techniques, goal setting, communication skills, and the construction of objectives.

No statistical differences were found between seminar participants and the control group on the three main variables of increase in pay, authority, and the number of promotions. In addition, no differences in behavior were detected in a comparison of the participants' supervisors responses with the responses from supervisors of the control group.

Although some women may have advanced because of their seminar attendance, the seminars in and of themselves, could not be credited with the advancement of participants into management or supervisory positions. Since no statistical differences between seminars were observed, this study did not endorse any seminar. Some seminars appeared more effective than

others in certain circumstances, however.

The results from the Supervisor Awareness Seminar were inconclusive. The seminar conducted during this study received mediocre evaluations. An insufficient response rate on the post-test made it impractical to analyze attitudinal changes. The case study, however, revealed that when a company actively supports the seminar and a high proportion of its management attend, positive evaluations and increased employee morale are more likely to result. No significant attitudinal changes resulting from attendance in this seminar were detected, however.

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INTRODUCTION

Management training has been defined as the development of "highly specific and immediately useful skills. It is intended to prepare people to carry out well-known tasks in well-defined job contexts."¹ Recently, management training programs or seminars* have come into vogue as a means of creating more efficient, competent, and respected managers who motivate their subordinates without resorting to autocratic or intimidating styles.

Many companies have developed their own in-house training programs. Most companies and individuals, however, must rely on seminar packages developed by outside consultants, nationally recognized training institutes, local universities, or adult education programs. Vast amounts of money are spent by both employers and employees for many different types of programs. Classes ranging from assertion training and management skills to career development and human relations techniques are being advertised as programs that will alter participants' work habits, teach them valuable new ideas, or help them relax and gain new self-esteem.

But what do the seminars accomplish? Are they successful in developing managers and training people for management positions? Which type of training program is most successful, particularly for individuals or employers with no access to in-house training programs?

It has been documented that management training affects the styles of supervisors. One study compared the supervisory characteristics of groups of male supervisors with low, medium, or high amounts of supervisory training by comparing critical supervisory incidents in the subjects' lives. A high amount of training was defined as 75 hours of company training and 3

*The terms management training program and management training seminar will be used interchangeably throughout this report.

college level management courses.

Two results from this study were particularly important for this research project. First, it was established that one does not have to be a supervisor to learn about supervision.² This finding is important because all of the subjects in this study were either non-supervisors or first line supervisors. Second, the group with a high amount of training had a different approach to management than those with less training. The different approach is summarized below:

The trained group shows more generalized response. It emphasizes supervisory style: be fair and consistent, listen to people, try to understand the needs of subordinates, be sympathetic. The individual with less training seems to be more concerned with guidelines for specific tasks: what to do if an employee has falsified his application blank, how often to repeat job instructions for new employees.³

This study seemed to indicate that training is important for supervisory development. It also indicated a great deal of training is necessary before the effects of the training can be realized.

Most research evaluating management training seminars has studied only the reactions of, or behavioral changes by, the participants in a single seminar. The long-range effects of the seminars, however, have rarely been systematically explored. Studies comparing the effects of various types of training seminars have seldom been conducted.

In addition, little research has been conducted which compares the effects of various types of training seminars and/or measures the effectiveness of training seminars offered for women. Females tend to have additional variables to overcome before achieving success in management. These factors include: female managers are the exception and are considered risks by upper management; females lack formal education in business and management skills; and females face social pressures from supervisors

and subordinates alike who feel women should not be encroaching on the previously all male domain of management. Since females have more obstacles in reaching management positions, research on management training programs designed and conducted for women is important to determine successful training methods for female managers.

Do training seminars help women advance in business? Which types of seminars help women advance? Do training seminars help females develop so they can become good managers? Are new skills and techniques learned and used from training seminars?

These questions were addressed by this research with the hope that training seminars could be identified which help women advance into management positions and train them to become competent and respected business managers. Conversely, if training seminars were not found to be of any obvious value, this result would help employees and employers alike in assessing and developing new methods for management training.

Employment Project

The origins of this research began with the members of the Iowa Commission on the Status of Women who decided to explore the problems of female workers in Iowa's private sector through a research grant. Specifically, the Commission submitted a proposal in 1975 for funding of the:

Research and development of a program to assess and document the extent of, and factors contributing to the underemployment of the female labor force in Iowa and to develop and evaluate a comprehensive program to counteract these factors.

The proposal outlined a three phase program to cover a period of three years. The first year, the survey phase, would test the hypothesis that female workers in Iowa were segregated into typical female occupations and averaged less pay than male workers. The second year, the education phase, would design and implement an educational model(s) with

the objective of counteracting some of the factors found to be disadvantageous to the full utilization of women's capabilities in the first phase. The third year, the evaluation phase, would evaluate the effectiveness of the programs implemented in the second year.

The first year of the research began in the Spring of 1975 when CETA (Comprehensive Employment Training Act) Title I funds were received by the Commission. The Employment Project, the name of the federally funded project, was established and operated as a separate organization within the Commission on the Status of Women. During the first year of data collection, over 13,000 surveys were distributed across Iowa to male and female workers in 261 different private firms. Approximately 6,000 were returned and included in the analysis. The analysis of data was completed in July of 1976 with the publication of the final report, A Study of the Underemployment and Underutilization of Women in Iowa.

From the conclusions reached during the first year, the second and third phases of the project were formulated to address the specific problem of the underutilization of women in supervisory and managerial positions. Supervisory and managerial positions were isolated because the first year findings showed they were positions where women were seriously underutilized, yet positions women desired.

Six management training seminars were conducted for the second phase of this research. All programs were subcontracted and conducted by outside consultants in the early part of 1977. The programs included three different managerial skills seminars, assertion training, achievement motivation training, and a supervisor awareness program. With the exception of the supervisor awareness program for male and female supervisors, participants of the other managerial training programs were all women. Compared to mixed

sex classes, all female classes created a safer, more sympathetic environment for the participants to share common situations and solutions to problems. This final report summarizes the seminars conducted in the second year, as well as the seminar evaluations completed during the third and final year of the Employment Project.

Evaluation of Training Seminars

The evaluation of training seminars can be defined as simply "the determination of the effectiveness of a training program."⁴ Donald Kirkpatrick has outlined four steps in the evaluation of training programs which this research followed. These steps are: 1) the reaction to the seminars or measuring how the participants liked the seminars; 2) the tangible results which were received from the seminars, such as whether the seminars helped women advance into management positions; 3) the techniques, ideas, and concepts learned in the seminars; and 4) the changes in the participants' behavior resulting from attending the seminars.⁵

Evaluating the reaction to the training seminars is the easiest step and often the only step completed. In this research, the reaction to the seminars was primarily measured by the results of the evaluation questionnaire administered immediately after each seminar was completed. A further check was made one year later when each participant was asked again to evaluate the seminar and its usefulness.

The step most thoroughly evaluated in this research was the second step or finding the tangible results and comparing them for each of the seminars. Specifically, the results of the seminars were measured by examining the participants' increase in pay, number of promotions, and increase in job responsibilities in the year following the seminars and comparing these

results with an established control group.

The evaluation of what the participants learned from the seminars was measured only indirectly by asking the participants after one year to identify the technique, idea or concept they learned from the seminar and used most often during the year. Since the concepts and techniques were different in all the seminars conducted, a comparison of the amount learned from each seminar would have been inconclusive and difficult to interpret.

The final area or step in the evaluation of training seminars is how the participants' behavior altered as a result of the seminars. This step was indirectly examined by comparing identical questionnaires completed by the participants' supervisors both before and one year after the seminar. In addition, the variable of job satisfaction was examined to determine if the participants had greater job satisfaction than the control group.

Although a direct measure of behavioral change would have been desirable, it was not considered feasible. A direct measurement of behavioral change would have required observations or interviews of the participants and/or supervisors. Cost and time constraints precluded such a research design.

The interpretation of the findings from these four steps is the basis for the evaluation of the effectiveness of training seminars and their ability to promote women. Statistical tests were used whenever appropriate to substantiate the findings of the research.

Organization of the Report

The final report of the last two phases of the Employment Project is divided into five parts. Part I includes the general information on the underutilization of women in management. Chapter I explains the background of the problem and summarizes some of the relevant research on the

subject. The second chapter describes the four causal models used to explain the various theoretical rationales for women's traditional underutilization in managerial positions.

Part II includes the research methodology and the hypotheses used in the research. Chapter III explains the methodology, hypotheses, and the terms used to test the five all female seminars. The seminar and company sample selections and the demographic characteristics of the participants in the five all female seminars are described in Chapter IV. Chapter V explains the methodology, hypotheses, and terms used in the Supervisor Awareness Seminar. The limitations of the study are described in Chapter VI.

Part III describes the contents of each of the six seminars conducted by the Employment Project, and the participants' reactions to the seminars. Also included is a day by day schedule of each seminar. Chapter VII describes the Achievement Motivation and Assertion Seminars. Chapter VIII includes a description of the three management skills seminars, while Chapter IX describes the Supervisor Awareness Seminar.

Part IV contains the results of the hypotheses and the analysis of the data. Chapter X summarizes the subjective one year evaluations of the five seminars for female participants. Chapter XI analyzes the results of the hypotheses outlined in Chapter III. The Supervisor Awareness Seminar's data is summarized in Chapter XII. Finally, Chapter XIII summarizes the conclusions drawn from the final two phases of the Employment Project, and it presents some practical applications for both employers and female employees concerning management training seminars for women. The Appendices and the Bibliography are included in Part V.

FOOTNOTES: INTRODUCTION

¹Bohdan Hawrylyshy, "Management Education - A Conceptual Framework," in Bernard Tayler and Gordon Lippitt, (eds.), Management Development and Training Handbook, (New York: McGraw-Hill, 1975), p. 170.

²Peter Couch and George Strother, "A Critical Incident Evaluation of Supervisory Training," Training and Development Journal, (September 1971), p. 6.

³Couch and Strother, pp. 9-10.

⁴Donald Kirkpatrick, "Evaluation of Training," in Robert Craig, Training and Development Handbook: A Guide to Human Resource Development, (New York: McGraw-Hill, 1976), p. 18:2.

⁵Kirkpatrick, p. 18:2.

CHAPTER I
EMPLOYMENT AND THE AMERICAN WOMAN:
THE EFFECTS OF OCCUPATIONAL SEGREGATION
WOMEN IN THE AMERICAN LABOR FORCE

Women have been members of the American labor force since the founding of the colonies in the seventeenth century. Women have worked in a wide variety of jobs throughout American history ranging from farmer, cobbler, seamstress, and printer in the pre-Civil War days to teacher, typist, industrial worker, carpenter, engineer, and business manager in modern times.¹ Even with a steady and strong employment history, the stereotype of the average American woman still depicts a full-time homemaker and mother. The average woman, though, no longer is a full-time homemaker who leaves the work force after marriage.

As of December 1976, 39 million women aged 16 and over were in the labor force.² The number of women in the labor force has more than doubled since 1950 and nearly tripled since 1940.³ Between 1950 and 1976, the total American labor force grew by about 31 million jobs. Women were hired in nearly three-fifths of the new jobs.⁴

Fifty-six percent of all women aged 18 to 64 years old are now in the civilian labor force.⁵ A 68 percent increase from 1950 to 1976 in the proportion of working women aged 25 to 34 years old is particularly notable.⁶ Table I-1 shows the labor force participation rates of women by age groups and the percentage change from 1940 to 1976 and from 1950 to 1976.⁷

The composition of the female labor force has also been changing. In 1950, only 23.8 percent of the female labor force was married; by 1976, 45 percent was married.⁸ Table I-2 shows the labor force participation rates

TABLE I-1
 PERCENTAGE OF WOMEN IN LABOR FORCE
 BY AGE GROUPS IN SELECTED YEARS
 AND
 PERCENT CHANGE 1940-1976 AND 1950-1976

AGE (YEARS)	1940	1950	1960	1970	1976	1940-76	1950-76
Total, 16 yrs. & over	28.9	33.9	37.8	43.4	47.3	+63.7	+39.5
16 and 17	13.8	30.1	29.1	34.9	40.7	+194.9	+35.2
18 and 19	42.7	51.3	51.1	53.7	59.0	+38.2	+15.0
20 to 24	48.0	46.1	46.2	57.8	65.0	+35.4	+41.0
25 to 34	35.5	34.0	36.0	45.0	57.1	+60.9	+67.9
35 to 44	29.4	39.1	43.5	51.1	57.8	+96.6	+47.8
45 to 54	24.5	38.0	49.8	54.4	55.0	+124.5	+44.7
55 to 64	18.0	27.0	37.2	43.0	41.1	+128.3	+52.2
65 yrs. and over	6.9	9.7	10.8	9.7	8.3	+20.3	-14.4

Source: U.S. Congress, Joint Economic Committee. American Women Workers in a Full Employment Economy, 1977, p. 26.

TABLE I-2

PERCENTAGE OF WOMEN IN LABOR FORCE
 BY MARITAL STATUS IN MARCH 1950, 1975, AND 1976
 AND PERCENT CHANGE 1950-1976

MARITAL STATUS	1950	1975	1976	PERCENT CHANGE
Married women, husband present	23.8	44.4	45.0	+89.1
With children under 18 yrs.	18.4	44.9	46.1	+150.5
With children under 6 yrs.	11.9	36.6	37.4	+214.3
With no children under 18 yrs.	30.3	43.9	43.8	+44.6
Other ever-married women	37.8	40.7	40.9	+8.2
With children under 18 yrs.	54.9	62.4	63.8	+16.2
With children under 6 yrs.	41.4	55.0	56.2	+35.7
With no children under 18 yrs.	33.7	33.2	32.8	-2.7
Single women	50.5	56.7	58.9	+16.6

Source: U.S. Department of Commerce, Bureau of the Census, "Current Population Reports," series P-50, No. 29; and U.S. Department of Labor, Bureau of Labor Statistics, "Special Labor Force Reports," No.s 13, 130, and 183 and BLS unpublished data for 1976.

of women by marital status in March 1950, 1975, 1976 and the percentage change between 1950 and 1976.⁹

At the turn of the century, the average American female worker was young, unmarried, without children, and worked in the labor force only until marriage. Presently, however, the average American female worker is middle-aged, married or has been married, has one or more children, and works an increasing number of years.

The number of women in Iowa's labor force mirrors the national statistics. As of 1976, 49.8 percent of all women 16 years and older were in the Iowa civilian work force. Women represented 41 percent of all workers in Iowa.¹⁰ In addition, 39 percent of all married women in Iowa were in the labor force.¹¹

Laws Concerning Sex Discrimination

Changes in American laws during the 1960's and 1970's have supported the changing trends in the female labor force. One of the first major legislative acts regarding sex discrimination was the Equal Pay Act of 1963. This act covers wage discrimination. It was considered necessary because women were earning an average of only 60 percent of the average wage of males.¹² As Mary Dublin Keyserling reports, the wage differential between men and women, however, has not improved since this act was passed:

Because of women's concentration at the lower ranges of the occupational ladder, their median earnings for year-round, full-time work in 1975 were only \$7,504, or only 59 percent of the \$12,758 median earnings of men for year-round full-time work. Of all women employed year-round and full-time, 22 percent earned less than \$5,000. This compares with fewer than 7 percent of men. At the upper end of the earnings scale, only 4.5 percent of women earned between \$15,000 and \$25,000; the percentage of men in this income bracket was six times greater. Fewer than one half of 1 percent of all these women earned \$25,000 or more; the percentage of men in this bracket was 20 times higher.¹³

Employees with complaints under the Equal Pay Act may have their grievances heard through the courts by hiring a private attorney or redress can be sought through the Wage and Hour Division of the Department of Labor.

Title VII of the Civil Rights Act of 1964 is the primary legislation prohibiting sex discrimination in employment. This act is interpreted and enforced by the Equal Employment Opportunity Commission.

Executive Order 11246 as amended in 1971 decreed that employers who hold federal contracts of \$50,000 or more and employ more than 50 people must have a written Affirmative Action Plan to correct the discrepancies of current and past sex discrimination.¹⁴ Goals must be included in the Affirmative Action Plan for hiring both minorities and women.¹⁵

Enforcement of this executive order rests with the Office of Federal Contract Compliance Programs within the Department of Labor. This office has in turn delegated some of its enforcement responsibilities to the various federal agencies which administer the federal contracts. The major remedy through Executive Order 11246 is not individual relief and correction, as is the case with the Equal Pay Act and Title VII, but rather through cancellation or termination of federal contract funds.¹⁶

The Supreme Court has upheld the legality of Affirmative Action plans. In a landmark decision, Griggs vs. Duke Power Company, the court stated that any policy or practice that has an adverse or disparate effect on women or minorities which cannot be justified by business necessity will be considered discriminatory.

Each state also has the option of passing laws against sex discrimination. Iowa has been one of the leading states in passing legislation against sex discrimination in employment and education. In 1970, Iowa amended its own Civil Rights Act to prohibit discrimination in hiring,

promotion, and all terms and conditions of employment on the basis of sex. All employers are covered unless they have fewer than four employees or unless the employment involves domestic or personal service. The Iowa Civil Rights Commission has been given the authority to investigate complaints and enforce provisions of the act concerning sex discrimination.

The Occupational Segregation of Women

Most women, like most men, work because they need the money. As of 1976, two-thirds of all women worked because they were single, widowed, separated, divorced, or had husbands who made less than \$7,000 a year.¹⁷

Women, on the average, are also as educated as men. Seventy percent of all women workers have high school degrees and one in eight has a college degree.¹⁸ The proportion of female college graduates working in professional occupations, however, fell from 81 percent in 1969 to 69 percent in 1974.¹⁹ In part, this drop reflects the declining market for elementary and secondary school teachers.

Even with the increasing number of women in the labor force and the economic need of many women to work, most women are still crowded into "female occupations" with little opportunity for vertical movement. Occupational segregation can be illustrated by noting that the ten occupations employing the most females account for 40 percent of all women workers, while the ten occupations employing the most men account for only 20 percent of all male workers.²⁰

The ten largest occupations for women in 1973 were secretary, retail trade salesworker, bookkeeper, private household worker, elementary school teacher, waitress, typist, cashier, sewer and stitcher, and registered nurse.²¹ In 9 out of 10 of the occupations, women comprised 83 to 99

percent of all workers in that particular occupation.²² The exception is retail sales where women made up 69 percent of the occupation.²³

In the last fifteen years, the concentration of female workers in most of these ten occupations has increased. Table I-3 shows the proportion of employed workers who were women in these ten occupations for selected years between 1960 and 1975.²⁴ The data were collected from various sources, and only general comparisons should be made.

Women in Management

Women were not generally employed as office workers until after the Civil War. With the invention of the typewriter in 1873 and the shift-key typewriter in 1878, women began to be trained as typists, stenographers, and bookkeepers, replacing the traditional male secretary and copier. In 1870, there were around 19,000 women office workers of all kinds in the United States. In 1890, there were 75,000 and in 1900, this number had swelled to 503,000, an increase of 2,700 percent in 30 years.²⁵ Working as an office worker was considered to be more prestigious and easier than the factory jobs many women held in the late 1800's. In fact, office jobs were primarily reserved for native-born, educated, white women.²⁶

The number of women in office work has been increasing since the turn of the century. Until World War II, women were found only in the lower paying, less prestigious, and non-decision making positions in business. Only in the last 15 years have women been moving into management positions. In most categories of management and supervisory positions, women's progress has been slow but steady.

Table I-4 shows the percent of employed persons who were women in selected managerial jobs in several years from 1960 to 1974.²⁷ The data

TABLE I-3

PROPORTION OF EMPLOYED WORKERS WHO WERE WOMEN
IN THE TEN LARGEST FEMALE OCCUPATIONS
FOR SELECTED YEARS SINCE 1960*

OCCUPATION	1975	1974	1973	1970	1960
All Occupations	39.0	38.9	38.4	37.7	32.8
Nurses, dieticians, therapists	----	93.1	----	94.4	96.0
Registered nurses	----	98.0	97.8	97.3	97.5
Teachers, except college	70.6	69.2	69.9	70.2	72.6
Elementary school teachers	----	84.3	84.5	83.6	85.8
Salesworkers, retail trade	61.6	60.9	----	----	----
Sales clerks, retail trade	----	69.4	69.0	64.6	63.3
Bookkeepers	----	89.2	88.3	82.0	83.4
Cashiers	----	87.7	86.7	83.5	76.9
Secretaries, typists and stenographers	98.4	98.4	----	96.6	96.5
Secretaries	----	----	99.1	97.6	97.1
Typists	----	----	96.6	94.2	95.1
Operatives except transport	39.5	40.4	39.2	37.9	35.5
Sewers and stitchers	----	----	95.5	93.7	94.0
Food service workers	74.6	74.7	69.7	68.0	67.6
Waiters	----	----	82.9	88.8	86.6
Private household workers	98.0	98.2	98.3	96.6	96.4

* Dashes are used when data are not available

Source: U.S. Congress, Joint Economic Committee. American Women Workers in a Full Employment Economy, 1977.

TABLE I-4

PERCENT OF EMPLOYED PERSONS WHO ARE WOMEN
IN SELECTED MANAGERIAL JOBS FOR SELECTED YEARS*

OCCUPATION	1974	1973	1970	1960
All Occupations	38.9	38.4	37.7	32.8
Managers and administrators except farm	18.5	18.4	16.5	14.7
Bank officials, financial managers	21.4	19.4	17.6	8.7
Buyers and purchasing agents	24.9	25.1	----	----
Buyers, wholesale & retail trade	36.3	----	29.5	35.5
Health administrators	----	----	44.6	75.1
Officials, administrators; public administration; n.e.c	20.8	----	19.1	17.4
Restaurant, cafeteria, bar managers	33.9	32.4	34.1	32.5
Sales managers, department heads, retail trade	32.4	28.9	23.8	23.4
Sales managers except retail trade	----	----	3.5	<.1
School administrators	27.8	29.0	26.5	25.6
College	----	----	23.5	30.7
Elementary and Secondary	----	----	27.1	25.0

* Dashes are used when data are not available

Source: U.S. Congress, Joint Economic Committee. American Women Workers in a Full Employment Economy, 1977, p. 97.

again need to be interpreted in a general, comparative manner rather than specifically. The sharpest increase in managerial positions for women is in the banking and financial managers category, one of the fastest expanding job categories. The growth in the number of women in this category was from 9 percent in 1960 to 21 percent in 1974.²⁸ In another rapidly growing category, health administration, the percent of women has declined due to an influx of men. Also, women lost ground as college administrators.²⁹

A 1976 study conducted by the Iowa Commission on the Status of Women concluded that women were underutilized* in supervisory and management positions in Iowa. Female employees in the private sector were found to be significantly underutilized in managerial and supervisory positions and in positions paying from \$10,000 to \$17,500 a year. A wide pay differential was also verified for Iowa, with 70 percent of the men sampled earning over \$10,000 per year and 84 percent of the women sampled earning under \$10,000.³⁰

One of the primary ways to redress the occupational segregation of women is to reduce the number of women in clerical occupations and increase the number of women in the managerial category. As Janet Norwood has stated:

The largest proportion of women is in clerical occupations. Thirty-five percent of all employed women are clerical workers, compared to 6 percent of men. It seems to me that the goal is to move this cluster of women out of the category in which they are now located into occupations which are higher paying, which are perhaps more challenging, and which offer more possibilities for women to realize their potential. In general, this means moving them into some of the managerial classifications in which they are now under-represented or into the professional and technical occupation group.³¹

*UNDERUTILIZATION is a term used to describe a situation in which fewer numbers of women are employed in specific job categories than would be expected in view of their availability in the work force.

UNDEREMPLOYMENT on the other hand, is a term that considers the relationship between an individual's education, experience and aspirations and her/his current job. The term depicts situations in which an individual's education, experience or aspirations is greater than others in similar jobs or at similar pay levels.

WHY HAVE WOMEN BEEN UNDERUTILIZED IN MANAGEMENT POSITIONS?

Many reasons have been offered to explain why women have not been given more responsible positions in business. The remainder of this chapter will summarize part of the relevant research in this area. The next chapter will categorize the response to this problem into specific models.

Much of the research and writing concerning women in management has centered around three areas: 1) male managers' attitudes toward women; 2) the socialization of women which has created specific sex-roles for women, keeping them from aspiring to leadership positions; and 3) a comparison of women's performance in management and supervisory jobs and functions with men's performance.

A primary study concerning male managers' attitudes toward women was conducted by Bowman, Worthy, and Greyser in 1965. Some interesting conclusions were reached in this survey study. Both men and women surveyed felt women have a moderate but not equal opportunity to become managers, however, almost one-third saw very little opportunity for women.³² It was also found that "there was overwhelming agreement that only the exceptional, indeed the overqualified, women can hope to succeed in management"³³ (emphasis theirs).

Men who have had some exposure or experience with female managers tended to be more favorably disposed to the idea of women in management than the male managers who had no contact with female bosses.³⁴ However, 81 percent of those surveyed did not feel that men would be comfortable with a female boss.³⁵ This latter finding was supported by Bass, Krusell, and Alexander who found that women were not believed to be less capable and talented than men, but that men and women did not feel comfortable with female supervisors.³⁶

Other studies have concluded that a manager's attitude toward women will affect initial selection as well as future promotions. Terborg and Ilgen found that their subjects were more apt to reward higher second year salary increases to men than women with the same qualifications and records.³⁷ Garland and Price found that internal attributes (e.g. ability and hard work) were given as reasons for the success of women if the subjects had positive attitudes toward women in management, while external attributes (e.g. good luck and an easy job) were cited as reasons if subjects had negative attitudes toward women in management. Garland and Price concluded that:

One important implication of this research is that bias against women in management may not only operate against a female at the beginning of her career, in the absence of clear performance data, but also when she is well into her career and may have established a superior record.³⁸

Many men resist bringing women into management because it will alter their methods of relating to their colleagues. Jean Lipman-Blumen labels the desire of men to exclude women from their past domain in business management as "homosocial." This term refers to the stratified system in our culture which excludes one sex from important aspects of the other sex's life. The main premise is that men, in particular, are brought up to be "attracted to, stimulated by, and interested in other men," particularly in their work world.³⁹ The term does not necessarily refer to sexual behavior.

Donald Jewell describes the resistance that women in management will meet:

The movement of women into management roles constitutes a significant change. It threatens men in management, and those men who aspire to management positions, and their wives. The forces of change are powerful, and have generated resistance in many forces and intensities. Dealing with resistance to her expanding role will be part of the life of the woman manager for years to come.⁴⁰

The second area of research and writing dealing with women and management has centered on the socialization of women leading to sex-role stereotypes. The traditional female stereotype depicts females as nurturant, people-oriented, sympathetic, and dependent on intuition while lacking the necessary analytical ability and logical aptitude for successful business management. Conversely, the male stereotype fits the stereotype of the business manager as McGregor states:

The model of the successful manager in our culture is a masculine one. The good manager is aggressive, competitive, firm, and just. He is not female, he is not soft and yielding or dependent and intuitive in the woman sense. The very existence of emotion is widely viewed as a feminine weakness that would interfere with effective business process.⁴¹

One study showed that characteristics ascribed to managers are identified as male characteristics. A large and significant relationship existed between the ratings of males and managers, while a near zero, nonsignificant relationship existed between the ratings of characteristics of women and managers.⁴² Characteristics which were not synonymous with the masculine stereotype, but were thought to be important characteristics for managers to possess included "employee-centered" behaviors such as "understanding, helpful, and intuitive."⁴³

Many women in the work world are also confronted with major role conflicts. Married women must find time to perform household tasks which women have been traditionally expected to perform. Working mothers, in particular, experience time conflicts and therefore, must make priority decisions. Society expects women to be good mothers, adding a special burden to working mothers. Rightly or wrongly, the working mother who "fails" as a parent will be blamed for neglecting her children. A working mother who succeeds as a parent will not, however, be given extra credit

for managing two full-time careers, working and parenting.⁴⁴ In addition, society has established males as being the primary breadwinners in a family. Any married woman who excels her husband in his job has to deal with this belief. Many women may stifle career opportunities for fear they will be more successful than their husbands.

Sex stereotypes have often been cited for influencing the type of education a woman receives. Women are usually steered away from science, math, engineering, and business classes in high school and college. The lack of science, math, and technical courses narrows women's career choices. It is debatable whether women in general lack aptitude in these areas or whether societal stereotyping, teachers, counselors, and parents subtly steer women away from these interests and courses.

Some scholars have also researched the possibility that women have a distinct psychology from men that creates difficulties in succeeding in a business atmosphere. Such psychological motives as the achievement motive (see section on Achievement Motivation in Chapter VII), fear of success, fear of failure and the affiliation motive have been researched as possible explanations for the lack of women in top level positions in business.⁴⁵

The third major area of research and writing has concerned how women compare to men in managerial and supervisory positions. This research has produced some conflicting results, but for the most part women are seen as being able to compete with men in management positions.

In a study evaluating male and female supervisory behavior, Rosen and Jerdee found that the efficiency of certain supervisory styles is influenced by the sex of the subordinate. They found that a "reward style" of supervision is more effective for male supervisors with subordinates of either sex than for female supervisors. In addition, when a supervisor has

subordinates of the opposite sex, it was found that a "friendly dependent" style worked best. A "threatening" style was considered undesirable and a "helping" style considered desirable for supervisors of either sex, regardless of the sex of subordinates.⁴⁶

In a study researching the differences between men and women managers and how they view their work environment, it was concluded that differences do exist. Men made stronger distinctions between the formal and informal organizations than women, and women had a greater tendency to look for satisfaction in the informal organization than did men.⁴⁷ Overall, however, women viewed the aspects of the formal organization more positively than men.⁴⁸ The research concluded, nevertheless, that "men and women managers are more similar than dissimilar in their feelings about the organizational climate within which they work."⁴⁹ In a review of the literature, it was found that most researchers agreed that "about the only testable difference between men and women seems to be women's greater ability in interpersonal relationships."⁵⁰

The Johnson O'Connor Research Foundation, Inc., identified 22 basic aptitudes related to success in business management. They found that in 14 of those aptitudes no difference between sexes could be found. However, they found that women excelled over men in six aptitudes including finger dexterity, graphoria, ideaphoria, observation, silograms and abstract visualization, while men excelled in only two, grip and structural visualization. One conclusion reached by the study was that "theoretically at least, there ought to be more women than men in management."⁵¹

Most of the research concerning how well women perform in supervisory roles has come from surveys that test stereotypes or impressions. In field

studies, however, there has been a consistent failure to find any differences between male and female supervisory behaviors.⁵² One field study looked at the leadership behavior of men and women and the differences in subordinate job satisfaction in units supervised by females and males in two mental health institutions. The study found that the supervisor's sex did not appear to have consistent influence on either the variable of leader behavior or the variable of subordinate satisfaction.⁵³ The authors, Osborn and Vicars, concluded by warning that:

...Artificial, short term laboratory situations tend to elicit subject responses based on readily available stereotypes, while long-term, real-life field settings include extensive interpersonal contact that provides subjects with a more realistic basis for their behavior. Thus, lab studies may yield deceptive data in overstating the total influence of sex stereotyping - that is, the results may be an artifact of the research setting.⁵⁴

CONCLUSION

This chapter has discussed the position of women in the American work force with special attention to women in management. It was found that more women are entering the work force, but that women are still concentrated in a small number of lower-paying, less prestigious jobs.

The number of women in management and supervisory position was found to be growing, particularly in banking and financial institutions. Some of the research on women in management was also reviewed. Studies indicate that stereotypes about women still exist. However, there is a growing amount of research which indicates women are as capable as men in management positions. Nevertheless, women face many obstacles in obtaining management positions. Miller, Labovitz, and Fry concluded:

But the indication is that, unlike men, women who improve their position by increasing their expertise, by moving up occupationally, or by moving into positions of authority may also run the risk of losing friendship and respect, influence, and access to information.⁵⁵

Even though barriers still exist for women, more women aspire to higher career goals and expectations than ever before. And the laws recently passed by Congress support equality and prohibit sex discrimination in employment.

FOOTNOTES: CHAPTER I

¹See Barbara Wertheimer, We Were There: The Story of Working Women in America, (NY: Pantheon Books, 1977), for a history of women in the American labor force, with a special emphasis on women in the trade unions.

²Mary D. Keyserling, "Women's Stake in Full Employment: Their Disadvantaged Role in the Economy - Challenge to Action," in U.S. Congress, Joint Economic Committee, American Women Workers in a Full Employment Economy, (Washington, D.C.: U.S. Government Printing Office, 1977), p. 26.

³Keyserling, p. 26.

⁴Keyserling, p. 26.

⁵Barbara Reagan, "De Facto Job Segregation," in U.S. Congress, Joint Economic Committee, American Women Workers in A Full Employment Economy, p. 91.

⁶Keyserling, p. 26.

⁷Keyserling, p. 26.

⁸Keyserling, p. 27.

⁹Keyserling, p. 27.

¹⁰U. S. Department of Labor, Bureau of Labor Statistics, Report 504, (Washington D.C.: U. S. Government Printing, 1977), p. 26.

¹¹U.S. Department of Labor, Employment Standards Administration, "Women Workers in Iowa, 1970," (Washington, D.C.: U.S. Government Printing, 1970), p.2.

¹²According to a statement made by President Kennedy at the signing of the Equal Pay Act in June 1963, cited by Marsha Greenberger and Diane Gutmann, "Legal Remedies Beyond Title VII to Combat Sex Discrimination in Employment," in U.S. Congress, Joint Economic Committee, American Women Workers in a Full Employment Economy, p. 77.

¹³Keyserling, p. 28.

¹⁴Elga Wasserman, Aric Lewin, and Linda Bleiweiss (eds.), Women in Academia: Evolving Policies Toward Equal Opportunities, (NY: Praeger Press, 1974), pp. 21-29.

¹⁵Goals and timetables are projected hirings based on the proportion of women and minorities living in a locality who are qualified for a given position. Goals are not rigid quotas that must be met, but are targets to help guide the employer in Affirmative Action. See C.H. Foxley, Locating, Recruiting and Employing Women: An Equal Opportunity Approach, (Garrett Park, Maryland: Garrett Park Press, 1976), Chapter 5, particularly pp. 77-78.

¹⁶Greenberger and Gutmann, p. 84. Also, as a further step a complaint can be referred to the Justice Department for legal action.

FOOTNOTES: CHAPTER I (Cont.)

¹⁷Martha Griffiths, "Can We Still Afford Occupational Segregation? Some Remarks," in Martha Blaxall and Barbara Reagan (eds.), Women and the Workplace: The Implications of Occupational Segregation, (Chicago: University of Chicago Press, 1976), p.9.

¹⁸Griffiths, p. 7.

¹⁹Reagan, (1977), p. 96.

²⁰Reagan, (1977), p. 93.

²¹Reagan, (1977), p. 95.

²²Reagan, (1977), p. 93.

²³Reagan, (1977), p. 93.

²⁴Reprinted from Reagan, (1977), p. 95.

²⁵Wertheimer, p. 233.

²⁶Wertheimer, p. 230.

²⁷Reprinted from Reagan, (1977), p. 97.

²⁸Reagan, (1977), p. 97.

²⁹Reagan, (1977), p. 97.

³⁰Iowa Commission on the Status of Women, A Study of the Underemployment and Underutilization of Women in Iowa, (Des Moines: State Government Printing, 1976), Table IV-15, p. 73.

³¹Janet Norwood, "Presentation V," in Martha Blaxall and Barbara Reagan (eds.), Women and the Workplace: The Implications of Occupational Segregation, p. 279.

³²G. W. Bowman, N.B. Worthy, and S.A. Greyser, "Are Women Executives People?" Harvard Business Review, (July-August 1965), p. 15.

³³Bowman, Worthy, and Greyser, p. 176.

³⁴Bowman, Worthy, and Greyser, p. 15.

³⁵Bowman, Worthy, and Greyser, p. 15.

³⁶Bernard Bass, Judith Krusell, and Ralph Alexander, "Male Managers' Attitudes Toward Working Women," American Behavioral Scientist, (Nov.-Dec. 1971), p. 235.

³⁷James Terborg and Daniel Ilgen, "A Theoretical Approach to Sex Discrimination in Traditionally Masculine Occupations," Organizational Behavior and Human Performance, 13(1975), pp. 352-376.

³⁸H. Garland and K. Price, "Attitudes Toward Women in Management and

FOOTNOTES: CHAPTER I (Cont.)

Attributions for their Success and Failure in a Management Position," Journal of Applied Psychology, 62(No. 1, 1977), p.33.

³⁹Jane Lipman-Blumen, "Toward a Homosocial Theory of Sex Roles: An Explanation of the Sex Segregation of Social Institutions," in Martha Blaxall and Barbara Reagan (eds.), Women and the Workplace: The Implications of Occupational Segregation, p. 16.

⁴⁰Donald Jewell (ed.), Women and Management: An Expanding Role, (Atlanta: Publishing Services Division, Georgia State University, 1977), p. 89.

⁴¹D. McGregor, The Professional Manager, (New York: McGraw-Hill Co., 1967), p. 23 in Virginia O'Leary, "Some Attitudinal Barriers to Occupational Aspirations in Women," Psychological Bulletin, 81(No. 11, 1974), p. 811.

⁴²Virginia Schein, "The Relationship Between Sex Role Stereotypes and Requisite Management Characteristics," Journal of Applied Psychology, 57(No. 2, 1973), p. 97.

⁴³Schein, p. 98.

⁴⁴See Susan Darley, "Big Time Careers for the Little Woman: A Dual Role Dilemma," Journal of Social Issues, 32(No. 3, 1976), pp. 85-98.

⁴⁵See O'Leary, pp. 809-826, for a discussion of attitudinal behaviors that might affect women's occupational goals and aspirations.

⁴⁶Benson Rosen and Thomas Jerdee, "The Influence of Sex Role Stereotypes on Evaluations of Male and Female Supervisory Behavior," Journal of Applied Psychology, 57(No. 1, 1973), p. 47.

⁴⁷W. Reif, J. W. Newstrom, and R.M. Moncza, "Exploding Some Myths About Women Managers," California Management Review, 17(No. 4, Summer, 1975), p.76.

⁴⁸Reif, Newstrom, and Moncza, p. 77.

⁴⁹Reif, Newstrom, and Moncza, p. 77.

⁵⁰Reif, Newstrom, and Moncza, p. 73.

⁵¹Michael Johnson, "Women: Born to Manage," Industry Week, (August 4, 1975), p. 25.

⁵²Richard Osborn and William Vicars, "Sex Stereotypes: An Artifact in Leader Behavior and Subordinate Satisfaction Analysis?" Academy of Management Journal, 19(September, 1976), p. 440.

⁵³Osborn and Vicars, p. 447.

⁵⁴Osborn and Vicars, p. 447.

⁵⁵J. Miller, S. Labovitz, L. Fry, "Inequities in the Organizational Experiences of Women and Men," Social Forces, 54(No. 2, December, 1975), p. 378.

CHAPTER II

THEORETICAL FRAMEWORK

The research report, The Underemployment and Underutilization of Women in Iowa, concluded that women in Iowa's private sector were underutilized in several job categories. In a survey of 6,000 male and female workers in the private sector, women were found to be substantially underutilized in craft, managerial, and supervisory positions. Women were also underutilized at pay levels from \$10,000 to \$17,500. College educated women compared to college educated men were underemployed in managerial positions and pay levels above \$10,000.¹

Several other relevant findings were also reported. Although the study revealed that female employees were typically less educated, had fewer dependents, and had worked a shorter period of time, the study did not find that women were satisfied with their lower paying occupations. Women wanted to hold higher level positions and the majority wished to hold technical, professional and managerial positions. The desire of women to attain higher level positions was also evidenced in dissatisfaction with their current pay and promotional opportunities.²

An analysis of desired job categories by industry produced another notable finding. It appeared that as the proportion of women in a job category increased, the proportion aspiring to that category also increased. The example presented was the managerial category in the transportation and utilities industry. Nineteen percent of the women in this industry were employed in managerial positions, as compared to 6 percent of the total sample, and 45 percent of the women in this industry desired managerial positions, as compared to only 22 percent of the total female sample.³

The second year of this research project addresses three main questions stemming from the first year's research. First, what changes do women

employees or business managers have to make to improve female representation in supervisory and middle management positions? Second, do management training seminars help promote women into supervisory or middle management positions? Finally, what kind of management training seminars are most effective in promoting women into supervisory or middle management positions?

Sex discrimination has been conceptualized as having two components: access discrimination and treatment discrimination.⁴ Access discrimination refers to limitations placed on the female subgroup at the time a position is being filled. Access discrimination includes lower starting salaries, failure to actively recruit women, and initial placement of women in jobs for which they are overqualified. Treatment discrimination refers to differential treatment of women once they have been hired by an organization. Treatment discrimination includes slower rates of promotion, assignments to less challenging and less interesting tasks, lower pay increases, less frequent pay reviews, and fewer training opportunities than men receive. This research studies methods of eradicating treatment discrimination by offering different types of training programs and studying the effects of the programs on pay, level of job responsibility, and number of promotions.

We have initially assumed that private businesses participating in this research comply with the laws regarding Affirmative Action and that the companies believe in equal opportunity for their employees. We have also assumed that women are as capable as men in performing supervisory functions. Finally, we have assumed that adults can be educated and are willing to change their behavior if they learn alternative behavior patterns which would maximize their personal ability, success and monetary gain.

Four causal models are proposed in this research to help conceptualize why women have been traditionally underutilized in supervisory and managerial

positions. The models relate some of the assumptions, frameworks, and conclusions from previous research. (See the previous chapter for an overview of this research.) Each model focuses on two causes of women's underemployment and underutilization: the internal barriers of the women themselves and the external barriers of the assumptions and structures of society and business.

Chart II-1 shows the relationship between these two sources and the four models, and the seminars conducted under each model. Each of the models begins with the premise that women are underemployed and underutilized in management and supervisory positions in the private sector. The first model involves the psychological attitudes of women toward their work. Attitudinal changes by women will remove the internal barriers and women will be promoted. The second model involves women attaining new management skills, but these skills must match the existing needs and be recognized by the external forces of business and society before women will be allowed to advance.

The last two models focus on external barriers. The third model involves changing the traditional assumptions and sex-role stereotypes about women held by present management. Employees tend to react to the expectations and assumptions held by their superiors. If the present management can change its traditional assumptions and sex-role stereotypes, then perhaps women's behavior will correspond to these changes and will meet the leadership's newly increased expectations. Women's behavior, however, must correspond with the new assumptions before they will be advanced. The fourth model involves altering the present business organizational structures to allow women greater input into policy and decision-making positions. Chart II-2 summarizes the assumptions, variables, and the results of the changes for each of the four models.

CHART II-1

Two causes of women's underutilization and underemployment in management and supervisory positions are:

- a) the internal barriers of the women themselves
- b) the external barriers of society and businesses

By combining these two factors, four models have been identified. Their relationship to each other is pictured below:

	WOMEN	BUSINESS
WOMEN	MODEL I	MODEL II
BUSINESS	MODEL III	MODEL IV

The seminars conducted under each model are as follows:

Model I:

- Assertion Training Seminar
- Achievement Motivation Seminar

Model II:

- Management Task Seminar
- Management Communication Seminar
- Combination Task and Communication Seminar

Model III:

- Supervisor Awareness Seminar

Model IV:

- No seminars conducted

CHART II-2

Assumption: Women are presently underemployed and underutilized in management positions.

MODEL	<u>PRIMARY FACTOR INHIBITING CHANGE</u>	<u>CHANGE FACTORS</u>	<u>RESULTS WILL BE</u>
MODEL I	<p>Women lack proper motivation, lack the desire, or lack skills to articulate aspirations</p> <ul style="list-style-type: none"> a) lack of self-esteem b) lack of achievement motivation c) role conflict 	<ul style="list-style-type: none"> a) change childhood socialization b) learn motivational skills c) learn how to articulate needs 	<p>Women will be able to adjust to business environment or alter immediate environment to fit their needs and aspirations</p>
MODEL II	<p>Women lack business skills</p> <ul style="list-style-type: none"> a) communication skills b) task skills 	<ul style="list-style-type: none"> a) formal education b) on-the-job experience, (on-the-job training) c) specialized workshops and training seminars 	<p>Women who gain proper business skills will be promoted</p>
MODEL III	<p>Present business leaders fail to recognize the potential in women</p> <ul style="list-style-type: none"> a) male managers b) female managers 	<ul style="list-style-type: none"> a) change socialization process b) change present business leaders' attitudes c) change laws to make present leaders recognize and promote women 	<p>Present leaders will promote qualified women</p>
MODEL IV	<p>Present business environment excludes women</p> <ul style="list-style-type: none"> a) women unable to relate to business life and male pattern b) automatic exclusion of women from business life and the power structure of business 	<ul style="list-style-type: none"> a) establish all-women business, unions, and organizations to establish own power structures b) change present business structures to allow more women vertical movement c) allow employees in lower job categories more influence in establishing business policy 	<p>Changes the business environment to allow women to have greater input in policy making and to assume power positions</p>

Model I

Model I postulates that women have been underemployed in management and supervisory positions because women themselves lack the proper stimulus to advance or are unable to articulate their advancement desires. These internal variables may inhibit women who have the necessary skills from seeking and aspiring to more responsible administrative positions.

Previous research has identified three major variables that hinder women's aspirations and drives for advancement to administrative positions. They are lack of self-esteem, lack of achievement motive, and role conflict.

Self-esteem can be defined as a sense of one's own worth and valuing of one's own uniqueness. In general, it has been found that girls have a more negative self-image than boys. Women also tend to think they possess innate traits which are opposite of men's innate traits.⁵ For example, women tend to feel they are intuitive and emotional whereas they feel men are logical and rational. Yet, at the same time, women feel men's traits are more desirable and rewarding. The Broverman (et al.) studies reported that a strong consensus exists about differing sex role characteristics. Groups identifying these varying sex-role characteristics differ not only across sexual lines but across age, race, education and religious lines as well.⁶ Male characteristics were found to be more positively valued than female characteristics.⁷ In addition, the desired characteristics for an adult (sex unspecified) were found to be very close to those identified as desirable male characteristics rather than the identified desired female characteristics.⁸

Simone De Beauvoir has described the female's tendency to lack a sense of uniqueness as women's thinking of themselves as "the other."⁹ According to her, women are trained to view their personal success through the success of others around them. This personal success, however, is a vicarious success

achieved through their husband's or children's accomplishments. Society as a whole, however, values people (usually male) who accomplish concrete successes obtained through job achievement, rather than the support people who help them. Society values women less than men because women do not participate as often as men in job or task achievement. Women internalize their "otherness" by valuing themselves less than the men they support and by having a less defined sense of their own value and worth than do men.

Women's tendency to support men continues in the business world. Women are more often the secretaries and clerical workers who support the men making the decisions. Advancing into a managerial position is oftentimes difficult for women because they lack the confidence and self-esteem necessary to lead and make decisions, and they often are discouraged from seeking management positions.

The drive for achievement is the second variable identified in this model. The researchers who have studied this motive have assumed that achievement motivation is a primary force in everyone's drive for success. The motive to achieve includes the necessity to aspire to greater but realistic career goals and it creates the drive for these goals. Two types of achievement motivation have been distinguished: autonomous motivation and social comparison motivation.¹⁰ Autonomous motivation originates from an individual's internalized standards and personalized goals. On the other hand, social comparison motivation is derived from responses to standards and goals set by others.

Females, because of their "otherness," depend more heavily on social comparison motivation. The goals established by society for women do not include career or job excellence. Instead, women are expected to be good mothers and wives, and are not expected to develop internalized standards of

excellence. Because women have not developed career oriented standards of excellence, women in the labor force often do not aspire beyond entry level positions. Higher level positions are not identified with the female standards of excellence set by society. For women to advance beyond the lower level positions, therefore, women must increase their autonomous motivation drive.

Role conflict in women arises when women fail to behave according to the expectations set by society. For working women, the major role conflict appears when married women take on "dual careers," or an added role to that of wife and mother, by working outside the home.¹¹

The problems of role conflict are often a function of time pressures and work overload rather than role incompatibility.¹² Working women are expected to perform the necessary tasks at home and to keep their homes in spotless order as though they were not working. In addition, women are expected to adequately perform their jobs without undue interruptions with home problems. Arranging for sufficient time to relax and to socialize with family and friends is often difficult for working wives. Without ample relaxation time, they may find their mental and physical resources strained with neither career adequately performed, thus creating more stress and tension.

The responsibilities of a supervisory position usually entail more time and energy than clerical or staff jobs do. Businesses expect their managers to be informed on new developments and inventions in their fields. Businesses may not promote working wives to management and supervisory positions, therefore, because these women are seen as not having adequate time or the mental and physical resources to perform the job. Women may not aspire to these jobs, because they feel that they may not be able to accept the added

responsibilities.

Three corrective factors have been identified in eliminating the combined effects of low self-esteem, low achievement motivation, and role conflict. The first factor is changing the socialization of children in order to give girls the opportunity to develop more varied career options and a more positive image of themselves and their work. Changes in socialization would help correct the problems of low self-esteem, role conflict, and low achievement motivation. However, the process of changing socialization patterns is a slow, tedious process involving the cooperation of most societal institutions. This factor is not conducive to short-term research.

The second corrective factor is teaching women to alter their motive structure to include and increase the achievement drive. (See section on Theory of Achievement Motivation in Part II for one method of building a strong achievement motive in people.) Enabling women to strive for success would increase their desire for more advanced positions in business. A change in motive structure would also teach women how to set goals and construct career plans that are attainable and realistic.

The third factor is teaching women how to gain a better sense of themselves and their worth; to transcend the conception of themselves as "other" to a sense of being a separate and full human being. One method devised to help women gain a better sense of themselves teaches women how to assert their rights and to express their feelings and emotions, without violating the rights of others. Through practicing these techniques, an individual's self-confidence can be increased.

Model II

The second model postulates that women are underutilized and underemployed in business because they lack the necessary technical and administrative

skills, all other things being equal. This model is similar to the traditional rationalistic bureaucratic model proposed by Weber. According to the Weberian model, individuals in the upper levels of decision-making have been promoted because they have more administrative and technical expertise than those individuals in the lower levels. This model assumes that companies' rewards are objectively distributed according to each individual's skill level and the amount of contribution received from each individual. Little or no regard to class, sex, race, or religion would be included in the evaluation of the employees.¹³

According to this model, any observable differences between men and women stem from training, social stigmas and educational opportunities that exist outside the business world. Each individual must compensate for such differences, if he or she desires promotional opportunities. Once new skills have been acquired, the individual's worth must be recognized by the business. Under a strictly rational model, this recognition would be imminent and the proper rewards distributed.

A manager or supervisor directs other people to help accomplish the goals of the business and its employees. The necessary skills needed by a successful manager can be divided into three general areas: technical; human; and conceptual.¹⁴ The need for technical skills is the most basic and familiar area. Technical skills are the skills necessary to complete an assigned job. Each job has a distinctive set of skills, and these skills must be acquired through individual training, education, or on-the-job experience. Most managers and supervisors must obtain a minimal amount of technical skills before they can be promoted to an administrative position.

Human relations skills is the second area. A primary function of a manager's job is regulating the work flow of subordinates to meet the goals and

objectives of the organization. This process requires good communication networks between the various job levels and between different departments and units in the business. An understanding of personnel problems and how to motivate one's subordinates is essential to this human relations skills area. A good manager also needs to be able to communicate objectives and goals to subordinates. He or she must express feelings, needs, and emotions to subordinates and superiors, give and receive feedback, and be aware of how one's attitudes, assumptions, and beliefs can create limitations for others.

The third type of skills needed by managers is in the conceptual area. Managers need to conceptualize the objectives of their units and how these objectives can be met most efficiently. They must plan and monitor progress toward their unit's goals and objectives. An understanding of the function of their units and how it relates to the company as a whole and the dependency of the units on each other are also important aspects of the conceptual area. The need for conceptual skills increases as the level of management and responsibility increases.¹⁵ Training for and an understanding of conceptual skills must begin at the earliest stages of supervision or the necessary skills for advancement will be lacking.

Three corrective factors have been identified in eliminating women's lack of managerial skills. One is formal education, which can particularly help women attain good technical skills. Another is on-the-job experience and training. This factor can help women attain proficiency in all three skill areas, if they are given the opportunity by their employers to advance beyond the entry level. The third corrective factor is specialized workshops or training seminars. This factor teaches women new techniques and helps point out the important aspects of supervisory positions. In addition, this

factor helps women systematically learn the supervisory skills as opposed to learning these skills by direct placement in a supervisory position without the benefit of previous experience or training.

Model III

The third model postulates that women are underemployed and underutilized in supervisory and management positions because predominantly male business leaders fail to recognize the potential of women due to their own socialization, tradition, and attitudes. Using this model, male managers tend to overlook women when making promotional decisions because traditional socialization, sex-role stereotypes, and other societal norms have reinforced men's inability to deal with women on an equal basis.

On an intellectual level, many men believe women should have the opportunity to use their talents and to develop their skills. On the other hand, equality of opportunity is seen as jeopardizing the existing organizational norm which identifies business managers and supervisors as male. Stereotypes are not only used to make overly simplified distinctions between the sexes, but are also translated into specific, rigid expectations enforcing appropriate behavior of the sexes.¹⁶ Sex-role stereotyping effectively imprisons both sexes into an arbitrary system which stifles both individual growth and creativity. Men, consciously or unconsciously, may attempt to undermine an aspiring woman by sabotaging her, by using her as a scapegoat, by isolating her, or by withdrawing and not supporting her on the job.¹⁷ In addition, present male managers assume men will be unwilling to work for women because they feel women do not have the necessary force to manage often resentful and threatened men. According to this model, then, businesses must create an atmosphere conducive to helping women advance. Once the present leadership alters its basic assumptions and sex-role stereotypes to include more options

and enlarged expectations, women will also alter their behavior to correspond with these changes. As Schwartz and Rago have stated:

Some say if women are just "thrown in," co-workers will get used to them. The solution, as indicated, is not that simple. It is not enough to filter women into management training programs, place them on important committees, and promise them higher positions. Full acceptance of women as professional peers of supervisors requires re-learning by both sexes to dispel previously learned male-female role expectations.¹⁸

Although the vast majority of private sector managers are male, according to this model, present female managers may also have a difficult time supporting and promoting other females. Present female managers may fear the possibility of competition with other women, which might possibly jeopardize their positions as members of the leadership team. Others may fear the label of "pro-women, anti-men," which could undermine their own authority. Present women managers also need to question their sex-role stereotyping and their roles as supervisors and managers, to help them feel more adroit in their own position and to help them feel comfortable in advancing their own female subordinates who are qualified for advancement.

Three corrective factors have been identified to re-examine and eliminate the sex-role stereotyping which prevents present business leaders from recognizing, developing, and promoting qualified women. The first factor is changing the socialization process in order for individual development to be stressed rather than previous societal norms and ideals. As in Model I, this factor involves a slow, tedious process and will require a constant, concerted effort by those who believe in equal opportunity for both sexes.

The second factor is changing the present business leadership's attitudes toward the promotion of women. This factor includes having a company's executives and middle managers take seminars designed to define, question, and reform attitudes concerning traditional sex-role assignments in the business

world. Other action policies might include the formation of male-female task forces, the invitation of outside parties or consultants to resolve issues or chair sessions with male-female groups, the development of a strong policy commitment to greater opportunities for women in management and supervisory positions, and finally, the support of the company's Affirmative Action Plan or the creation of a new plan.¹⁹

The third corrective factor is to alter the existing discrimination laws and to strictly enforce existing laws designed to make business leaders promote more women. This factor, however, has not consistently worked in the past. Changing laws can only begin the process of societal change. These laws must be accepted by the general public or they will be ignored and sabotaged by both private business and government agencies. Making business leaders promote more women may enable some women to become managers, but their jobs should not become unbearable due to the hostility of those around them.

Model IV

Model IV postulates that the underutilization and underemployment of women in managerial and supervisory positions are caused by the existing business structures and environments. In this final model, the term "business environment" refers to the overall atmosphere created and the assumptions used to operate a profitable business. The usual business structure is a hierarchical authority structure with the top management deciding policy middle management overseeing policy decisions and managing supervisors, and first line supervisors directing the lower level and entry level technical workers. Women have been traditionally slated for the lower and entry level job categories.

In corporations most women usually develop and advance in a separate, but parallel, structure from men. Most women are automatically placed into clerical or secretarial positions, beginning in clerical pools with little or no chance for creative thinking. Once women have proven they can handle these routine secretarial tasks, they may be advanced into private secretarial positions. Private secretaries usually become attached to individual men in the company and rise and fall with them, rather than strictly on their own merits and skills. Once a woman is placed on a secretarial path, it is extremely difficult for her to step off of the secretarial path and into a managerial position, regardless of her qualifications.

Rosabeth Moss Kanter, in her most recent book, discusses the structural barriers of business which inhibit both sexes from reaching their full potential. Kanter identified three central explanatory variables: structure of opportunity; structure of power; and the proportional distribution of people of different kinds (the social composition of peer groups).²⁰ In this limited space, only the highlights of Kanter's three variables are presented.

In business, the axiom for success is "get promoted or perish." Positions in large corporations are usually either pegged as good advancement positions or dead-end jobs. Most clerical positions are low status positions because they lead nowhere. The key to the structure of opportunity variable is "that people in the upper levels of organizations tend routinely to be more motivated, involved, and interested in their jobs than those at the lower levels."²¹ Those with fewer opportunities for advancement usually seek social recognition from peers, who probably have equally low opportunities for advancement.²² Since women are usually found in the lower status, dead-end jobs, they tend to seek satisfaction from social recognition. Women, who seem less motivated and committed than task oriented and ambitious men, are probably stuck in

jobs with low opportunity. At the same time Kanter states:

*Men with less opportunity look more like the stereotype of women in their orientation toward work... as they limit their aspirations, seek satisfaction in activities outside of work, dream or escape, interrupt their careers, emphasize leisure and consumption, and create sociable peer groups in which interpersonal relationships take precedence over other aspects of work.*²³

According to Kanter, the structure of power within the organizational structure largely determines the effectiveness of individual managers and supervisors. Credibility (competence plus power) was identified as the primary characteristic needed by managers to get results.²⁴ Power is rewarded through political trade-offs in large organizations. Political maneuvering becomes inevitable because of the interdependency of units and departments which is built into the structure of large organizations.²⁵ Those managers or supervisors who are thought to be most able to contribute unique information or skills will consequently become the most powerful.

Those supervisors and managers without power or credibility tend to respond by concentrating their authority and power on those they control. Their hostile feelings are vented on immediate subordinates by strict enforcement of the rules, arbitrary decisions and close supervision of work by their subordinates. These hostile feelings are then transmitted to subordinates who recognize the low power position of their supervisors. The subordinates also become weak and hostile and will begin to react by being less motivated and less ambitious, i.e., acquiring the main characteristics of people in low opportunity jobs.

The nature of clerical work (often thought of as necessary but not creative or informative) reinforces the powerlessness of clerical workers. The detailed work, which can easily be checked and timed, is conducive to autocratic, powerless managers. In addition, the normal setting of clerical workers, with desks lined up in four or five rows in large rooms, creates a mass

production atmosphere, thus simultaneously making it easier to supervise and harder to exert one's own individuality and skills. This environment reinforces the powerlessness of clerical workers and therefore, women in general.²⁷

The third variable which Kanter identifies is the proportional distribution of different kinds of people. The upper levels of management are noted for the absence of women and minorities. This void creates special situations for those women and minorities who do obtain top corporate positions. They often become tokens, symbols of their sex or race, whether they succeed or fail. If they succeed in the position, perhaps there is hope for other women or minorities; if they fail, then it is further proof that women and minorities are not capable of succeeding at top levels. Before the pressures of tokenism can be reduced, more women and minorities will have to obtain top level management positions.

Three corrective measures were identified for Model IV: the establishment of all-women businesses, unions, and other organizations to establish their own power structures; to change the present structures or organizations to allow women more vertical movement within business; and to allow employees in lower job categories more influence in establishing business policy and in controlling their own job.

By founding their own businesses, women would be able to establish parallel business organizations and create new power structures which could challenge existing business structures. They could alter the traditional business environment to include a more humanistic approach to management. More importantly, by banding together, women as a group will then be powerful enough to insist on equal representation in the existing power structures and organizations.

By changing the present structure of organizations to allow women more vertical movement to managerial and supervisory positions, women will perceive their greater opportunities and will respond by being more motivated, more work and task-oriented, and thus, more ambitious. This corrective measure is related to the other corrective measure, that of changing the present organizational structure to allow all employees greater responsibility in establishing business policy and goals. This approach would give women, who are proportionally employed in the lowest job categories of business organizations, more power in the organizations, as well as a greater opportunity to develop their leadership skills and a feeling of greater responsibility towards their company.

The first three models used in this research are concerned with the individual level of analysis. Three different approaches were addressed: how women can increase their ambition and self-esteem, how women can increase their management skills, and how supervisors can alter their preconceived assumptions about women in management. The fourth model, however, is concerned with the organizational level of analysis; e.g. how the organizational structure can be altered to allow women more vertical mobility within businesses. Because the levels of analysis differ, other research designs will be necessary to test Model IV. Since this model was not conducive to being tested through management training seminars, Model IV was not tested by this research project.*

*The hypotheses relating to the companies (Chapter III on Hypotheses and Research Design) address the companies on the organizational level of analysis. However, no attempts were made in this research project to alter the organizational structures and, therefore, this model could not be directly tested. The appropriateness of Model IV, however, will be indirectly explored by examining this one group of hypotheses.

FOOTNOTES: CHAPTER II

¹See Iowa Commission on the Status of Women, A Study of the Underemployment and Underutilization of Women in Iowa, (Des Moines: State Government Printing Office, 1976), beginning p. 69 for underutilization findings and p. 74 for underemployment findings.

²Iowa Commission on the Status of Women, p. 161.

³Iowa Commission on the Status of Women, p. 130.

⁴J.R. Terborg and D.R. Ilgen, "A Theoretical Approach of Sex Discrimination in Traditionally Masculine Occupations," Organizational Behavior and Human Performance, 13(1975), pp. 352-353.

⁵V.E. O'Leary, "Some Attitudinal Barriers to Occupational Aspirations in Women," Psychological Bulletin, 81(No. 11, 1974), p. 814.

⁶I.K. Broverman, S.R. Vogel, D.M. Broverman, F.E. Clarkson, and P.S. Rosenkrantz, "Sex-Role Stereotypes: A Current Appraisal," Journal of Social Issues, 28(No. 2, 1972), p. 61.

⁷Broverman, p. 66.

⁸Broverman, p. 66.

⁹See Simone de Beauvoir, The Second Sex, (New York: Bantam Books, 1968), Introduction.

¹⁰O'Leary, p. 820.

¹¹See S.A. Darley, "Big-Time Careers for the Little Woman: A Dual Role Dilemma," Journal of Social Issues, 32(No. 3, 1976), pp. 85-98, for a description of the differences between ascribed roles (those roles attained by virtue of one's inherent characteristics, for example being a parent) and achieved roles (those roles attained by training, personal achievement or election). Society assigns an evaluation range of neutral to negative for ascribed roles. Every mother is expected to be a good mother and is socially condemned if she is not. Achieved roles, on the other hand, have a value range from neutral to positive. Society expects women to perform well in both types of roles, while men are judged primarily for their achieved roles.

¹²O'Leary, p. 816.

¹³J. Miller and S. Labovitz, "Inequities in the Organizational Experiences of Women and Men," Social Forces, 54(No. 2, December 1975), pp. 366-367.

¹⁴See R.L. Katz, "Skills of an Effective Administrator," Harvard Business Review, (September-October 1974), pp. 90-102.

¹⁵Katz, p. 96.

FOOTNOTES: THEORETICAL FRAMEWORK CONT.

¹⁶E.B. Schwartz and J.J. Rago, Jr., "Beyond Tokenism: Women as True Corporate Peers," Business Horizons, 16(December 1973), pp. 69-70.

¹⁷Schwartz and Rago, p. 70.

¹⁸Schwartz and Rago, p. 74.

¹⁹Schwartz and Rago, p. 75.

²⁰R.M. Kanter, Men and Women of the Corporation, (New York: Basic Books, Inc., 1977), p. 246.

²¹Kanter, p. 143.

²²Kanter, pp. 147-148.

²³Kanter, p. 161.

²⁴Kanter, p. 169.

²⁵Kanter, pp. 171-172.

²⁶Kanter, p. 189.

²⁷Kanter, p. 191.

CHAPTER III

MODEL I AND MODEL II HYPOTHESES AND RESEARCH METHODOLOGY

INTRODUCTION

The four models discussed in the Theoretical Framework suggest that conducting a series of training seminars could help more women advance into supervisory and management positions. Research on various seminars under each model could also indicate which model is most accurate in predicting the causes of the underutilization and underemployment of women in management and supervisory positions. Distinguishing the success of the various types of available training seminars would help both employers and employees decide which seminar(s) would most likely help women advance. Only the hypotheses which addressed these problems and which could be measured were selected for testing.

The main hypothesis of this research is that management training seminars will help women advance into management and supervisory positions. The general null (or rejection) hypothesis, conversely, is that management training seminars will not help women advance into management positions.

This chapter presents Model I and Model II hypotheses, research methodology, and the design of the questionnaires used as the research instruments. In addition, the last section of the chapter presents the definitions and the operational definitions of the major terms used in this research.

As explained in the Introduction to this report, four methods of evaluating training seminars were employed by this project: 1) the reaction to the seminars; 2) the tangible results such as the amount of pay increase that can be attributed to a particular seminar; 3) the behaviorial changes on

the job that can be attributed to the seminar; and 4) the skills, techniques, and ideas learned from the seminar. The primary hypotheses in the study concern the tangible results and the behavioral changes caused by the seminar. The reactions and the skills learned were tested subjectively and are presented in Chapter X. No specific hypotheses, however, will be presented for these two areas.

The first section of this chapter contains the major research hypotheses relating to the seminars. This section is divided into two parts, one relating to the results of the seminars, the other relating to the behavioral changes. The hypotheses in the second section are concerned with whether or not certain characteristics of the female participants were the determining factors in who advanced, and the third section's hypotheses deal with various factors of the participating companies to ascertain if structural factors of the companies helped determine the advancement of female employees.

The hypotheses are presented in the research format as opposed to the null format for easier comprehension of the project's purposes.¹ The hypotheses will be tested by statistical tests which are described in the Research Methodology section of this chapter. The main hypothesis(es) for each variable under study is numbered separately. Corollary hypotheses, numbered sequentially to the right of the decimal, follow each main hypothesis.

HYPOTHESES RELATING TO THE SEMINARS

Three primary variables were used to test whether or not the training seminars helped women advance in their companies. These three variables were considered separately and all were considered to be equally important. Each hypothesis was tested by comparing a control group (who did not participate in any seminar) with the groups of participants in the Achievement Motivation,

Assertion, Management Task, Management Communication, and Combination Management Task and Communication Seminars. Most hypotheses are followed by a corollary hypothesis predicting the seminar(s) which will have the best results in advancing women for that variable. Only if the primary hypothesis was statistically significant was the corollary hypothesis(es) tested.

The primary device used to measure and compare levels of positions in business is the amount of pay those positions bring. Therefore, the first primary variable used was the amount of pay increase from the start of the seminar period* to one year after the seminar. The specific hypotheses relating to pay are:

Hypothesis 1.1 The female participants will receive a greater increase and a greater percentage increase in wages when compared to the control group.

Hypothesis 1.2 The female participants of the Model II seminars and specifically the Management Combination Seminar will receive a greater increase and a greater percentage increase in wages when compared to the female participants who attended the other seminars.

Since Model II seminars concentrated on skills needed for management, these seminars were predicted to produce participants who could attain higher salary increases because of their new business skills compared to the participants of the other seminars. Since the Management Combination Seminar consisted of both task and communication skills, the participants of this seminar were predicted to have the greatest increase in their wages.

The second primary variable was the number of promotions received during the year following the seminar. The variable was tested by two different measurements. The first measurement was the number of participants who were promoted from non-supervisory positions into supervisory or

*All the Model I and Model II seminars were conducted within a month of each other. The pre-test questionnaire was completed by all participants before any of the seminars began. The one year post-test was given one year after the pre-test was given.

management positions. The second measurement was the actual number of promotions received as defined by each participant. The specific hypotheses relating to the number of promotions are:

- Hypothesis 2.1 A greater proportion of the female participants will be placed in supervisory or management positions when compared to the control group.
- Hypothesis 2.2 The female participants will receive a greater number of promotions when compared to the control group.
- Hypothesis 2.3 The female participants of the Achievement Motivation Seminar will receive a greater number of promotions when compared to the female participants of the other seminars.

The Achievement Motivation Seminar concentrated on helping the participants set higher goals. The participants of that seminar, therefore, should be more apt to seek advancements within their companies. For achievement motivated people, attaining personal goals (which are not always measured in terms of money) is the most important means to personal satisfaction.

The third variable tested was the increase in responsibility from the beginning of the seminar period to one year after the seminar period. This variable was divided into three sections: task authority, personnel authority, and autonomy on the job. The specific hypotheses relating to this variable are:

- Hypothesis 3.1 The female participants will have a greater increase in task authority when compared to the control group.
- Hypothesis 3.2 The female participants of the Management Task and Management Combination Seminars will receive a greater increase in task authority when compared to the female participants of the other seminars.

Since the Model II seminars dealt exclusively with increasing the skills of the female participants and the Management Task and Combination Seminars attempted to increase the task skills of the women, these two seminars were predicted to produce more participants with increased task authority in their jobs compared to the participants of the other seminars.

Hypothesis 3.3 The female participants will have a greater increase in personnel authority when compared to the control group.

Hypothesis 3.4 The female participants of the Management Communication Seminar will have a greater increase in personnel authority when compared to the female participants of the other seminars.

Since the Management Communication Seminar dealt with human relations skills, the participants of this seminar were predicted to have the greatest increase in personnel authority compared to the other seminar participants.

Hypothesis 3.5 The female participants will have a greater increase in autonomy on the job when compared to the control group.

Hypothesis 3.6 The female participants of the Assertion Seminar will have a greater increase in autonomy on the job when compared to the female participants of the other seminars.

Since the Assertion Seminar taught its participants to assert their rights and needs to others, it was predicted that the participants of this seminar would increase their autonomy on the job more than the participants of the other seminars.

Behavioral Changes Due to the Seminars

Two variables were examined to determine if the seminars altered the behavioral patterns of the participants. The first variable was job satisfaction. From the analysis of the first year report, A Study of the Underemployment and Underutilization of Women in Iowa, it was found that women were less satisfied with their opportunities for promotion and their pay than were men.² If the seminars helped promote the participants of the seminars, their job satisfaction in these categories should be higher than than the control group.* If, on the other hand, the seminars did not help promote

*For Hypotheses 4.1 and 4.2 another control group was added. A random group of women from the first year sample was selected that satisfied the same criteria as the other 180 subjects. It was felt the main control group from this research may have been dissatisfied because they were not chosen to attend any of the seminars, and that this could be tested if another control group, which was not part of this research project, was also used as a comparison.

the participants they may have become more dissatisfied than the control group because of higher, but unfulfilled expectations.

The variable of job satisfaction included three dimensions for the purpose of this research. These three dimensions are: 1) satisfaction with present work and the environment in which that work is performed; 2) satisfaction with the opportunities for promotion; and 3) satisfaction with present pay. These three dimensions were tested separately.

Hypothesis 4.1 The female participants will have greater job satisfaction in each of the three dimensions than the control groups if any of the following hypotheses are confirmed: Hypotheses 1.1, 2.1, 2.2, 3.1, 3.3, or 3.5.

Hypothesis 4.2 The female participants will have less job satisfaction in each of the three dimensions than the control groups if none of the following hypotheses are confirmed: Hypotheses 1.1, 2.1, 2.2, 3.1, 3.3, or 3.5

The second variable tested for behavioral changes due to the seminars was the difference in supervisor ratings before the seminars and one year after the seminars. All immediate supervisors of the participants were asked to complete questionnaires assessing the women's supervisory potential, planning ability, ability to express feelings and handle conflict, personal initiative, and overall job performance. The differences between the before and one year after the seminar ratings of each participant were assessed according to the following hypotheses:

Hypothesis 5.1 The supervisors of the female participants will proportionately increase their evaluation ratings on all items when compared to the supervisors of the control group.

Hypothesis 5.2 The supervisors of the female participants of the Management Task and Combination Seminars will have a greater increase in their evaluations of the women's supervisory potential and planning ability when compared to the supervisors of the female participants of the other seminars.

Hypothesis 5.3 The supervisors of the female participants of the Assertion Seminar will have a greater increase in their evaluations of the women's ability to express feelings and handle conflict when compared to the supervisors of the female participants of the other seminars.

Hypothesis 5.4 The supervisors of the female participants of the Achievement Motivation Seminar will have a greater increase in their evaluations of the women's personal initiative when compared to the supervisors of the female participants of the other seminars.

Hypothesis 5.5 The supervisors of the female participants of the Management Combination Seminar will have a greater increase in their evaluations of the women's overall job performance when compared to the supervisors of the female participants of the other seminars.

HYPOTHESES RELATING TO THE FEMALE EMPLOYEES

After the hypotheses relating to the seminars were tested, the following five hypotheses were examined to ascertain if certain variables connected with the subjects' characteristics could help predict which women were promoted. The demographic characteristics of each female employee were taken from the participant's questionnaire and were re-established on the one year questionnaires. Often characteristics such as age, marital status, number of dependents, and amount of education are cited as determining factors in the promotability of women. If these characteristics are important, then it is possible they could supersede the effects of the training seminars under research, and therefore, these variables were considered important to investigate.

Hypothesis 6.1 The variables of age, marital status, number of dependents, and amount of education will have no significant effect upon the number of promotions, the increase in wages, and increase in authority of the female participants.

Often the contention is made that women are initially placed in low paying, predominately female jobs. Once women are placed into these categories of jobs, it becomes extremely difficult to move into more responsible, higher paying jobs. The following hypothesis deals with only one aspect of this contention, but the results could indicate if the trend

exists for this sample of women.

Hypothesis 7.1 The female employees with the lowest 1976 wages will receive the lowest increase and the lowest percentage increase in wages the following year.

The next hypothesis examines whether women who have been with their employers the longest number of years tend to receive the greatest increases in their job authority.

Hypothesis 8.1 The female employees who have been employed the longest with their particular company will have the greatest increase in personnel authority, task authority and autonomy on the job.

The next hypothesis examines whether or not the women who were supervisors before the seminars received greater increases in salary and responsibilities than the women who were in non-supervisory positions before the seminars were conducted. This may give some indication of which group of women can benefit most from management training seminars.

Hypothesis 9.1 The female participants who were first line supervisors or above in December 1976 will have a greater increase and greater percentage increase in wages and a greater increase in authority when compared to those female participants who were not supervisors at that time.

The last hypothesis relating to the female employees' characteristics examines whether the success of the training seminars was dependent on the immediate supervisor's support of the female participant. If the immediate supervisors felt the seminars would benefit the participants, they would probably tend to see the benefits of the seminars and would help the participants use their new skills. On the other hand, if the immediate supervisors felt that the participants should not attend or would not benefit from attendance, any attempts by the participants to use their new skills would not be supported by their immediate supervisors. The support of the immediate supervisor, therefore, could be an important link between the

success of the seminars in transmitting new skills to the participants, the use of the new skills by the participants on the job, and the recognition of those new skills by those supervisors who decide which women to promote. (The immediate supervisor may or may not be the primary person deciding if a participant is promoted, but almost always has an important influence in the decision.)

Hypothesis 10.1 The female participants who received the greatest support from their supervisors to attend the seminars will have the greatest number of promotions and the greatest increase in wages when compared to the female participants who did not received support from their supervisors.

HYPOTHESES RELATING TO THE COMPANIES

This group of hypotheses relates characteristics of the companies to the variables of pay and promotions to ascertain if the characteristics of a company are determining factors in advancing women. Since the company characteristics were not the major thrust of this research, only the characteristics which could be determined by EEO-1 reports were used.³ Since our variables are limited, no systematic model will be employed, and therefore, some of the company hypotheses will overlap and interact or may even contradict each other. The conclusions to these hypotheses, therefore, must be considered with caution and will be only used as indicators for possible future research into the underutilization and underemployment of women in management and supervisory positions. The first hypothesis examines the relationship between the present proportion of women in management positions and the number of promotions received by the participants.

Hypothesis 11.1 The companies employing the greatest proportion of female managers will have the highest number of participants promoted within their company.

The next hypothesis tests whether companies with low salaries for their

female employees (measured for each company by the average wage of the female participants from that company) will have the lowest increase in wages and the fewest number of promotions. This hypothesis examines one aspect of occupational segregation, which states that women who are segregated into low paying, dead-end jobs will tend to stay in those jobs. (See Model IV.)

Hypothesis 12.1 The companies with the lowest beginning mean wages (experimental and control groups) for the female employees will give their participants the lowest increase and the lowest percentage increase in mean wages, and the fewest promotions.

Since many of the professional jobs for women are located in the service industry, it was postulated that women within this industry will have the largest number of promotions.

Hypothesis 13.1 The service companies will have the highest rate of promotions (for their female participants) of any represented industry.

The next hypothesis examines the size of the company and the number of promotions received by their female employees. The larger the company, the more the opportunities and job positions available for the employees and therefore, more female employees may have the opportunity for advancement.

Hypothesis 14.1 The companies with the greatest number of employees (both male and female) will have the highest rate of promotions for their female participants.

The last hypothesis of this group proposes that the companies with large proportions of female workers will give their female employees fewer advancement opportunities. Again, companies with a large proportion of women tend to have these females grouped into a few lower paying (usually clerical) occupations. Often these women have little chance of moving out of these lower paying positions into management and supervisory positions.

Hypothesis 15.1 The companies with the largest proportion of female employees will give their female participants the smallest increase in mean wages.

RESEARCH METHODOLOGY AND INSTRUMENT DESIGN

Research Methodology

This research was conducted to determine whether management training seminars conducted for female employees helped them advance in their companies faster than female employees who did not attend any of the seminars. Information was collected from the participants of the five seminars and from the control group before the seminars were conducted (a pre-test), approximately six months after the seminars were conducted, and one year after the seminars were given. Questionnaires were given to each of the subjects on all three occasions to collect the necessary information to test the hypotheses.

The primary research design employed to test the results of the five seminars was a "before-after" design with one control group. The statistical model used was a fixed two-way analysis of variance model. Analysis of variance is a versatile statistical technique which allows the testing of one or more independent variables and a dependent variable. The independent variables may be qualitative rather than quantitative.

In this research study, the independent variables used were the seminars, the companies where the female employees worked, and various characteristics of the female employees (marital status, number of children, amount of education, and age). The effects of the seminars, as the experimental factor in this research, were weighed more heavily than the effects of the companies and the subjects' characteristics. Two-way analysis of variance also helped to determine if any interaction effects between the two

independent variables (i.e. the seminars and the companies) took place.*

The dependent variables in analysis of variance, however, must be quantitative. Three main dependent variables were examined to determine the results of the seminars. These three variables separately measured different aspects of the level of an employee's job over time, and the variables can be used to assess and measure an employee's vertical movement within a company. These variables are: number of promotions, increase in annual wages (in dollars), and increase in job authority. Job authority included three subcategories: task authority, personnel authority, and autonomy on the job. These three variables represent measurable aspects of a job which can be used to compare the upward mobility of female employees within companies as well as across companies.

Each of the three variables and their subcategories were tested separately to ascertain if the different training seminars had significantly different mean scores from the control group and if the various companies had different effects upon these mean scores. (See Model I and Model II hypotheses for the hypothesized relationships.) All of the variables used to determine the results of the seminars were tested by analysis of variance except for supervisory level. This variable was tested by chi-square contingency tables, since this variable was not measured on an interval scale. The conclusions were based on these separate analyses and no attempts were made to weigh the importance in the differences of the three dependent variables or to combine the dependent variables.

*Most of the hypotheses relating to female employees and the hypotheses relating to the companies were tested by using the model of a single factor analysis of variance. Essentially, the two models are the same except two-way analysis of variance has two independent variables instead of one, and therefore, interacting effects can also be measured. Appendix B explains the rationale behind the analysis of variance models, the symbols, the statistical tests, and the tables involved.

The other two variables in the section "Hypotheses Related to the Seminars" were concerned with behavioral changes by the participants because of the influence of the seminars. The two variables were: job satisfaction and the evaluations by the participants' supervisors. Both of these variables were also tested by the analysis of variance model.

The job satisfaction variable, however, was tested by single analysis of variance when the second control group was added, because the companies where these women worked were different from the companies who participated in the study. The job satisfaction variable was also tested by a two-way analysis of variance, without the second control group, to ascertain if the company variable was important. The one independent variable was the seminars.

Statistical tests were used in this study to determine if differences in the dependent variables (pay, job authority, number of promotions, job satisfaction, and supervisors' evaluations) between the female employees of the various seminars and companies were due to chance or were the results of the seminars. The F test was the main test used in analysis of variance to see if the two factors (seminars and companies) had significant effects upon the upward mobility of the female employees. The F test was also used to determine if the interaction between these two factors was significant. A significance level of .05 or higher (95% confidence level that the results could not have been obtained by chance) for the F test was needed for a hypothesis to be confirmed and for the null hypothesis to be rejected. The primary null hypothesis is that the training seminars had no significant effects (as measured by the three dependent variables) upon the female employees, no matter where they were employed.

After employing the F test, if significant differences between the

seminars and the companies were found to exist, other established statistical tests were employed to examine the nature of the differences and the implications of these differences. In other words, tests exist to help determine which model best describes the underutilization and underemployment of women, and which seminars(s) helped to advance women the most. Specifically, the method of orthogonal contrast, Tukey and Scheffe procedures, and Dunnett's t statistic were used as the appropriateness of the results dictated.

The Research Instruments: The Questionnaires

Questionnaires were designed by the staff of the research project as the research instruments to gather the necessary data to test the hypotheses. First, the participants' questionnaire was designed and given to determine which companies and which female employees satisfied our requirements and could be included the study. Each of the ten companies was required to have eighteen full-time employees who met the following criteria: 1) held no higher than a first line supervisory positions, 2) had aspirations to a supervisory position or to a professional, technical or managerial position, and 3) had completed a minimum of one year of college or other professional related training beyond the high school level. Only three women chosen to participate in the research did not fulfill the above criteria. This questionnaire also was designed to gather the necessary demographic data used in the hypotheses relating to the female participants. See Appendix C for a copy of this questionnaire.

The second questionnaire was administered to each of the female employees in the study. These subjects were chosen randomly by using a random numbers table from the pool established by the first questionnaire. This pre-test questionnaire was specifically designed to gather the data for

the three main dependent variables: number of promotions, increase in wages, and increase in job authority.

The job authority data were obtained by a series of questions pertaining to each person's job. The series of questions required a judgement of each individual's job as compared with the other jobs around her. An increase over the year on this job authority index should indicate that an individual has perceived that her job responsibilities have grown.⁴ See Appendix D for a copy of this questionnaire.

Each immediate supervisor of the participants was asked to complete a supervisor's questionnaire developed by the Project staff. This questionnaire was completed before the seminars and one year after the seminars were conducted. Designed to measure any behavioral changes by the participants over the year, this questionnaire was considered necessary to help determine if changes (such as supervisory potential, initiative, and the ability to handle conflict) occurred in the participants which might not manifest themselves in the job advancement variables. See Appendix E for a copy of the supervisor's questionnaires.

Immediately after each seminar, all participants completed an evaluation questionnaire. The questionnaire was developed by the Project staff to help compare the contents of the seminars, how the seminars kept the attention of the participants, and the effectiveness of the seminar leaders. See Appendix F for a copy of this questionnaire.

Each participant was asked to complete a six month post-test and a one year post-test. Both of these questionnaires were similar to the pre-test in the questions asked and the format used. Additional information, however, on the seminars and classes taken during the year (and not conducted by this research project), the amount of time the participants have worked

for their present employers, the number of people supervised, and a description of increased responsibilities as a result their last promotion were requested. Significant results were not expected until the one year post-test, because companies rarely promote or greatly increase wages in a six month time period.

On the one year post-test, the job satisfaction question was also asked. The job satisfaction question consisted of three parts. These three parts were satisfaction with present work, opportunities for promotion, and the present pay. This criteria is part of the Job Description Index (JDI) developed by Smith and Associates,⁵ and consisted of three of the five dimensions tested in the first year report of this study.⁶ A control group from the first year report was added in the event that the regular control group's job satisfaction was altered by not being asked to attend any of the seminars.

The participants were also asked about their perceptions of the seminars they attended after one year. Each participant was specifically asked to recall the main objective of the seminar, to name the idea or technique presented during the seminar which she used the most, to list the changes she would like to see in the seminars, and to list how the seminar had helped in her career and personal life. The answers to these responses were compiled to determine which of the seminars the participants perceived to be the most beneficial. See Appendix G for a copy of the six month post-test and Appendix H for the one year post-test.

DEFINITIONS OF MODEL I AND MODEL II TERMS

1. FEMALE EMPLOYEES - Those full-time working women who met the following criterion: 1) held no higher than a first line supervisory position; 2) had aspirations to a supervisory position or to a professional, technical, or managerial position; and 3) had completed a minimum of one year of college or other professional related training beyond the high school level, and who were one of the 180 women who participated in the Model I and Model II research.
2. TRAINING SEMINARS - The workshops in management training selected by the Employment Project. Five specific seminars were conducted: Achievement Motivation, Assertion Training, Management Task, Management Communication and Combination Management Task and Communication. Thirty women from ten companies were randomly selected to attend each seminar.
3. FEMALE PARTICIPANTS - The female employees who attended one of the five training seminars.
4. CONTROL GROUP - (Also referred to as the primary control group.) A group of thirty randomly selected female employees, three from each of the participating companies who did not attend any of the training seminars.
5. SUPERVISORS OF THE FEMALE EMPLOYEES - The immediate supervisors to whom the female employees reported while on their jobs. These supervisors were asked to complete an evaluation of the female employees selected for this research project in December 1976 and again in December 1977.
6. COMPANIES - The ten private businesses in the Des Moines area which participated in the research. Each of these companies employed at least 350 people, including at least 150 women.
7. PROMOTIONS - An increase in job responsibilities or duties as recognized by the employee. Operationally, a promotion was measured by the female

employee stating she had received X number of promotions within the one year time span.

8. WAGES - Annual gross salary. Operationally, wages were measured in dollars received per year as indicated by the female employee. An increase in wages was measured as the difference between the salaries received from year one (December 1976) to year two (December 1977).
9. SUPERVISORY POSITION OR SUPERVISOR - A person who directs other employees and who had responsibility for their work. Operationally, the female employees indicated whether or not they were supervisors by checking the category most appropriate for their present jobs. These categories were: 1) non-supervisory (personnel with no supervisory responsibilities); 2) first line supervisor (those who directly supervise non-supervisory personnel; or 3) middle management (those responsible for integration and execution of policies set by top managers or those who supervise other supervisors).
10. TASK AUTHORITY - The degree of an employee's authority and responsibility over the inanimate resources of a business. Operationally, this was measured by summing the responses given by the female employees on a five point scale (1 to 5) for each of seven items (the minimum score being 7 and the maximum score being 35). These seven items included allocating equipment, budgeting, setting quality standards, deciding how work tasks are divided, determining how the work is done, deciding the pace of the work, and deciding how the work will actually be performed.
11. PERSONNEL AUTHORITY - The degree of an employee's authority and responsibility over the human resources of a business. Operationally, this was measured by summing the responses given by the female employees on a five point scale (1 to 5) for each of six items; the minimum score being 6 and

maximum score being 30. These six items included selecting new workers, evaluating the performance of others, determining the pay of others, deciding who receives promotions, deciding who is terminated, and determining work policies for one's unit.

12. AUTONOMY ON THE JOB - The amount of an employee's freedom and opportunity to determine her/his own style, goals, and pace on the job. Operationally, this was measured by summing the responses given by the female employees on a five point scale (1 to 5) for each of six items (the minimum score being 6 and the maximum score being 30). These six items included the opportunity for independent thought and action, setting goals, determining methods and procedures, setting the pace of work, making one's own decisions on the job, and controlling what happens on one's job.

13. JOB SATISFACTION - The feelings of employees about different aspects of their job. Three dimensions were especially felt to be applicable to this research. These were: 1) satisfaction with the nature of the present work and the environment in which the work is performed; 2) satisfaction with opportunities for promotion; and 3) satisfaction with the amount of pay received. Operationally, this variable was tested by the Job Description Index. For each of the three dimensions of the variable (present work, promotions, and pay), a list of descriptive words or phrases was given. Each subject was asked to indicate which of the words or phrases described her job. If the word or phrase pertained to her job she was to place a "Y" for yes beside the word. If it did not pertain, she was instructed to write "N" for no, and if she could not decide, she was to place a question mark "?" beside the phrase. The possible scores ranged from 0 to 54 on the dimension of present work and from 0 to 27 on both pay and promotions.

14. EVALUATION RATING ON SUPERVISORS' QUESTIONNAIRE - The rating of each female employee's performance and potential by her supervisor. Operationally, this evaluation consisted of six questions each have a seven point scale (1 to 7) on six items. Included in this evaluation were items concerning supervisory potential, the ability to express feelings and handle conflict, personal initiative, interpersonal skills, the ability to plan and carry out work, and overall job performance.
15. AGE - Number of years old measured by the indication of one of five different age groups: under 25, 25-34, 35-44, 45-54, 55 and over.
16. EDUCATION - The number of years of formal education. Operationally, this was measured by the number of years of formal education. In addition, the type of education was specified. Included in this division were one year of college, two years of college, two year college degree, four year college degree or more, vocational training, and nursing degree.

FOOTNOTES: CHAPTER III

¹The null hypothesis states that there are no differences between groups or no relationships between variables. The research hypothesis, on the other hand, predicts a given relationship between variables, either positive or negative. In research, it is assumed the null hypothesis is true until it is rejected by statistical tests. Only after a null hypothesis is rejected can a research hypothesis be accepted.

²Iowa Commission on the Status of Women, A Study of the Underemployment and Underutilization of Women in Iowa, (Des Moines: State Government Printing Office, 1976), pp. 141-144.

³EEO-1 reports are required of all firms that employ 100 or more persons within Iowa by the Equal Employment Opportunity Commission.

⁴The Employment Project would like to thank Dr. Tom Ferratt, professor at Drake University, for his development of the job authority questions and for his permission to use the index. In an unpublished study, Dr. Ferratt correlated large series of job authority questions using a sample of secretaries and validated that the series of questions we used were the most significant in determining the secretaries' job responsibilities.

⁵The Job Description Index developed by Smith and Associates was developed to ascertain an employee's feeling about her/his job. It is a thoroughly researched and validated instrument. The form of the questionnaire has several advantages, as Smith explains: "First, it is directed toward specific areas of satisfaction rather than global or general satisfaction. Several different areas of job satisfaction must be measured separately if any substantial understanding is to be achieved. This does not imply that satisfaction in several areas are necessarily statistically independent, but it does provide for those important situations where there are some discriminable differences which the respondent can report with some assurance.

Second, the verbal level required to answer the JDI is quite low... The JDI does not require that the respondent be able to make abstractions or understand long, vague sentences with several qualifications, but only that he understand the general meaning of single words or short phrases.

Third, the JDI does not ask the respondent directly how satisfied he is with his work, but rather asks him to describe his work. Thus, the responses have a job-referent rather than a self-referent. In describing his job, the respondent does, however, provide information which may be used to infer his satisfaction." Patricia C. Smith, et al., The Measurement of Satisfaction in Work and Retirement (Chicago: Rand McNally and Company, 1969), pp. 69,70.

⁶The other two dimensions used in the first year's study which were not used this year were: 1) the satisfaction with type of supervision received; and 2) the satisfaction with the employee's co-workers. These two dimensions were not thought to be applicable in this research, particularly when no significant differences between men and women along those two dimensions were found in the first year's survey. See Iowa Commission on the Status of Women, pp. 136-150.

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

The second part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, and that the structure of the atom is determined by the laws of quantum mechanics.

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CHAPTER IV

MODEL I AND MODEL II SAMPLE SELECTIONS AND PARTICIPANT CHARACTERISTICS

INTRODUCTION

This chapter presents the procedure used to select the seminars evaluated in this study. In addition, the selection of the consultants who conducted the seminars and the companies which participated is discussed.

The last part of this chapter presents the demographic characteristics of the female employees who attended the five seminars and served in the control group. Both work-related and personal statistics are included in this section.

SELECTION OF SEMINARS

Six seminars were chosen to test the experimental factor of training seminars. The six programs selected for evaluation in the research were Assertion Training, Achievement Motivation Training, three management skills seminars and the Supervisor Awareness Seminar. The Project staff and Advisory Task Force¹ chose these six programs as representative of the major areas of training programs within the established theoretical framework. (See Chapter II for further details.) The programs were also available to employers in Iowa and could easily be replicated.

SELECTION OF CONSULTANTS

Consultants were selected according to the existing federal regulations governing consultant work by federal contractors,² and by negotiation rather than formal advertising. The Women's Bureaus in Kansas City and Washington, D.C., as well as various women's organizations were contacted for

names of persons and firms that conducted training seminars for women on a consultant basis. The universities in Iowa were also contacted for suggestions.

Evaluation and awarding of contracts were based on the following criteria: 1) proposed staffing and the qualifications of trainers; 2) relative price advantages; 3) the organization's ability to conform to the Project's timetable; 4) the consultant's experience in working with private sector employers; 5) experience with proposed programs in the private sector; 6) course outline; and 7) reputation of consultants as related to their acceptance by participating employers.

Fifteen proposals were received from private management consulting firms, universities, and individuals. According to the criteria, five consultants were recommended by the Project staff. A steering committee of the Advisory Task Force then approved the recommended list of five. All consultants contacted had extensive experience with both the specified topic and the teaching of various seminars. In addition, they also had credentials and recommendations acceptable to private sector employers.

COMPANY SAMPLE

The employer universe for the selection of ten employers to participate in the employee training programs included all firms in the greater Des Moines area who had filed EE0-1³ reports in 1974, excluding the transportation and utilities industry. In addition, the firms had to employ a minimum of 350 people, including at least 150 women. Specifically, the universe included 30 firms. Of these, 25 were contacted for cooperation and ten agreed to participate. The selection of firms in the Des Moines area alone was necessary due to budgetary constraints.

The firm size stipulation was necessary for two reasons. First, the organization needed to be large enough to release fifteen of their female employees for the training sessions without major scheduling problems within the organization. Second, a minimum of 150 employees was necessary to provide a satisfactory pool for random selection.

Companies randomly selected to participate in the research were contacted by members of the Employment Project staff to elicit cooperation. The results of the first year of the Project were explained and the employers were given a copy of the report. In addition, the objectives of the second and third years of the Project and the funding source through CETA Title I were also explained. Each employer was furnished with outlines of the seminars to be conducted and details of the company's cooperation were explained.

The sampling of firms had certain limitations. The restriction on the number of total employees and the number of female employees excluded smaller employers and companies with only a few women employees. The sample also excluded companies with few educated women employees.

DEMOGRAPHICS OF THE FEMALE PARTICIPANTS

Many of the demographic characteristics presented in Charts IV-1 through IV-9 are a result of the sampling criteria for participation in the training programs or control group. (See the criteria outlined in Chapter III.) Therefore, only 3 women in the sample had no education beyond high school while 79 (or 44 percent) had received a B.A. or a more advanced degree. The educational criteria, in turn, influenced the age composition downward. The younger the woman, the greater the likelihood of her attending college due to increased acceptance and availability of

CHART IV-1

EDUCATION OF SAMPLE

BY TYPE OF SEMINAR

EDUCATION	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1 Year of College	3	10%	6	20%	5	17%	3	10%	3	10%	-	-	20	11%
2 Years of College	7	23%	4	15%	3	10%	4	13%	8	27%	4	13%	30	17%
2 Year Degree	3	10%	1	3%	4	13%	3	10%	3	10%	3	10%	17	9%
4 Year Degree of More	13	43%	14	47%	11	37%	11	37%	12	40%	18	60%	79	44%
Vocational Training	3	10%	5	17%	4	13%	6	20%	3	10%	3	10%	24	13%
Nursing Degree	1	3%	-	-	2	7%	2	7%	-	-	2	7%	7	4%
High School Only	-	-	-	-	1	3%	1	3%	1	3%	-	-	3	2%
Total	30	99%	30	102%	30	100%	30	100%	30	100%	30	100%	180	100%

Chi-Square = 23.894

Significance of Chi-Square = .777

CHART IV-2

SUPERVISORY LEVEL OF SAMPLE

BY TYPE OF SEMINAR

SUPERVISORY LEVEL	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Non-Supervisor	21	70%	21	75%	19	63%	20	67%	19	63%	22	73%	122	69%
1st Line Supervisor	9	30%	7	25%	11	37%	9	30%	10	33%	7	23%	53	30%
Middle Management	-	-	-	-	-	-	1	3%	1	3%	1	3%	3	1%
Top Management	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	30	100%	28	100%	30	100%	30	100%	30	99%	30	99%	178	100%

Chi-Square = 4.706

Significance of Chi-Square = .910

CHART IV-3

PRESENT JOB CATEGORY OF SAMPLE

BY TYPE OF SEMINAR

PRESENT JOB	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborer	-	-	1	3%	-	-	-	-	2	7%	1	4%	4	1%
Operative	1	3%	-	-	1	3%	-	-	-	-	-	-	2	1%
Craft	-	-	1	3%	-	-	1	3%	1	3%	-	-	3	2%
Office/Clerical	13	43%	16	55%	7	23%	14	47%	14	47%	14	50%	78	44%
Sales	2	7%	-	-	2	7%	2	7%	-	-	1	4%	7	4%
Technicians	6	20%	3	10%	5	17%	3	10%	4	13%	2	7%	23	13%
Professionals	6	20%	3	10%	8	27%	8	27%	5	17%	8	29%	38	22%
Managers	2	7%	5	17%	7	23%	2	7%	4	13%	2	7%	22	12%
Total	30	100%	29	98%	30	100%	30	101%	30	100%	28	101%	177	100%

Chi-Square = 31.597

Significance of Chi-Square = .633

CHART IV-4

DESIRED JOB CATEGORY OF SAMPLE

BY TYPE OF SEMINAR

DESIRED JOB	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Service	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Laborer	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operative	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Craft	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office/Clerical	-	-	3	11%	1	3%	-	-	2	7%	1	3%	7	4%
Sales	-	-	-	-	-	-	-	-	1	3%	-	-	1	1%
Technicals	2	7%	-	-	1	3%	-	-	4	14%	-	-	7	4%
Professionals	8	28%	8	30%	7	24%	10	35%	5	17%	6	20%	44	25%
Managers	19	66%	16	59%	20	69%	19	69%	17	59%	23	77%	114	66%
Total	29	101%	27	100%	29	99%	29	104%	29	100%	30	100%	174	100%

Chi-Square = 25.475

Significance of Chi-Square = .184

college education for women.

Selected work-related characteristics were also influenced by the sampling criteria as shown in Chart IV-2, IV-3, and IV-4. Sixty-nine percent, or 122, of the women had no supervisory responsibilities, while 30 percent, or 53, were first line supervisors. The majority of the women desired professional or managerial jobs, 25 percent and 66 percent respectively. Four percent desired technical or office/clerical jobs and one person desired a sales position.

Other personal statistics revealed that 56 percent of the women were married and 24 percent of the women reported that they had children living at home. The women in the sample were relatively young, with 80 percent of the women under 35 years of age. (See Charts IV-5, IV-6, and IV-7.)

Members of the sample held jobs in eight of the nine job categories, but the greatest number, 78 (or 44 percent), held office/clerical jobs. Women were also clustered in the technical (13 percent), professional (22 percent), and managerial (12 percent) categories. Seven of the women held sales, operative, craft, or laborer jobs. The women in the sample had worked for their employers an average of 2.9 years. In addition, 51 percent of the women had worked less than two years for their current employer as shown in Chart IV-8.

Most incomes reported by the women fell into the range between \$5,000 to \$13,000 annually. Most of the women, however, earned incomes in the lower portion of the range with 85 percent earning under \$11,000. Twelve women, or 7 percent, earned \$13,000 or more. Income statistics are reported in Chart IV-9.

As can be seen, the specific characteristics of the sample appear

CHART IV-5
 MARITAL STATUS OF SAMPLE
 BY TYPE OF SEMINAR

MARITAL STATUS	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Presently Married	16	53%	17	59%	17	57%	15	50%	17	57%	18	60%	100	56%
Not Presently Married	14	47%	12	41%	13	43%	15	50%	13	43%	12	40%	79	44%
Total	30	100%	29	100%	30	100%	30	100%	30	100%	30	100%	179	100%

Chi-Square = .809

Significance of Chi-Square = .976

CHART IV-6
 NUMBER OF CHILDREN OF SUBJECTS
 BY TYPE OF SEMINAR

NUMBER OF CHILDREN	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
None	20	69%	23	77%	25	83%	21	70%	22	73%	25	83%	136	76%
One	5	17%	3	10%	1	3%	3	10%	5	17%	1	3%	18	10%
More than One	4	14%	4	13%	4	13%	6	20%	3	10%	4	13%	25	14%
Total	29	100%	29	100%	30	100%	30	100%	30	100%	30	99%	179	100%

Chi-Square = 7.142

Significance of Chi-Square = .685

CHART IV-7
 AGE OF SAMPLE
 BY TYPE OF SEMINAR

AGE	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Under 25 years	12	40%	9	30%	14	47%	12	40%	14	47%	15	50%	76	42%
25 - 34 years	16	53%	14	47%	9	30%	9	30%	9	30%	12	40%	69	38%
35 - 44 years	1	3%	3	10%	2	7%	5	17%	4	13%	2	7%	17	9%
45 - 54 years	1	3%	2	7%	4	13%	3	10%	3	10%	1	3%	14	8%
55 and over	-	-	2	7%	1	3%	1	3%	-	-	-	-	4	2%
Total	30	99%	30	101%	30	100%	30	100%	30	100%	30	100%	180	99%

Chi-Square = 17.765

Significance of Chi-Square = .603

CHART IV-8

LONGEVITY OF SAMPLE WITH COMPANY

BY TYPE OF SEMINAR

YRS. WITH COMPANY	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Less than 1	12	40%	8	27%	9	30%	8	27%	7	23%	11	37%	55	31%
1 - 2	6	20%	3	10%	6	20%	6	20%	7	23%	8	27%	36	20%
3 - 5	9	30%	12	40%	9	30%	9	30%	10	33%	8	27%	57	32%
6 - 10	3	10%	6	20%	6	20%	6	20%	5	17%	1	3%	27	15%
More than 10	-	-	1	3%	-	-	1	3%	1	3%	2	7%	5	3%
Total	30	100%	30	100%	30	100%	30	100%	30	99%	30	101%	180	101%

Chi-Square = 18.41

Significance of Chi Square = .56

CHART IV-9

INCOME OF SAMPLE

BY TYPE OF SEMINAR

INCOME	SEMINAR													
	Achievement		Assertion		Task		Communi- cation		Combination		Control		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Less than \$5,000	1	3%	-	-	-	-	2	7%	2	7%	3	10%	8	4%
\$5,000 - \$6,999	9	30%	7	23%	6	20%	9	30%	5	17%	9	30%	45	25%
\$7,000 - \$8,999	9	30%	13	43%	11	37%	8	27%	15	50%	6	20%	62	34%
\$9,000 - \$10,999	4	13%	6	20%	7	23%	9	30%	7	23%	6	20%	39	22%
\$11,000 - \$12,999	5	17%	-	-	3	10%	1	3%	1	3%	4	13%	14	8%
\$13,000 or more	2	7%	4	13%	3	10%	1	3%	-	-	2	7%	12	7%
Total	30	99%	30	99%	30	100%	30	100%	30	100%	30	100%	180	100%

Chi-Square = 28.284

Significance of Chi-Square = .295

to be randomly distributed throughout the different seminars and control group. The chi-square statistics reported at the bottom of each chart do not indicate that any of the characteristics are distributed in any other than a random fashion.

Selected demographic characteristics are also reported by company in Chart IV-10. Two characteristics are of interest. One, education by company, shows that Company F's participants were all college graduates where the other companies had participants with a variety of post-high school experiences. As the chi-square statistic shows, educational backgrounds were not randomly distributed throughout the companies. The chi-square statistic was also significant at the .05 level in the case of income by company as the income statistics varied greatly. One company had no participants making under \$7,000 annually, while another had no participants making more than \$8,999 annually.

CHART IV-10

DEMOGRAPHIC CHARACTERISTICS OF SAMPLE BY COMPANY

CHARACTERISTICS	COMPANY									
	A	B	C	D	E	F	G	H	I	J
Education										
One Year College	2	6	2	-	2	-	3	1	3	1
Two Years College	5	3	-	3	8	-	1	6	3	1
Two Year Degree	1	-	3	4	1	-	2	3	2	1
B.A. or more	10	5	6	5	4	18	10	8	6	7
Vocational Training	-	3	5	5	2	-	1	-	4	3
Nursing Degree	-	-	1	-	1	-	-	-	-	5
H.S. or less	-	1	-	1	-	-	1	-	-	-
TOTAL	18	18	17	18	18	18	18	18	18	18
Income										
Less than \$5,000	-	2	1	-	-	-	2	1	1	-
\$5,000 - \$6,999	1	7	3	-	3	9	8	8	5	1
\$7,000 - \$8,999	5	4	7	13	4	4	7	6	7	5
\$9,000 - \$10,999	10	1	2	2	7	4	-	2	5	5
\$11,000 - \$12,999	2	1	-	2	2	1	-	1	-	5
\$13,000 or more	-	2	5	1	2	-	-	-	-	2
TOTAL	18	17	18	18	18	18	17	18	18	18

N = 179
 Chi² = 117.934
 Sig. = .000

N = 178
 Chi² = 100.165
 Sig. = .000

FOOTNOTES: CHAPTER IV

¹The Advisory Task Force was an advisory group to this Project comprised of representatives from the private sector, government, academia, and labor which was formed in the first year of research. See Appendix A for a listing of members.

²Federal Management Circular, 74-7, especially Attachment 0.

³Equal Employment Opportunity Employee Information (EEO-1) Reports are filed by all private sector employers with a minimum of 100 employees within the state and submitted to the Equal Employment Opportunity Commission annually.

TABLE 1

1954

The following table shows the number of persons employed in the Federal Government of Canada in 1954, by sex, age, and marital status, and also the number of persons employed in the Federal Government of Canada in 1953, by sex and marital status. The figures are based on the 1954 Census of Canada, and are subject to the usual errors and omissions of a census.

Table 1. Federal Government of Canada, 1954.

Table 1. Federal Government of Canada, 1954. (continued)

Category	1954	1953
Total	100,000	95,000
Male	55,000	50,000
Female	45,000	45,000
Under 15	10,000	10,000
15-24	20,000	20,000
25-34	30,000	30,000
35-44	25,000	25,000
45-54	15,000	15,000
55-64	10,000	10,000
65 and over	5,000	5,000
Married	70,000	65,000
Single	30,000	30,000

CHAPTER V

MODEL III HYPOTHESES AND RESEARCH METHODOLOGY

INTRODUCTION

This chapter presents Model III's hypotheses, research methodology, and instrument design. The following hypotheses are concerned with the sixth seminar conducted by this Project. The Supervisor Awareness Seminar had both male and female participants and was designed for supervisors and management personnel. No direct measurement concerning this seminar's effect on the advancement of female employees in lower supervisory and non-supervisory positions could be made. Different measurements and tests, therefore, were needed for this seminar. An indirect test measuring attitudes toward female employees was used to measure the effects of the seminar.

In addition, a case study was conducted of a company where two-thirds of its middle and top management had participated in the Supervisor Awareness Seminar over a two year time span. None of their employees attended the seminar conducted under this research, however. The hypotheses and test conducted are the same for both the case study and the Supervisor Awareness Seminar conducted by this project. In both the Supervisor Awareness Seminar we conducted and in the case study, control groups were established.

The participants and the control group received a Model III survey modeled after the Harvard Business Review's questionnaire concerning sex discrimination by executives.¹ Our derivation of this questionnaire was designed to distinguish subtle discriminatory attitudes when making everyday business decisions. In the questionnaire, each respondent was to

pretend to be an executive vice president. Eight different situations were described in memo form that required an executive decision. Each memo of the survey involved one person. Two forms of the questionnaire were administered, however. One form had a male as the main person in the situation, while the other form had a female in the same situation. Both forms had an equal number of males and females as main characters. See Appendix I for a copy of the questionnaire used.

The first and main hypothesis for the Model III seminars examines the difference in responses to each of the eight memos of the questionnaires between Form 1 and Form 2. The general hypothesis for this seminar is that the participants of the seminar would not have significant differences in responses between the two forms (the sex of the subjects described in the survey would not influence the recommended action) while the control group would tend to recommend actions on the basis of sex. The null hypothesis is that the participants and the control group(s) would not have significant differences in their responses on the two forms.

Hypothesis 16.1 The participants will not have significantly different mean scores for all questions between Form 1 and Form 2 while the control group(s) will have significantly different mean scores on all questions between Form 1 and Form 2.

With both the control and participant groups, the effects of age, education, longevity with the companies, position in the companies, salary, marital status, and number of promotions were examined to see if these variables had any significant effects upon the responses to the questionnaire.

Hypothesis 17.1 The variables of sex, age, education, longevity with the company, position with the company, wages, marital status, and number of promotions will have no significant effects upon the mean scores of either the participant or control group(s).

After each memo on the questionnaire, respondents were asked to explain

the reasons behind their particular response. Each explanation was then examined for "factors of sex." Factors of sex included any reference to stereotypes or a sex related comment cited as a factor in the response chosen. Example: "Cheryl may end up getting married and leaving the company, so she shouldn't be chosen for the training seminar."

Hypothesis 18.1 The factor of sex as a reason for choosing specific responses will be mentioned significantly more times by the control group(s) than by the participant group.

MODEL III TESTING PROCEDURES

Supervisor Awareness Seminar

The design for the Supervisor Awareness Seminar is a post-test compared to a similar but non-equivalent control group. In this portion of the research project, seminar participants from four companies were compared to the control group from their own company in regard to attitudes toward women in business settings.

Each group of participants from the four companies and its corresponding control group were compared separately. It was not possible to test for any interaction of company effects because the number of participants from each company differed and the selection of companies in Des Moines was not random. Therefore, this portion of the study did not use company as an independent variable.

The universe for the selection of employers to participate in the Supervisor Awareness Seminar consisted of all Des Moines employers who filed EEO-1 reports in 1974. In addition, the organizations had to employ a minimum of 250 persons and could not have participated in the Model I and Model II training programs. Specifically, this universe consisted of 20 organizations of which eight were contacted.

The size constraint was believed to be necessary for two reasons. Again, the organization needed to be large enough to release three to six of their employees without major scheduling difficulties while a corresponding number were needed for matching. Second, it was believed that this program, unlike the others, was suited for smaller companies because the participants might be able to use their new knowledge and attitudes more effectively in a smaller company.

To choose the participants of the seminar, pairs of employees were matched according to sex, company rank, and responsibility to help eliminate some of the external variables which might have affected a subject's responses. One person from each of the matched pairs was then chosen by random selection to attend the seminars; the other was considered to be part of the control group. Nine male and nine female supervisors participated in the program, while nine other male and nine other female supervisors were chosen to serve as control group members.

The subjects were tested for attitudinal changes six months after the seminar was conducted. Since the questionnaire is unique, a better comparative evaluation was considered to be made if the test was only taken once and compared to the results obtained from a control group. Taking the survey a second time might have easily contaminated the results and concealed any real attitudinal changes that might have occurred from the seminar.

A series of contingency tables were analyzed to determine if any significant differences occurred between the responses chosen by the participants and the responses chosen by the control group. These contingency tables were tested by the chi-square statistic. (This statistic is described further in Appendix B.) A significance level of .10 or higher (90 percent

confidence level that the results could not be obtained by chance) was needed before the hypotheses for the Model III seminar were accepted and any further analysis made.

Case Study

For the case study of a Des Moines company where two-thirds of its management participated in the Supervisor Awareness Seminar, a similar design of comparing participant and control group results from the Model III survey was used. The middle and upper management of the company was divided into the 37 participants who attended the seminar (not chosen randomly) and those who did not attend. A control group of 40 was then randomly chosen from the latter group. Some of the control group, by necessity, were senior clerical personnel rather than management personnel, as the number of females in top and middle management was small. The participants and the control group were approximately equally divided between men and women.

A second control group was formed in the case study. A similar company was chosen (outside of Des Moines) which had no participants in the seminar at any time. Twenty women and twenty men from management and senior clerical personnel from this company were chosen to complete the survey.

All three groups were randomly chosen to take one of the two forms of the Model III survey. By comparing the differences in the responses to Form 1 and Form 2 between the participants and the control groups, attitudinal differences could be ascertained. A series of contingency tables were used to determine differences in attitudes. These contingency tables were tested by the chi-square statistic to determine if the participant and control groups had significantly different responses to the two forms

of the questionnaire. A significance level of .10 or higher (90 percent confidence level that the results could not have been obtained by chance) was needed before further tests of association were employed.

DEFINITIONS OF MODEL III TERMS

1. PARTICIPANT - Those first line supervisors or above who attended the Supervisor Awareness Seminar either through the company in the case study or through this research. If they were chosen through this research, they were chosen randomly.
2. CONTROL SUPERVISORS - The first line supervisors or above who did not attend the seminars. They were roughly matched with the participants by rank and responsibility in their own companies.
3. PROMOTION - See definition in Chapter III.
4. EDUCATION - See definition in Chapter III.
5. WAGES - See definition in Chapter III.
6. FORM 1 AND FORM 2 - The two different forms of the Model III survey adapted from the Harvard Business Review survey designed to detect subtle discrimination in individual management decisions. Form 1 and Form 2 contained identical situations in the eight memos presented. However, one form alternated male/female subjects throughout the memos while the other form alternated female/male subjects. For example, Form 1 had Roger Davis as the subject of the first memo while Form 2 had Diane Davis as the subject. Each participant was given only one form of the survey. The control and the participant groups were randomly given one of the two surveys, so each group was given equal numbers of Form 1 and Form 2 surveys.
7. RESPONSE ON THE SURVEY - Each situation required a specific course of action and was followed by a series of responses of different ways each could be handled. If the responses were similar on each memo between Form 1 and Form 2 (the responses similar for the male and female main character) then no differences in treatment between the sexes was ascertained for those surveyed. If mean differences did occur between Form 1 and Form 2 then differences in treatment were distinguished.

8. POSITION WITH THE COMPANY - Three different ranks of position were distinguished for those receiving the survey: 1) first line supervisor, senior clerical, or technicians; 2) middle management and professionals; and 3) top management (including those who report directly to the chief executive officer).
9. FACTOR OF SEX - After the set of responses for each memo in the survey, an open-ended question was asked: "What factors did you consider in making your decision?" Factors of sex included any reference to a stereotype or sex-related comment cited as a factor in the response chosen. Example: "Cheryl may end up getting married and leaving the company, so she shouldn't be chosen for the training seminar."
10. LONGEVITY WITH THE COMPANY - The number of years that the participants or the control group members had been employed with their current employer.

FOOTNOTES: CHAPTER V

¹We want to thank Harvard Business Review for letting us use their study and their second, third, and eighth memos verbatim. The results of their study can be found in Benson Rosen and Thomas Jerdee, "Sex Stereotyping in the Executive Suite," Harvard Business Review (March-April 1974), pp. 45-58.

In Harvard's study it was found that subtle differences did exist between the male and female versions of the questionnaire. Therefore, we felt that this questionnaire would measure the effects of the seminar in altering the participants' sex-role stereotypes.

the first part of the study...

The results of the study... In the first part of the study...

It is important to note that...

The study was conducted...

The results of the study...

CHAPTER VI

LIMITATIONS OF THE STUDY

The conclusions that can be drawn from this study are limited by the nature of the research design. Perhaps most importantly, the training seminars may not adequately represent the models and they may not have been able to correct the obstacles to female advancement that each particular model predicts.

It is also possible the training seminars were able to correct the obstacles to advancement predicted by the models, but an evaluation period longer than one year was needed for the predicted changes to appear. This type of limitation may produce a Type I statistical error; e.g. failing to provide confirmation for a hypothesis which in fact is a correct hypothesis.¹

Type II statistical errors were also possible under this design; e.g. finding confirmation for a hypothesis which is in fact a false hypothesis. The significance levels (.05 and .10) were chosen to reduce the possibility of this type of error. A problem, nevertheless, lies in the possibility that employers will use the training seminars as criterion in promoting women, but that their attitudes toward promoting women in general will not have changed. The most serious Type II error, however, lies in the possible conclusion that a training seminar is valuable when in fact the training seminar has no value in removing the obstacles to female advancement. One of the repercussions of this conclusion would be that employers would offer training seminars for advancement purposes even though the seminars would not help the promotability of their female employees.

In this study each model is treated independently, while in reality some mixture or interactions of the models probably creates a more accurate

picture of women in business. Except for the Combination Seminar under Model II, no interaction effects of the seminars or the models were studied. Testing for such interaction and combination effects among the four models and providing any test for Model IV is beyond the scope of this study.

The questions asked the participants on the questionnaires may not have provided adequate information on the variables under study. The fixed responses to the job authority questions may not have provided the respondents with choices which expressed their exact feelings. Or, the questions may not have corresponded to their particular jobs. It is also possible that biases were introduced in the completion of the questionnaires. Completing four questionnaires could also have made the respondents careless or they may have exaggerated their job responsibilities, pay, or promotions, because they knew that was the object of the study.

Since the participants were randomly assigned to the seminars it is possible that their needs or interests did not correspond to the main thrust of the seminars they attended. This involuntary placement may have created resentment or a lack of commitment to the learning process each seminar offered.

The control group may also have been influenced by knowing they were part of this research project. Most of the women in the control group realized the results of management training seminars were being tested. They may have thought it was in their interest to get training on their own to be able to compete with the participants of the other seminars. In addition they may have tried harder to excel on their jobs knowing they were part of a research project, an example of the "Hawthorne effect."²

A bias may have resulted from the companies who agreed to participate. They may have felt a need to participate to help their Affirmative Action

program, or they may have been more conscientious about training their female employees than other companies. Because the study was only conducted with companies in Des Moines, any generalization of the results to other cities should be done very cautiously.

With these concerns expressed, it is still possible to derive much information from this study. At the most concrete level, information will be provided on whether training seminars provide an avenue for advancement for those women who take them. Further, the relative effectiveness of different types of training seminars will be provided.

Answers to these two questions help provide insight into the relative importance of three of the four models on the underutilization and underemployment of women in business. These insights can be used by others to indicate profitable areas within the four models for further research and to suggest practical remedies for including more women in management positions.

FOOTNOTES: CHAPTER VI

¹Hubert Blalock, Social Statistics, (New York: McGraw-Hill, 1972), pp. 113-116.

²Harold Rush, "The Behavioral Sciences in Training and Development," in Robert Craig, Training and Development Handbook: A Guide to Human Resource Development, (New York: McGraw-Hill, 1976), pp. 84-85.

CHAPTER VII

DESCRIPTION OF MODEL I SEMINARS

Model I, described earlier in the Theoretical Framework, outlined the internal variables of women that have contributed to women's underutilization and underemployment in management positions. These internal variables inhibit women who have the necessary skills from seeking and aspiring to more responsible administrative positions.

Three interrelated variables were identified that hindered women's aspirations for and attainment of supervisory and management positions. The first variable was the lack of self-esteem. Self-esteem was described as a personal sense of one's own worth and the value of his/her uniqueness. Women have been caught between traditional sex-role stereotypes and their individual needs for personal fulfillment outside the family structure. Women have been taught to value their nurturant qualities at the expense of expanding their own talents and skills. This bind has created uncertainties in what women should value in themselves, and is expressed by women feeling insecure and lacking confidence.

Achievement motivation was the second variable identified in this model. The achievement motive is only one of many major motives internalized by each individual, but it is a major motive in aspiring to success and greater responsibility. The motive to achieve is necessary for individuals to aspire to greater, but realistic, career goals and it creates the drive necessary to achieve these goals. Adequate career planning and systematic thinking about future personal goals are important aspects of this variable.

The third variable was role conflict. Role conflict for women usually

appears when married women enter the work force. Society's traditional role for married women has placed them in the home, while many times her own or her family's needs have forced her to join the work force. This dual career has placed strain on many women and has left them with inadequate time and insufficient physical and mental resources to do a good job in either career.

Two seminars were conducted to test Model I. The first seminar conducted was an Achievement Motivation Seminar. This seminar presented the theory of achievement motivation and taught the participants how to think in achievement motivation imagery. Career planning and formulating career goals were important aspects of this seminar. Internalization of the achievement motive so that each individual would aspire to and achieve personal goals was the primary objective of the seminar.

An Assertion Training Seminar was also conducted to test the hypothesis that women lack self-esteem compared to men and therefore feel unable to assume the responsibility of a manager or supervisor. Assertion training teaches that each individual has the right to be treated fairly, to stand up for oneself, and to express one's feelings. In order to be assertive, a sense of oneself as an equal to others is required. By learning to value oneself as an equal to others, one's self-esteem increases. The variable of role conflict in this model was not tested by any seminar.

ACHIEVEMENT MOTIVATION SEMINAR

Theory of Achievement Motivation

The Achievement Motivation Seminar was modeled after seminars conducted by David McClelland in the early 1960's.¹ The achievement motive has been extensively researched by psychologists in an attempt to understand

the individual's drive for success in competitive situations and for overcoming obstacles.

The achievement motive is only one of many human motives that psychologists have identified. Other motives include the affiliation motive, the power motive, the curiosity motive, and the fear motive. No consensus among psychologists has been reached as to how motives are formulated in humans or if motives can be altered once they have been formulated.

Most of the research concerning the achievement motive has followed the behaviorist school of psychology.² This school of thought believes motives are dynamic within people and that motives will change as the environment (rewards and punishments) changes.

The behaviorist school believes children first learn particular motives by linking cues which are identified from experiences and fantasies. Although all individuals tend to have similar motives, each individual weighs the strengths of the various motives differently depending on the experiences and fantasies of the individual. Motives can then be defined as "effectively toned association networks arranged in a hierarchy of strength or importance within a given individual"³ (emphasis theirs).

Psychologists believe the strength of an individual's achievement "association cluster" can be measured by the Thematic Apperception Test (TAT). For this test, an individual writes fantasy stories in response to a standard picture or slide. The fantasy stories are written by answering standard questions such as "Who are the persons in the slide?", "What is happening?", "What has happened in the past?", and "What will happen in the future?". An example of a slide is a young man sitting at a desk with a look of consternation on his face with paper strewn about his desk. In the background, there is a blackboard with complex equations written on it.

The story an individual writes about the picture can be scored for n Achievement Score (n Ach or n Achievement). If the individual writes a story containing references about doing well, achieving success, overcoming barriers or obstacles, and stating a realizable goal, then the individual will be given a high n Ach score. In other words, receiving a high n Ach score is another way of stating the person probably tends to fantasize in an achievement oriented fashion, to think along an achievement motive association network, and to strive for achievement in their everyday lives.

Because motives are defined as hierarchically arranged, an individual can gain a greater achievement drive by altering his/her established hierarchy of motives. The Achievement Motivation Seminar was designed to meet this goal through a four step process. First, an individual must clearly establish the achievement motive network by defining the achievement motive and by giving examples of it. Second, the individual must conceptualize the network by playing simulated games which illustrate how the achievement oriented person responds to specific situations. Third, he/she must establish new uses and associations for the new achievement motive hierarchy by learning to fantasize along achievement motive lines. Fourth, an individual must work out a new hierarchical relationship so that past, dominate motives will not impede the new increase in the achievement drive. This can be accomplished by setting career goals and personal objectives.⁴

David McClelland, who developed the Achievement Motivation Seminar, related his research on achievement motivation to economic development and continued economic growth. He felt that entrepreneurship was the key to economic development, and he wanted to be able to teach individuals how to increase their achievement motives so they could become good entrepreneurs. The most thorough research on the success of the Achievement Motivation

Seminar is reported in McClelland's and Winter's book, Motivating Economic Achievement. The participants in the research were small businessmen and entrepreneurs from India and Pennsylvania, and all were male.

From this research, McClelland and Winter discovered that an individual with a high n Ach score exhibits certain characteristics. McClelland described the characteristics of achievement motivated people as:

... They set moderately difficult goals for themselves, neither too easy nor too hard, so as to maximize the likelihood of achievement satisfaction. They are more than normally interested in concrete feedback on how well they are doing. In this respect they seem to be particularly like businessmen who, more than professionals, get concrete feedback in concrete performance terms as to their relative success or failure. They like assuming personal responsibility for solving problems, because in that way they get a sense of achievement satisfaction from completing a task, whereas they cannot if success depends on luck or circumstances beyond their control, or if they are working exclusively on someone else's problem. Finally, those with high n Ach generally show initiative and exploratory behavior, continually researching the environment to find tasks that they can solve to their satisfaction.⁵

Other relevant conclusions from McClelland's and Winter's research on their Achievement Motivation Seminar included: 1) the participants had to have opportunities to activate their achievement motive, 2) the participants usually had to be in job positions where they had an opportunity to be self directed or at least able to establish their own goals,⁶ and 3) that the participants needed a prior disposition toward the achievement motive in order for the seminar to accomplish its goals. In a follow-up of the participants a year after the seminar, McClelland and Winter found that the men who took the seminar, and who also were owners or in charge of their businesses, tended to increase sales and profits and expand their businesses more than a control group who did not attend the seminar. However, those participants who had a high retention of the n Ach association network, as measured by the TAT taken one year after the seminar was completed, were not necessarily the men whose businesses had the most dramatic and positive

changes.⁸

Most of the early research used in formulating the achievement motivation theory was conducted using male subjects. The assumption was made that females would follow the same patterns as the males in their achievement drive. Research, however, conducted on female subjects has not supported this assumption.⁹ From the first research on achievement motivation in females, it was noted that the results from female subjects yielded results which were not consistent with the findings found for male subjects. Atkinson reported in 1958 that "perhaps the most persistent unresolved problem in research on n Ach concerns the observed sex differences."¹⁰

Several areas of divergence between male and female subjects have been found. First, the scores on the TAT are higher when the slides or pictures used relate to the goal orientation relevant for the subjects.¹¹ For example, if women value the traditional women's role, they would have low scores if a slide shows a man working on his automobile. Second, women usually had higher scores on the TAT when female figures were used in the pictures or slides than when male figures were used. Exceptions to this result occurred in females who received greater satisfaction in their husband's achievement rather than their own and in cases where women's goal orientation emphasized intellectual pursuit (as defined by accomplishment in formal education and professional areas). This latter exception probably is due to the lack of positive female role models in intellectual areas and therefore women tend to identify best with male figures in the TAT test. Aside from these two exceptions, French and Lasser concluded that "when maximum performance prediction is desired from the motivation scores of women subjects it appears advisable to use the female figures (in the TAT)...¹²

In McClelland's theory, achievement motivation manifests itself in specific areas. These areas include business skills (as measured by increased sales volume, business expansion, and profits), entrepreneur capacity, leadership, and intellectual ability. Success in these areas was a measurement of the success of their Achievement Motivation Seminar. These areas, however, have not traditionally been appropriate for female success. Females exhibiting these four trait areas do not necessarily receive the rewards and support from society that males receive. Therefore, teaching women to strive for achievement, as exemplified by these four trait areas, may bring about role and value conflicts rather than personal satisfaction for women.

Other achievement models may apply more directly to women. One model, the Crandall model, suggests there are three determinants of motivation: expectancy of success, attainment value (the significance attached to a particular achievement), and standards of performance. This model assumes that motivation is directed toward a specific task or area. This model, therefore, could include roles and tasks which are usually reserved only for females.¹³

Another model suggests that women's roles and occupations be taken into account. Women who abide by traditional female roles and who are homemakers may hold a different concept of the achievement motivation than those women who hold professional positions.¹⁴

In addition, working women who hold jobs that are supportive work roles (such as secretaries, receptionists, and nurses) may also hold a concept of achievement motivation that stresses social attributes and their supporting roles. Women have traditionally been strong in social skills and affiliation areas rather than the business or entrepreneurial areas. Nevertheless, they may have just as strong an achievement motive as males, but the motive

may be manifested in different areas. It is important to consider that females may aspire to different achievement goals than males. Social skills may be an important achievement goal for females especially because females tend to receive more social approval for achievement in social related areas than do males. As Stein and Bailey state:

We propose that evidence discussed supports the hypothesis that social skills are a central area of achievement concern for many females, not that female achievement efforts are instigated primarily by affiliation motives or desire for social approval per se. The goal is attainment of a standard of excellence, but the areas in which such attainment is most important are somewhat different from males. The argument that achievement rather than affiliation is the important motivational system is supported by the fact that social arousal led to achievement imagery, not affiliation imagery...¹⁵(emphasis theirs)

Another area of controversy, yet unresolved, stemming from the topic of women and the achievement motive, centers around the concept of "fear of success." Matina Horner developed this concept when she discovered that college women who were very capable of high success and high achievement responded negatively when verbal cues were given that suggested women were successful. An example of a cue is: "After first term finals, Anne finds herself at the top of her medical school class."¹⁶ Horner suggested that women fear success because they want to avoid the negative social consequences that this success might imply.¹⁷ For example, Anne, who found herself at the head of her medical school class, may be ostracized by the males in her class and others who think Anne is too aggressive, unhappy, and unmarried. Horner's theory, however, has been questioned for methodological reasons as well as for the universality of its application.¹⁸

An Achievement Motivation Seminar was not located that included the recent research findings on women and the achievement motive. Therefore, an Achievement Motivation Seminar designed for males was used for the all female audience. However, some of the exercises and activities (such as the

building of fighter bombers) were not developed for the average female and most females would have a difficult time relating the exercises to many of the tasks they perform in their normal daily routine. Findings from this seminar will help to identify if a separate Achievement Motivation Seminar for women is necessary that encompasses the recent research on women and the achievement drive.

An Achievement Motivation Seminar was recently conducted for black ghetto males from Washington, D.C., and for poor white males from Oklahoma. The results of these seminars and the risks involved in conducting an Achievement Motivation seminar were reported.¹⁹ Many of the conclusions from the research also hold for this seminar for women and are worth repeating. First, the Achievement Motivation Seminar training was most effective among present and prospective small businessmen, where the entrepreneur already had a basic knowledge of the operation of the business. Second, the program had to be supported by basic management skills. Third, there needed to be ample opportunities for growth and financial and technical resources. Fourth, the contents of the seminar were conceived for essentially "one man" business operations rather than team cooperation efforts, therefore, men who were in businesses run by team cooperation exhibited less benefits from the seminar than those who ran their businesses alone. Finally, there was evidence that this seminar could lead to frustration and disappointment if the opportunities were not present.²⁰ However, there were benefits, growth, and personal satisfaction evident from the seminar if the opportunities were present.²¹

Course Content

The Achievement Motivation Seminar was a five day workshop offered on consecutive Fridays. Two business professors from Des Moines taught

the seminar, and one of the professors had taught the seminar previously. The seminar was very structured and formal, but an informal review session led by a professional woman was included at the start of each seminar session. Although the leaders were willing to answer questions, large group discussions outside of the review sessions were usually short.

Small support groups were the key to the learning process of the Achievement Motivation Seminar. The women remained in the groups the seminar leaders had formed the first morning. Women with similar marital status and number of children were placed in groups together. Each small group participated together in the group exercises and small group discussions, and each individual formulated career and personal goals with the help of her support group.

The Achievement Motivation Seminar had four major goals: 1) to develop and increase the achievement motive in each person; 2) to stimulate the participants to consider opportunities in their environment and then set challenging, but realistic goals; 3) to develop the participants' abilities to act and think as high achievers so they can sustain their drive to achieve set goals; and 4) to assist participants in identifying their need to develop new skills and to formulate plans to acquire those skills.

The participants were introduced to McClelland's theory of achievement motivation on the first day (see the section on the Theory of Achievement Motivation for an explanation), and the characteristics of high achievers were explained. These characteristics were referred to at least three times during each session, so that they would be remembered by the participants. Recognition of the high achiever characteristics was important because each participant was required to compare her own behavior pattern to that of a model high achiever.

In the handout explaining the penny toss given to the participants, the four characteristics of the high achiever were described. From that handout these characteristics were listed verbatim as:

1. A high achiever tends to set moderately difficult goals for themselves (*sic*), neither too hard nor too easy, so as to maximize the likelihood of achievement satisfaction.
2. A high achiever is interested in feedback on how well he (*sic*) is accomplishing his goals.
3. A high achiever prefers to assume personal responsibility for solving problems in order to minimize luck or circumstances beyond his control from influencing the results of the outcome of his efforts.
4. A high achiever generally shows more initiative and exploratory behavior in continually researching his environment.

The film, "You Pack Your Own Chute," was shown and was followed by discussions in the support groups about the implications of the film and a comparison between experiences in the film and participants' experiences. Several other short exercises were also done to help facilitate the support groups' initial formulation of the Achievement motive and to help the participants get to know one another.

Each participant was also asked to take the TAT. (See section on Theory of Achievement Motivation for an explanation of the TAT.) Four slides (all with male characters) were shown. After each slide, the participants were asked to fantasize about the slide and quickly write a story about the slide by answering four groups of questions.

Each participant was asked to keep a journal and to record at least two significant concepts learned during each session. In addition, they were asked to record incidents during the week which were performed differently as a result of their participation in the seminar. These journal entries were used by the participants in the weekly review sessions.

The first exercise of the second day was a fantasy exercise. Each

participant was asked to fantasize about living on a island fifty miles from civilization. Several women were asked to share their fantasies with the group and achievement imagery was identified.

A lecture on the scoring of the TAT was given. During the week, the leaders scored each of the participant's tests for an Ach score. Every participant was then asked to score her own test to familiarize herself with achievement imagery. (The procedure for scoring the TAT test is complicated, and therefore, will not be explained here.)

The first simulated business exercise was a penny toss. Each group had a circle drawn for them somewhere in the room. Each participant was given five pennies which she was instructed to throw into the circle. There were no other instructions and she could stand as close as she wanted and use any method of tossing or any props that she desired. The object was to illustrate the characteristics of a high achiever which would be setting realistic goals by standing far enough away from the circle to create a challenge. Each group then discussed its own group and individual performances and whether the group exhibited the characteristics of a high achiever.

Each participant took the last hour to individually write down some personal and career goals. This exercise was the beginning of the career planning objective in the seminar. During the next three sessions, each participant worked on and revised her goals individually and with the help of her support group. Within the support group, each participant presented and discussed her goals, with her group asking questions to help clarify the stated goals. Three areas were specifically addressed: 1) simplifying the goals of each participant, helping make certain the goal attainment can be measured in order to identify when the goals are met; 2) evaluating strengths and weaknesses of the participants; 3) and helping identify the areas where

self-development was needed.

A lecture on values began the third day of instruction. The purpose of this lecture was to show that American societal values correspond to the characteristics of a high achiever. The second simulated business exercise was then introduced. In this exercise, each participant was instructed to construct as many fighter planes from tinker toys as possible in a three minute time span. Before the construction, each woman decided on a goal of how many planes she thought she could construct in three minutes. A specific model of the fighter plane was supplied, and was to be exactly copied. Each participant was asked to assess her goal and her actual accomplishment, comparing them to the characteristics of a high achiever. Each participant reset her goal and tried again. The exercise was then repeated with the construction of more difficultly designed bomber planes.

To illustrate the concept of societal values as they relate to achievement, a lecture was given on some of McClelland's research. In this research, McClelland studied second grade textbooks across cultures. He scored the stories in these readers for n Ach in two different historical periods, in 1925 and in the early 1950's, and then correlated them with the economic growth rates in the respective countries. McClelland concluded that economic growth was related to the need for achievement as it was exemplified by the scores of the second grade readers. The participants were asked to score two second grade stories, one from India and the other from Russia for n Ach score. The second career planning and goal setting period closed the third session.

A lecture on motives and motivation started the fourth day's instruction. This lecture explained some psychological theories on needs and motivations and related the theories to business and personal life styles.

Maslow's hierarchy of needs and Murray's twenty-eight basic needs were discussed. In addition, Herzberg's two factor theory was briefly explained. This theory describes a dichotomy between satisfiers of motivators in a work place and dissatisfiers (hygenes). Satisfiers for individuals in the work place are motivating factors, while hygenes inhibit motivation in the work setting. A discussion listing various satisfiers (e.g. ventilated rooms with windows, regular increases in pay, and plenty of work space) and hygenes (e.g. crowded conditions, infrequent pay reviews, stuffy rooms with no windows) illustrated Herzberg's theory.

The last simulated business exercise exemplified the role of parents in inculcating the achievement motive within their children's hierarchy of motives. The exercise used two participants of each support group; one participant took the role of a child, the other the role of a parent. The child was blindfolded and using only one hand stacked blocks, while the parent instructed and guided the child. The exercise also helped illustrate results obtained from prior research on developing the achievement motive within children. The research, conducted only with male children, concluded that mothers of high achievers have greater expectations for their children than mothers of low achievers. Mothers of high achievers also displayed more warmth (kissing, hugging and other outward signs of affection and attention), more encouragement, fewer restrictions, and a less authoritarian manner of discipline than did mothers of low achievers.

The TAT was then repeated. The same four slides were repeated in order for the leaders to assess the differences in the two scores as a measurement of the seminar's success. Much of the seminar was designed to help the participants learn how to fantasize in an achievement oriented way, because it has been theorized that fantasizing about a particular motive will lead

to a change in behavior toward that motive. Teaching the participants how to successfully take the TAT and score the test was an integral part of the Achievement Motivation Seminar, because the participants learned what achievement fantasies were and it also made the participants begin to fantasize achievement dreams. The fourth day was completed by having each support group help its members formalize goals and career plans.

On the concluding day, each participant presented a formalized, written career plan with stated goals that she hoped to accomplish during the upcoming year. This plan was presented confidentially to the seminar leaders. In one year, the leaders planned to contact each participant to check to see if her goals have been met. During the interim period, if the support groups meet on their own, the group will also help monitor each participant's progress toward her goals.

A lecture on creativity was given in the morning. The steps in the process of problem solving were described including fact finding, idea finding, and solution finding. The lecture concentrated on the techniques involved in idea finding. Next, the process of brainstorming was introduced and each group was given five minutes to brainstorm answers to the problem of how the telephone company should dispose of old telephone books. Each group was then asked to brainstorm ways they could distinguish themselves on the job as a result of attending the Achievement Motivation Seminar.

In the final exercise, each support group developed a skit or play that illustrated the objectives of the seminar. This exercise helped strengthen the cohesiveness of the support groups and helped synthesize the material presented. Each support group was then instructed to choose a chairperson and tentative meeting time and place for the group to continue informally on its own.

Group Response

The participants indicated overwhelmingly on their evaluations that they felt the support groups were the highlight of the seminar. Only one or two of the six support groups had trouble establishing immediate rapport and a feeling of camaraderie. The women indicated that the support groups helped them establish personal and career goals and they were pleased to have the opportunity to formulate these goals. Some women, however, expressed a desire for more guidance by the leaders in teaching them the process of career goal formulation. A desire for greater contact with other support groups during the seminars was also mentioned.

Most of the women seemed to enjoy the simulated business exercise that illustrated the characteristics of a high achiever. Participants seemed eager to learn the innovative ideas that the seminar presented. The women were generally willing to fantasize and to share their fantasies with the group. The participants indicated they learned they were responsible for their own lives and they were capable of changing their attitudes and controlling aspects of their own lives.

The low point of the seminar seemed to be the second taking of the TAT. The women indicated they would have liked different pictures to help stimulate their fantasies and they would have liked at least some slides which depicted females.

Some of the women also indicated they would have like at least one female instructor. Although a woman was asked to lead the review sessions each week, she was able to attend only three out of the five sessions, and she left immediately after each review session. Having a female instructor could have developed a more empathetic atmosphere, especially when the women brought up role conflicts and other business related situations.

The other four Model I and II seminars all had female instructors. The importance of female instructors were confirmed as the female instructors were able to validate many of the problems facing these women.

A few of the women indicated that some of the lectures were too abstract, a bit pedantic in nature, or too long. The lecture on McClelland's research of second grade readers was mentioned most often as being too pedantic, detailed, and boring. The women, however, thought that the lectures were necessary and that they did learn from them.

Attendance was hindered the third day because of bad weather which may have detracted from the continuity of the seminar. Appendix J compares the evaluations of the Achievement Motivation Seminar with the other seminars conducted.

ACHIEVEMENT MOTIVATION SEMINAR SCHEDULE

First Day

8:30 - 9:15 AM	Getting acquainted - name exercise.
9:15 - 9:45	Introduction of program.
9:45 - 10:00	Division into support groups.
10:00 - 10:45	Lecture on the nature of achievement motive and basics of McClelland's theory.
10:45 - 12:00	Who Am I? Who Do I Want to Be? (Diad exercise in new support groups.)
12:00 - 1:00 PM	Lunch
1:00 - 2:00	TAT
2:00 - 2:45	Lecture on achievement motive and its relation to other motives.
2:45 - 3:00	Write own epitaph.
3:00 - 4:15	Film: "You Pack Your Own Chute" and discussion.
4:15 - 4:30	Former student of Achievement Motivation Seminar spoke on the seminar's effects for her.

Second Day

8:30 - 9:00 AM	Review and critique
9:00 - 9:45	Fantasy exercise - individual and large group discussion.
9:45 - 10:00	Break
10:00 - 10:45	Lecture on TAT scoring.
10:45 - 12:00	Self-scoring of first session's TAT (individual activity).
12:00 - 1:00 PM	Lunch
1:00 - 2:00	TAT discussion in support groups.
2:00 - 3:00	Penny tossing - simulated business exercise on goal setting.
3:00 - 3:15	Break
3:15 - 4:30	Goal setting and career planning I (individual activity).

ACHIEVEMENT MOTIVATION SEMINAR SCHEDULE (CONT.)

Third Day

- 8:30 - 9:00 AM Review and critique
- 9:00 - 10:00 Lecture on the relationship of the achievement motive to values and American values as they relate to Achievement Motivation.
- 10:00 - 10:15 Break
- 10:15 - 11:00 Goal setting and career planning I (support group activity).
- 11:00 - 12:00 Fighter and bomber plane building - simulated business exercise in goal setting and performance.
- 12:00 - 1:00 PM Lunch
- 1:00 - 2:00 Lecture on relationship of values to stories in second grade readers.
- 2:00 - 3:00 Individual and support group activity - scoring second grade stories for achievement motive using TAT method.
- 3:00 - 3:15 Break
- 3:15 - 4:30 Goal setting and career planning II (individual activity).

Fourth Day

- 8:30 - 9:00 AM Review and critique
- 9:00 - 9:45 Lecture on motives and motivation.
- 9:45 - 10:00 Break
- 10:00-12:00 Parent and child role-playing exercise with blocks - support group activity in goal setting, performance and expectation.
- 12:00 - 1:00 PM Lunch
- 1:00 - 2:00 Goal setting and career planning II (support group activity).
- 2:00 - 3:45 TAT test retake and scoring (individual and support group activity).
- 3:45 - 4:00 Goal setting and career planning III (individual formulization).

ACHIEVEMENT MOTIVATION SEMINAR SCHEDULE (CONT.)

Fifth Day

8:30 - 9:00 AM	Review and critique
9:00 - 10:15	Goal Setting and career planning III (personal year plan completed).
10:15 - 10:30	Break
10:30 - 11:00	Lecture on the nature of creativity.
11:00 - 11:45	Brainstorming exercise (support group activity).
11:45 - 12:00	Evaluation
12:00 - 1:00 PM	Large group lunch.
1:00 - 3:00	Development of support group presentation on Achievement Motivation.
3:00 - 4:30	Presentation of support group skits.

ASSERTION TRAINING SEMINAR

Course Content

The Assertion Training Seminar was taught on six consecutive Friday mornings for an hour and a half. The overall objective of the seminar was to teach assertive techniques. The format for the sessions was the presentation of philosophy and information for the first two weeks and then reinforcement of those techniques through role-playing and group exercises for the remaining four sessions.

The instructors for the seminar were two women counselors from the University of Iowa. This seminar was identical in content to others that they had taught, but the inclusion of only employed women in the class was unique. The instructors used many personal experiences in their presentations and maintained an informal atmosphere for the sessions.

The main topics discussed during the course were: 1) the basis of the assertive philosophy; 2) implications and definitions of assertive, non-assertive/passive and aggressive behavior; and 3) techniques for being assertive and interacting with aggressive individuals. The group responses and interactions were a very important part of the seminar as they built on the information previously given to the class.

Assertion training was presented as a technique of particular importance for women because of societal expectations that women should always assume non-assertive behaviors and responses. The training was given practical application by eliciting problem situations from the group. Problem people and problem situations that the participants listed were co-workers, unknown people, dealing with loved ones, insults, sex discrimination, "saying no," returning merchandise, and dealing with hurt feelings. Parental, peer,

and sibling pressures, along with those of religious and media institutions were identified as sources of problems where assertive behavior could have a positive impact. A handout of socialization messages and their effects was distributed.

A list of "Rights" which belong to everyone, according to the philosophy of assertiveness, was also distributed. Included on that list were:

- Right to say "no" without feeling guilty or selfish.
- Right to determine the use of your own time.
- Right to feel and express anger.
- Right to feel and express healthy competitiveness and achievement drive.
- Right to strive for self-actualization through whatever channels one's talents and interests find natural.
- Right to use one's own judgement in deciding which needs are the most important for one to meet.
- Right to make mistakes.
- Right to have one's opinions given the same respect and consideration that other people's opinions are given, even when they are different.
- Right to ask for help from other people.
- Right to be treated as a capable human adult and not to be patronized.
- Right to consider one's own needs and to be as important as those of other people.
- Right to decide how one will take care of one's own responsibilities.
- Right to ask someone else to change his or her behavior.
- Right to tell someone else of one's needs.
- Right to be independent.
- Right to judge your own behavior, thoughts and emotions, and to take the responsibility for their initiation and consequences upon yourself.
- Right to offer no reasons or excuses for justifying your behavior.
- Right to judge if you are responsible for finding solutions to other people's problems.
- Right to change your mind.
- Right to say "I don't know."
- Right to be independent of the goodwill of others before coping with them.
- Right to be illogical in making decisions.
- Right to say "I don't understand."
- Right to say "I don't care."²²

Three types of behavior - assertive, non-assertive, and aggressive - were defined and explained by example. Non-assertive behavior was identified as behavior that "leaves a sinking feeling in your stomach" and often leaves one saying, "I wish I had said/done..." Deferring to others because of

their sex, social or educational status can also lead to non-assertive behavior including withdrawing, dropping shoulders and breaking eye contact. One negative consequence of this behavior can be a postponement of angry feelings until they explode into aggression.

Aggressive behavior was characterized as overbearing and threatening. An aggressive person will often point, say "you" in an accusatory manner, interrupt, and invade the other person's personal space. Oftentimes aggression is a result of a number of incidents, rather than one specific incident. Passive aggression was defined as intellectual aggression evidenced by a subtle belittling of others in a backhanded, indirect way.

Assertion was defined as a form of behavior that allows respect for one's own and others' rights by being emotionally honest and by not playing games. Being assertive allows respect for the other person regardless of whether or not one approves of the behavior, where aggression indicates disapproval of both the person and the behavior. In the assertive philosophy an individual takes responsibility for one's own behavior, "owns" it, with the goal of honest expression. One basic premise of assertion is that anger is an acceptable and normal emotion, but that its expression without the violation of others' rights is very important.

Responding to a number of situations the women had difficulty dealing with, seven assertive techniques were explained:

1. Simple Assertion: to state a simple need.
Example: Would you please shut the door?
2. Empathic Assertion: to acknowledge the other person's feelings when assertive.
Example: I know you had a rough day at work, but I don't feel like having dinner with you.
3. Confrontative Assertion: to resolve a problem; a prior agreement is pointed out, the discrepancy explained in specifics, and then the question is asked, "What are we going to do about it?"

Example: I thought we agreed that since we're both working now that you would help me get the kids ready for school. For the last two days I have still done it all. What are we going to do about it?"

4. Soft Assertion: to express caring, affection.

Example: I just want to tell you that I enjoy your company.

5. Angry Assertion: to express anger without being aggressive or accusative.

Example: I feel angry when (be specific) you turn your unit's report in late because (explain circumstances leading to the anger) it causes the whole department's report to be late. I would prefer you to complete the report on time.

6. Negative Assertion: to admit a mistake that is your fault without getting guilty or defensive.

Example: You're really right, I did make an error in that report and I will check it over more carefully next time.

7. Assertive Disengagement: to postpone a discussion that could probably be more fruitful at a later time.

Example: I feel like I am not in a positive mood to reach a compromise with you now because I am so upset. Could we talk about it tomorrow?

Toward the end of the course, more complicated assertive techniques were presented. "Escalation" was explained as the process of increasing the response or assertion appropriate to the situation. "Workable compromise" was defined as a solution to a problem that both parties can agree to and live with. "Negative inquiry" is a technique to clarify criticism by asking for a more specific criticism. For example, an appropriate negative inquiry to the statement, "You look awful today," might be, "What is it exactly about my appearance today that you don't like?" A negative response with no escalation was defined as the "broken record." An example of a broken record response to a salesman would be, "I'm just not interested in buying additional magazines today" said with persistence and in a monotone. Another technique suggested was "fogging," which is agreeing in part with the criticism, but not admitting to an unjustified criticism. For example, a response to a comment such as "If you don't quit coming home so late you are just going to

get sick," would be "You could be right, I might get sick..."

The last three sessions all included exercises and role playing utilizing the different types of responses presented. A "refusal line" exercise allowed each woman to take a turn refusing to do something she had particular trouble dealing with while the other women tried to get her to agree to do it. Also in small groups, with everyone standing, each woman took turns responding to unfinished sentences from one instructor. The unfinished sentences used included: "I keep myself from being more assertive by... I feel proud when... My greatest strength is..." On the last day, the entire group formed a circle for "Applause." In this final exercise, each person was encouraged to stand in the middle and tell the group one thing they were proud of. In response, the rest of the group cheered and applauded.

Group Response

Generally, the group responded very enthusiastically to the information given to them. Each of the last four sessions began with participants sharing their experiences using assertive techniques during the previous week. This review seemed to bring the group back together after the week's break, as well as reinforce what had been taught in the preceding weeks. As the course progressed, it was quite apparent that many of the women felt much more confident than they had in the first session. There were very few women by the end of the course that had not shared a personal experience with the entire group. In the "Applause" exercise, some of the rapport established was evident by small group members encouraging other members to get up and participate.

Various hand-outs were distributed throughout the six weeks. The instructors began the seminar wanting the participants to "contract" their

goals for the seminar with others in their small groups, but the idea was not carried throughout the seminar. In addition to the handout on socialization messages, another reprint was distributed that compared non-assertive, assertive, and aggressive behavior.

In their closing remarks to the women, the instructors encouraged the small groups to continue to meet. They also suggested that the women keep a journal to record important assertive incidents and to refer to the handouts they had been given. It was also suggested that posting the handout of "Rights" in a prominent place in their home or office could be a useful reminder.

The course could have been more closely tied to the women's particular job situations if the instructors had used more work-related examples to illustrate the different techniques. The women themselves, however, were far more likely to bring a work-related as opposed to a personal matter to the attention of the group. Problems mentioned included situations with supervisors, organizational changes causing problems within their companies, and correctional interviews they had to conduct.

A frequent criticism of the class in the evaluations was that the one and a half hour sessions were too short for the material covered. Continuity was also sometimes a problem, with some small group exercises having to be completed the following week. Appendix J provides a summary of the evaluations from the Assertion training participants.

ASSERTION SEMINAR SCHEDULE

First Day

- 8:30 - 8:45 AM Overview of program
- 8:45 - 9:30 Difficult situations elicited from group.
- 9:30 - 10:00 Discussion on socialization messages.

Second Day

- 8:30 - 8:45 AM Discussion on women as supervisors.
- 8:45 - 10:00 Lecture on non-assertive, assertive and aggressive behavior. Handouts: "A Comparison of Non-Assertive, Assertive and Aggressive Behavior" and "Basic Rights."

Third Day

- 8:30 - 8:45 AM Feedback from group
- 8:45 - 9:00 Discussion on problems with saying "No."
- 9:00 - 10:00 Presentation of assertive techniques:
Simple Assertion
Empathic Assertion
Confrontal Assertion
Soft Assertion
Angry Assertion
Negative Assertion
Assertive Disengagement

Fourth Day

- 8:30 - 8:50 AM Feedback from group
- 8:50 - 9:45 Presentation of additional techniques:
Escalation
Workable Compromise
Negative Inquiry
Broken Record
Fogging
- 9:45 - 10:00 Refusal line exercise

Fifth Day

- 8:30 - 8:45 AM Feedback from group
- 8:45 - 9:00 Recap of techniques
- 9:00 - 9:30 Completion of refusal line exercise.

ASSERTION SEMINAR SCHEDULE (CONT.)

Fifth Day Cont.

9:30 - 10:00 Unfinished sentences exercise, feedback.

Sixth Day

8:30 - 9:00 AM Feedback from group

9:00 - 9:30 Applause exercise

9:30 - 10:00 Closing remarks and evaluations completed.

FOOTNOTES: CHAPTER VII

¹See David McClelland, The Achieving Society, (New York: D. Van Nostrand Co., 1961), for his research on n Ach and its effect on economic development.

²The behaviorist school has been led by B.F. Skinner, who held that motives are dynamic within every person. This is contrasted by the Freudian psychologists who believe motives are formulated in childhood and cannot be radically altered at a later point in life. The theory of Achievement Motivation began with the publication of D.C. McClelland, J.R. Atkinson, R.A. Clark and E.L. Lowell, The Achievement Motive, (New York: Appleton-Century-Crofts, 1953).

³David McClelland and David Winter, Motivating Economic Achievement, (NY: The Free Press, 1969), p. 43

⁴McClelland and Winter (1969), p. 43.

⁵From Gerald Meier (ed.), Leading Issues in Economic Development, (England: Oxford University Press, 1970), p. 665.

⁶McClelland and Winter (1969), p. 16.

⁷Meier (ed.), p. 672.

⁸McClelland and Winter (1969), p. 326.

⁹Aletha Stein and Margaret Bailey, "The Socialization of Achievement Orientation in Females," Psychological Bulletin, 80(No. 5, November 1973), pp. 345-365.

¹⁰J.W. Atkinson (ed.), Motives in Fantasy, Action and Society, (Princeton: D. Van Nostrand, Co., 1958) p. 77 as quoted in Elizabeth French and Gerald Lasser "Some Characteristics of the Achievement Motive in Women," Journal of Abnormal and Social Psychology, 68(No. 2, 1964), p. 119.

¹¹French and Lasser, p. 125.

¹²French and Lasser, p. 127.

¹³Stein and Bailey, p. 346.

¹⁴See footnote 3 of Stein and Bailey, p. 347.

¹⁵Stein and Bailey, p. 350.

¹⁶See Matina Horner, "Toward an Understanding of Achievement-Related Conflicts in Women," Journal of Social Issues, 28(No. 2, 1972), pp. 157-175, for a summary explanation of her experiments and her "fear of success" theory.

FOOTNOTES: CHAPTER VII (Cont.)

¹⁷See Matina Horner, "Femininity and Successful Achievement: A Basic Inconsistency," in J. Bardwick, E.M. Douran, M.S. Horner, and D. Gutman (eds.), Feminine Personality and Conflict, (Belmont, California: Brooks-Cole, 1970), for a complete explanation of Horner's original experiment and theory.

¹⁸For example, See Adeline Levine and Janice Crumrine, "Women and the Fear of Success: A Problem in Replication," American Journal of Sociology, 80(No. 4, January 1975), pp. 964-974.

¹⁹Jeffery Timmons, "Black is Beautiful - Is it Bountiful," Harvard Business Review, (Nov.-Dec. 1974), pp. 81-93.

²⁰Timmons, pp. 88-89 and pp. 91-92.

²¹Timmons, p. 86.

²²Credit to Patricia Jakubowski-Spector, Ed.D., University of Missouri-St. Louis.

CHAPTER VIII

DESCRIPTION OF MODEL II SEMINARS

Model II, described earlier in the Theoretical Framework, postulated that women were underutilized in management and supervisory positions because they lacked the necessary business skills. This model resembles the classical rational bureaucratic model that describes corporate hierarchies as rewarding each member according to his/her skills. Because most women have traditionally avoided or otherwise been discouraged from taking business related courses in college, most women have not acquired a sound business training before entering the corporate world. If women are going to be promoted into management and supervisory positions, Model II postulated that women will need to acquire the basic business skills. Model II assumed that women will use their acquired business skills and that the present management will promote women who exhibit the basic business skills more readily than those without these skills.

Managerial skills have been divided into three basic and developmental areas.¹ The first skill area is technical knowledge. The necessary technical knowledge will be different for each job, depending on the nature of the job. Most managers and supervisors must learn the necessary technical knowledge before they can be promoted into an administrative position.

The second kind of managerial skills is the human relations area. This area includes the ability to communicate objectives, needs, and feelings to subordinates; the ability to give and receive feedback from subordinates and supervisors; the ability to deal with personnel problems that interfere with the unit's work; and the awareness of one's attitudes, assumptions, and beliefs concerning others and the limitations created by these feelings. A primary function of a supervisor's job is regulating the work flow of

subordinates to meet the goals and objectives of the organization. This process requires good communication networks between the various job levels in the company and an understanding of the personnel problems that may arise in meeting the goals and objectives. Effective skills in the human relations area are essential for the work process to flow smoothly and to enable a manager to sense any breakdowns in this process.

The third area of skills needed by managers is the conceptual area. Managers need to conceptualize the purpose and objectives of their units as well as to plan and monitor the progress toward their units' goals and objectives. In addition, managers need to visualize how the functions of their units relate to the company as a whole and how each unit depends on other units to accomplish the company's overall goal. The need for this skill increases as the individual's level of management and responsibility increases.² Training and understanding of the conceptual area, however, must begin at the earliest stage of supervision or the necessary skills for a more responsible position will be lacking.

The three skill areas were taken into consideration in choosing the seminars tested under this model. The technical area is indigenous to each participant's job and, therefore, this area unfortunately could not be taught in the management training seminars.

The other two areas, however, were conducive to concentrated management training seminars. Three seminars were conducted to test Model II. These three seminars were Management Task Seminar, Management Communication Seminar, and the Combination Management Task and Communication Seminar. The Task Seminar concentrated on the conceptual components of management; the Communication Seminar concentrated on the human component; the Combination Seminar dealt with both the human and the conceptual components.

The same two women taught all three seminars. The two women reside in Iowa City and were experienced in teaching similar business seminars. The content of the three seminars were similar to other seminars they had taught, but were slightly modified for the all female audience and for the job levels of the participants.

The two leaders created an informal atmosphere where participants were encouraged to interact and share their own problems and thoughts with the group. The leaders used lectures and large group discussions to introduce the main topics. The more analytical aspects of the seminar, which focused on specific problems and applications of the main concepts, usually were investigated in small groups. These small group exercises helped the women become active participants rather than casual observers and listeners, and the women were encouraged to discover ideas and solutions to problems on their own.

The seminar leaders used humor to illustrate points and to keep the seminars informal. They also used personal experiences effectively to explain new ideas and techniques to the participants. The participants indicated on their evaluations that these two leaders also empathized with their positions and problems which added to the effectiveness of the three seminars.

MANAGEMENT TASK SEMINAR

Course Content

The Management Task Seminar was a three day workshop held on consecutive days. The seminar was divided into four major topic areas which included: 1) the management process; 2) management by objectives (MBO); 3) budgeting; and 4) time management.

THE MANAGEMENT PROCESS. The primary focus of the first day was understanding the management process. A film by James Hayes (the president and chief executive officer of the American Management Association) entitled "Concepts of Management" was shown. A discussion of management as a unity concept, where the various aspects of a manager's job are intertwined and are dependent upon past decisions and events, followed. In this film, management was defined as "getting things done through other people." The implications of the definition were discussed and the current American Management Association's definition was presented. This definition was "working with and through other people to accomplish the objectives of both the organization and its members." This later definition, a more humanistic approach to management, was used as the working definition of management throughout the seminar.

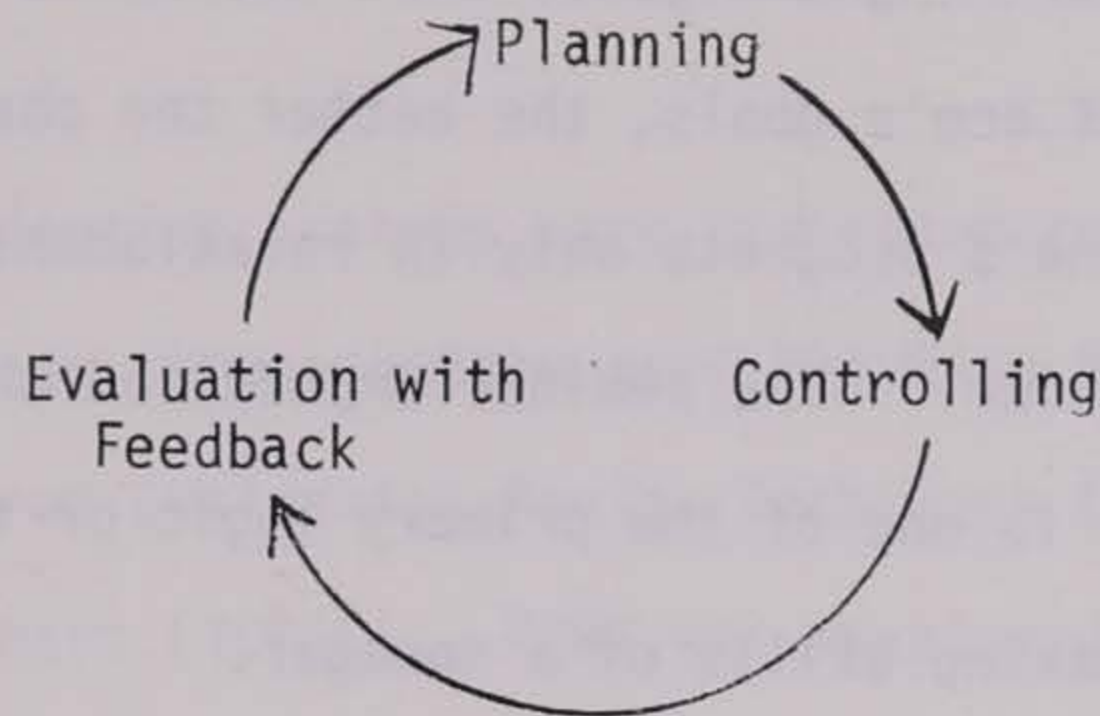
A model of the process of management was then presented (see Chart VIII-1). The process of management was conceptualized as a circular concept which involves the interaction of three main stages: planning, controlling, and evaluation with feedback for the next cycle. Primary concentration in the seminar was on the planning process which includes writing objectives and budgeting, or the allocation of resources.

The role of the manager or supervisor as a liaison between the policymaker in upper management and the technical workers who complete the necessary tasks to achieve the established goals was also discussed. Two short film vignettes were shown illustrating problems which managers often confront.

The film, "Productivity and the Self-fulfilling Prophecy," was shown on the final day of the seminar. The film examined how managers can affect their subordinates' productivity by their attitudes and expectations.

CHART VIII-1

THE MANAGEMENT PROCESS



I. Planning

- A. Strategic Planning - Long range aim for a specific time frame (usually 3-5 years)
- B. Operational Planning
 - 1. Define objective (results expected by end of budget cycle)
 - 2. Assign responsibilities
 - 3. Allocate resources (budgeting)
 - 4. Organizational controls and standards of performance

II. Controlling

- A. Management Control (day-to-day)
 - 1. Developing individual standards
 - 2. Design project controls and measures of performance
 - 3. Motivating, coaching and counseling
 - 4. Monitoring, reviewing progress and solving problems
 - 5. Performance appraisal
- B. Operational Control (ensuring that specific tasks are carried out efficiently and effectively)

III. Evaluation with Feedback for next cycle

(Part of a handout given to participants)

MANAGEMENT BY OBJECTIVES. The second major area covered in the seminar was management by objectives (MBO). Developed in the middle 1950's by Peter Drucker, this system has been widely used in business. The primary premises of MBO are defining the goals that one wants to accomplish (the better idea one has of one's goals, the better the chance of accomplishing them), and measuring one's progress only in relationship to the goals one has set out to accomplish.³ The seminar emphasized the process of writing objectives because it is one of the primary logic or thought processes behind the decision-making skills of a manager.

Six short criteria were listed for writing clear objectives. Objectives were defined as specific results (not an activity) which are consistent, specific, measurable, related to time, and attainable. Each individual was given the opportunity to write both personal and job related objectives. More general objectives related to helping women overcome problems in business were constructed in small groups through brainstorming exercises. The whole group evaluated many of these objectives for content and form and used them as examples for writing understandable, measurable and attainable objectives.

BUDGETING. A third major focus area of the Task Seminar was the role of budgeting in the process of management. Budgeting was defined as a resource allocation planning procedure that is necessary before any major task can be undertaken. This point was illustrated by a small group exercise where each group planned a budget for a wedding reception where tickets would be sold to help defray the cost.

Five different budgeting techniques were also briefly explained. They were: elementary budgeting procedures, Planning Programming Budgeting System (PPBS), Program Evaluation Review Technique (PERT), Task Oriented Performance

Index Chart (TOPIC), and Zero Based Budgeting. The principles of basic budgeting were briefly explained along with some elementary terms such as balance-on-hand, depreciation, and net sales. These elementary budgeting procedures were further illustrated by a hand-out, as were the other four techniques covered.

Three of the budgeting systems were explained as they related to writing objectives. These three systems were Planning Programming Budgeting System (PPBS), Program Evaluation Review Technique (PERT), and Task Oriented Performance Index Chart (TOPIC). PPBS was developed as a rational approach to define and decide major policy issues. Programs with similar objectives are planned and compared on the basis of resources needed (workers, time, and materials), project results, and financial requirements.

PERT is an event oriented network that helps in planning the sequence (critical path) of attaining a given objective. This planning procedure helps to ensure that the proper resources (workers, materials, and money) are present when needed. In addition, this technique provides a means of estimating the time needed to finish a given project or objective.

TOPIC is a control technique used to measure the progress of a given objective. Three basic mathematical ratios provide the basis of this technique: the cost index, the achievement index, and the topic index. For any given time, the cost index is the ratio of the actual cost over the planned cost to date. The achievement index is the actual achievement over the planned achievement to date. The topic index is the achievement index over the cost index, which is a single summary measure of the planning effectiveness.⁴

The final budgeting technique was Zero Based Budgeting. This technique requires the comparison of various decision packages, each designed to fulfill

the same or similiar goals and objectives with no regard to past performances or objectives. Each decision package outlines the goals and functions projected for a given time period, alternative courses of action, an assessment of the consequences of not performing the function, the cost of the function, and finally the benefits of the function.

TIME MANAGEMENT. The fourth major topic covered by the Task Seminar was time management. A film based on Allen Lakein's book, How to Get Control of Your Time and Your Life, was shown. Time management is a control technique to get things accomplished while allowing flexibility and spontaneity.

The primary goal of time management is to overcome time pressures by increasing one's total output. Setting priorities and making decisions as to what needs to be accomplished and when they should be completed are the first steps in time management. Constructing a realistic "to do" list daily of the goals and priorities for that day and avoiding the easy, but unimportant tasks were two main suggestions to increase time efficiency. Being overly conscious of time or overly organized were considered as undesirable as disorganization. Time management was designed to balance these extremes and to gain control over what one does with one's life.

Group Response

Of all the seminars, the Task Seminar seemed to elicit the most work related problems and experiences. In addition, problems pertaining particularly to women were brought up. The seminar leaders encouraged the interchange of problems and created an atmosphere where the women felt comfortable in sharing their problems. Some of the problems raised were the underutilization of educated women, frustrations at being in dead-end clerical jobs, low pay and status, and the problems of balancing home, family, and work.

The movie, "Women: Up the Career Ladder," helped the women to express these feelings and needs. In general, the movie touched on the problems of women's motivation, self-concept, business and social relations, expectations, and risk-taking. By writing societal objectives based on the ideas in the film, the participants were able to think of alternative and corrective measures to these problems.

Overwhelmingly, the budgeting section was evaluated as the low point of the seminar. This section attempted to cover too much and seemed poorly organized. In addition, the women's previous knowledge of the subject ranged from almost no exposure to daily use of the ideas presented, so they either indicated confusion or boredom concerning this area.

The films shown were well received and enjoyed. The film, "Time of Your Life," based on Lakein's time management ideas was probably the best received and most easily adapted to everyday use. The film, "You Pack Your Own Chute," generated some lively discussion.

The women indicated they enjoyed learning about writing objectives as it helped them clarify objectives in their present jobs as well as their personal goals. Through the exercises in writing objectives for individual jobs, the women were exposed to many different types and varieties of jobs and job responsibilities. Appendix J summarizes the evaluations received from the participants of the Task Seminar and compares the evaluations of the Task Seminar with the other seminars.

MANAGEMENT TASK SEMINAR SCHEDULE

First Day

8:00 - 9:00 AM	Listing of the women's expectations and management concerns.
9:00 - 9:30	Listing of the ten best things about one's self and general mix.
9:30 - 10:30	General Introduction
10:30 - 10:45	Break
10:45 - 11:00	Discussion on the management process and concepts.
11:00 - 11:30	Film: "Concepts of Management."
11:30 - 12:00	General discussion on a definition of management.
12:00 - 1:00 PM	Lunch break
1:00 - 2:45	Two short film vignettes depicting specific management problems; small group discussions to determine the problems and how to correct them.
2:45 - 3:00	Break
3:00 - 3:30	Exercise: Role playing in groups of two on placing one's self in a management hierarchy and the problems that might occur.
3:30 - 4:00	Discussion on authority vs. responsibility, overall view of steps in defining and solving a problem.
4:00 - 4:30	Discussion on the psychological contract.

Second Day

8:00 - 9:00 AM	Lecture on writing objectives.
9:00 - 9:30	Standards of performance and some examples.
9:30 - 10:30	Small groups or individual projects on writing three objectives for each individual's job.
10:30 - 10:45	Break
10:45 - 11:45	Group analysis of sample objectives.
11:45 - 12:30	Film: "You Pack Your Own Chute" and discussion.

MANAGEMENT TASK SEMINAR SCHEDULE CONT.

Second Day Cont.

12:30 - 1:30 PM Lunch

1:30 - 2:15 Small group exercise planning a wedding reception budget.

2:15 - 3:00 Basic budgeting

3:00 - 3:15 Break

3:15 - 4:00 Planning Programming Budgeting System (PPBS), Program Evaluation Review Technique (PERT), Zero Based Budgeting, and Task Oriented Performance Chart (TOPIC).

4:00 - 4:30 Film: "Bolero" showing a conductor of an orchestra as a manager of the symphony.

Third Day

8:00 - 8:30 AM Discussion on conflict resolution.

8:30 - 9:00 Film: "Women: Up the Career Ladder," small group discussion on women and career conflicts.

9:00 - 9:45 Small group exercise on writing objectives to help women in business.

9:45 - 10:30 Brainstorming session.

10:30 - 10:45 Break

10:45 - 12:00 Small group exercise going through the steps of problem solving to achieve the objective established in earlier brainstorming session.

12:30 - 1:00 PM Lunch

1:00 - 1:30 Film: "Time of Your Life."

1:30 - 2:00 Discussion on time management.

2:00 - 2:15 Break

2:15 - 3:00 Film: "Productivity and the Self-fulfilling Prophecy: The Pygmalion Effect," discussion on the effects of managers' attitudes on productivity.

3:00 - 4:00 Individual exercise on writing personal objectives.

4:00 - 4:30 Giving feedback in small groups, seminar evaluations, and bibliography on management distributed.

COMMUNICATION SEMINAR

Course Content

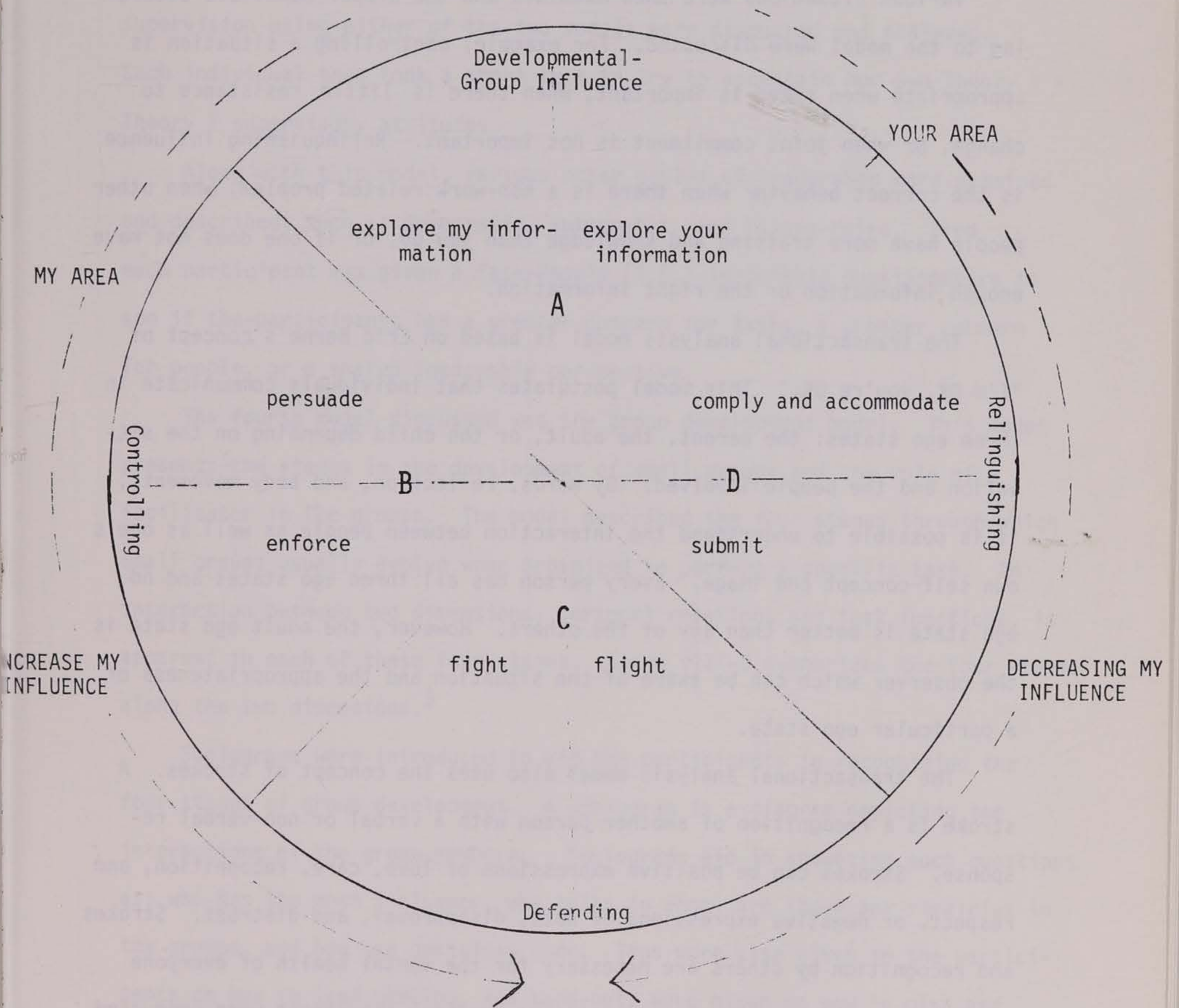
The Communication Skills Seminar was a three day workshop held on consecutive days. The seminar introduced four different communication models and six different communication skills and concepts. The four models were the basic communication model, the transactional analysis model, McGregor's Theory X - Theory Y model, and the group development model. The six skills and concepts were assertive behavior, listening skills, giving and receiving feedback, the interpretation of body language and non-verbal communication, the concept of the self-fulfilling prophecy, and the use of brainstorming.

The basic communication model is a way of organizing one's thinking about any communications situation or problem. The model can be used to make a person more effective in estimating the amount of influence and who holds the influence in a particular situation. The communication model is based on the belief of synergy. Synergy is the concept that a group of people working together can accomplish more than any one individual. By sharing information and dividing tasks, a group of individuals can generate research and give feedback on new ideas and new products. Before the benefits of synergy can be used, the group must be willing to share and explore information from everyone in the group. The basic communication model is shown in Chart VIII-2, and the power of synergy can only be completely felt in section A of the chart.

Section A depicts the collective group influence (or the concept of synergy) where a group by sharing its information has more influence than any one member. Section B shows the attributes of an individual who wants power and influence. That person will communicate by persuading and enforcing his/her will on others. The third section, Section C, shows the

CHART VIII-2

Communication Model Based on Idea of Synergy



confrontation between two or more individuals vying for influence. The behavior of these individuals will be characterized by fight or flight. Finally, Section D, is relinquishing influence to other(s) which is characterized by accommodating, submitting, and complying.

Various situations were then examined and the proper behaviors according to the model were discussed. For example, controlling a situation is appropriate when speed is important, when there is little resistance to change, or when joint commitment is not important. Relinquishing influence is the correct behavior when there is a non-work related problem, when other people have more training and knowledge than you do, or if one does not have enough information or the right information.

The transactional analysis model is based on Eric Berne's concept of "I'm OK, you're OK." This model postulates that individuals communicate in three ego states: the parent, the adult, or the child depending on the situation and the people involved. By words, reflection, and body movements, it is possible to understand the interaction between people as well as one's own self-concept and image. Every person has all three ego states and no ego state is better than any of the others. However, the adult ego state is the observer which can be aware of the situation and the appropriateness of a particular ego state.

The transactional analysis model also uses the concept of strokes. A stroke is a recognition of another person with a verbal or non-verbal response. Strokes can be positive expressions of love, care, recognition, and respect, or negative expressions of hate, disapproval, and distrust. Strokes and recognition by others are necessary for the mental health of everyone according to this model. Exercises using business situations were conducted to illustrate the benefits and concepts of transactional analysis.

The third model presented at the seminar was McGregor's Theory X - Theory Y model. Theory X is based on the assumption that people dislike

work, will attempt to avoid responsibility, and will need to be controlled, threatened and directed before they will work. Theory Y assumes people like to work, will exercise self-control, will seek responsibility, and are creative, imaginative, and intelligent. The benefits and limitations of supervision using either of the two models were discussed and analyzed. Each individual then took a short test to try to ascertain her own Theory X - Theory Y supervisory attitudes.

Along with this model, various other styles of leadership were examined and described, such as democratic, autocratic, and laissez-faire. Then each participant was given a Task-People (T.P.) leadership questionnaire to see if the participants had a greater concern for tasks, a greater concern for people, or a shared leadership perspective.

The fourth model discussed was the group development model. This model presents the stages in the development of small groups and the role of a facilitator in the groups. The model described the four stages through which small groups usually evolve when organized to perform a specific task. An interaction between two dimensions, personal relations and task functions, is apparent in each of these four stages. Chart VIII-3 summarizes the four stages along the two dimensions.⁵

Sociograms were introduced to aid the participants in recognizing the four stages of group development. A sociogram is a diagram depicting the interactions of the group members. Sociograms aid in answering such questions as: who has the most influence, who talks to whom, are there any rivalries in the groups, and how are decisions made. Tips were also given to the participants on how to lead meetings and hand-outs were given on how to plan and lead large meetings.

To illustrate the group development model, the participants were divided

CHART VIII-3

Four Stages of Group Development

Stage	Personal Relations	Task Functions
1	Dependency - on the first chosen facilitator and getting to know other members in the group.	Orientation and Defining - concerning the Task that needs to be Accomplished.
2	Conflicts - concerning power, authority, dependency, rules and agenda.	Organization - who should be responsible for what.
3	Cohesion - sharing of ideas and information, and giving feedback to each other. General support for the group.	Data flow - openness about task sharing information. Work gets accomplished.
4	Interdependence - members can work singly in any sub-group or with group as whole.	Problem Solving - tasks well defined, high commitment to defined task, and support and experimentation in solving problems.

CHART VIII-4

JOHARI'S WINDOW

Giving and Receiving Feedback

	Known to self	Not known to self
Known to others	I. Area of free activity (Public self)	II. Blind area ("bad breath" area)
Not known to others	III. Avoided or hidden area (private self)	IV. Area of unknown activity

into groups. One group of participants discussed the barriers of women in business with the expressed purpose of naming five barriers in the order of importance. The other participants drew a sociogram of the group and watched the evolution of the stages which the group passed through in finishing the given task. The results of the group process were then discussed by the participants.

The concept of assertive behavior was illustrated through four conflict situations from the film, "Assertive Training for Women: Part II." The participants practiced assertive behavior in small groups and were given several handouts that described assertive behavior.

The concept of the self-fulfilling prophecy was introduced by a film, "Productivity and the Self-fulfilling Prophecy (The Pygmalion Effect)." (See Task Seminar for a more detailed explanation of the self-fulfilling prophecy concept.) This concept was then discussed as it related to managers in business and how managers' hidden expectations of their subordinates have a great effect on subordinates' performances. According to this concept, the higher the expectations, the better the performance.

The technique of brainstorming was presented to help the women learn how to generate new ideas. Two problems were used to illustrate the process of brainstorming: the first problem was how the seminar room could be improved, and the second was how to help women get promoted in business.

Listening skills were developed by exercises designed for triads. Two people held a conversation and each had to paraphrase what the other said before the conversation could continue. The third person judged how well the other two were listening and paraphrasing. Giving and receiving feedback skills were then developed, and the concept of Johari's Window was introduced (see Chart VIII-4). Feedback is most important in the second area which is unknown to self but known to others. By receiving feedback

from others, one can learn more about self and reduce the second (or blind) area and by giving feedback to others one can teach others about oneself. Rules of giving and receiving feedback were established and then several situations were followed by a role-playing exercise and a large group discussion.

Finally, some hints on interpreting body language and non-verbal communication were given. These hints especially pertained to group meetings and one-to-one conversations. Role playing exercises on communicating with body language were done to illustrate the importance of being aware of body language and non-verbal communication.

Group Response

The Communication Seminar was the second seminar given by these two seminar leaders and it flowed more smoothly than the Task Seminar. The participants brought up a number of personal problems and experiences that helped define and illustrate the various models and concepts. Communication problems at home within the family, as well as work-related problems such as motivating a slow worker, were addressed.

According to the participants' evaluations, learning about the assertion concept and how to say "no" were the two most valued models or concepts dealt with in the seminar. Also, the participants stated they learned about the importance of communication in groups and in supervisory positions.

The most frequent complaint on the evaluations from participants was that the group dynamics exercise was too long and drawn out. The objective of this exercise was to diagram the development and stages of a group given a specific task to accomplish. In finishing the exercise and trying to hear from all of the participants, there was much repetition. Unfortunately due to the length of the exercise and by scheduling this exercise at the close

of the seminar, there was a slight feeling of being let down at the end of the seminar.

The models, techniques, concepts, and skills used in the seminar seemed to fit well together and were easy to grasp once they were examined in discussions or group exercises. The Communication Seminar seemed to accomplish its objectives and gave participants a good outline of the communication approaches used in business. The participants seemed to have enjoyed and benefited from the role-playing exercises. They also expressed a desire to try the approaches in their everyday lives.

The participants' evaluations from this seminar showed the seminar was well received. Appendix J summarizes the evaluations received from the participants of the Communication Seminar and compares the evaluation of this seminar to the other five seminars.

COMMUNICATION SEMINAR SCHEDULE

First Day

8:00 - 9:00 AM	The women's expectations and management concerns.
9:00 - 9:30	Listing of ten best things about one's self and general mix.
9:30 - 10:30	General introduction
10:30 - 10:45	Break
10:45 - 11:15	Introduction to communication and influence of communication in business.
11:15 - 12:00	Lecture on basic communication model.
12:00 - 1:00 PM	Lunch
1:00 - 2:00	Discussion on comparing non-assertive, assertive and aggressive behavior.
2:00 - 3:00	Film: "Assertive Training for Women: Part II."
3:00 - 3:15	Break
3:15 - 4:30	Role-playing of assertive behavior in small groups.

Second Day

8:00 - 9:00 AM	Lecture on transactional analysis.
9:00 - 10:45	Role-playing illustrating transactional analysis.
10:45 - 11:00	Break
11:00 - 12:00	Film: "You Pack Your Own Chute," and discussion.
12:00 - 1:00 PM	Lunch
1:00 - 1:30	Lecture on McGregor's Theory X - Theory Y model.
1:30 - 2:00	Test on type of leadership skills and attitudes of the women present.
2:00 - 2:30	Small group exercises on listening skills.
2:30 - 2:45	Break
2:45 - 3:15	Small group exercises on how to say "No."

COMMUNICATION SEMINAR SCHEDULE CONT.

Second Day Cont.

- 3:15 - 3:45 Discussion on how to give and receive feedback and Johari Window concept.
- 3:45 - 4:30 Small group practice on giving and receiving feedback.

Third Day

- 8:00 - 9:00 AM Styles of leadership and the role of leadership in group discussion.
- 9:00 - 9:45 Body language and non-verbal communication.
- 9:45 - 10:00 Break
- 10:00 - 10:45 Film: "Productivity and the Self-fulfilling Prophecy (The Pygmalion Effect)."
- 10:45 - 11:30 Lecture on the group development model.
- 11:30 - 12:00 Large group exercise on group dynamics.
- 12:00 - 1:00 PM Lunch
- 1:00 - 2:30 Large group exercise on group dynamics continued, and developing and using a sociogram.
- 2:30 - 3:00 Break
- 3:00 - 3:30 Small group exercise on brainstorming.
- 3:30 - 4:00 Discussion on how to lead a meeting.
- 4:00 - 4:30 Giving feedback in small groups, seminar evaluations, and the distribution of a bibliography on management.

COMBINATION MANAGEMENT TASK AND COMMUNICATION SEMINAR

Course Content

The Combination Task and Communication Seminar was a five day seminar held on consecutive days. The content of this seminar was the same as the Task and Communication Seminars together with slightly different emphasis. (See the course content sections of the Task and Communication Seminars for detailed descriptions of course content). The Task and Communication models and concepts were interspersed. The topics covered the first day were the management process, the use of objectives and goals, and standards of performance. The second day covered budgeting, writing objectives, and the basic communication model. On the third day, assertive behavior, the transactional analysis model, and the concept of the self-fulfilling prophecy were discussed. The topics on the fourth day included brainstorming, problem solving, McGregor's Theory X - Theory Y leadership styles, and listening skills and feedback. The fifth day covered the topics of how to lead a meeting, the group development model, time management, and personal objectives and goals.

Three major changes were made in the content of the Combination Seminar to facilitate the flow of the seminar and to fit all topics into five days. First, the budgeting section was shortened and focused more on examples and exercises instead of lectures. Second, the transactional analysis model was shortened and did not include group exercises. Finally, the group dynamics exercise was shortened. In the Combination Seminar, the exercise consisted of only drawing a sociogram rather than also developing and illustrating the stages of group development.

Group Response

Of all the seminars researched, the Combination Seminar received the

best evaluations. The objectives seemed to have been clear, the instructors were well received, and the participants indicated they learned a great deal about the role of management and the functions of supervision.

The large group discussions tended to focus on the participants' personal problems rather than business related problems. Concerns about women's issues were often voiced. At one point, there was a lengthy and rather heated discussion on working women's responsibilities toward and roles with their children. This discussion also led into a discussion on the need for more adequate child care centers.

The group interacted well, and the participants were cordial. However, the trust level did not seem as high as the Task Seminar nor did the enthusiasm seem as great over the whole week. The length of the seminar may have contributed to these factors. It was difficult to keep the participants' attention and a high level of enthusiasm throughout the five day period.

The effect of combining the Task and Communication Seminars together was positive, although the communication section of the seminar was received with greater enthusiasm. Appendix J summarizes the evaluations received from the participants of the Combination Seminar and compares the evaluations of this seminar to the other seminars.

The materials presented in the Combination Seminar probably could better be retained if the seminar was given one day a week for five weeks, as in the Achievement Motivation Seminar. The participants' only real complaint was they were not given the opportunity to apply their new knowledge while attending the seminar. There seemed to be too much material to grasp at once without an opportunity to apply some of the material to the job situation.

The seminar received little criticism from the participants and they indicated from their responses and from their evaluations that the seminar

met their expectations and the objectives set by the leaders. The seminar leaders conducted the course well and there were no major flaws in any of the sections. The content of the seminar was presented smoothly, and a clear, complete picture of the roles, functions, and duties of managers and supervisors was portrayed.

COMBINATION SEMINAR SCHEDULE

First Day

- 8:00 - 9:00 AM The listing of women's expectations and management concerns.
- 9:00 - 9:30 Listing of ten best things about one's self and general mix.
- 9:30 - 10:30 General Introduction
- 10:30 - 10:45 Break
- 10:45 - 11:00 Questions of "What is Management," and "What is the Management Process?"
- 11:00 - 12:00 General discussion on defining management.
- 12:00 - 1:00 PM Lunch
- 1:00 - 2:45 Two short film vignettes depicting specific management problems; small group discussions trying to decide what was wrong and how to correct the problems.
- 2:45 - 3:00 Break
- 3:00 - 3:30 Discussion on "What are Objectives" and "What are Standards of Performance."
- 3:30 - 4:00 Discussion on skills needed by managers.
- 4:00 - 4:30 Discussion on psychological contract; expectations between employer and employee.

Second Day

- 8:00 - 8:45 AM Small group exercise planning a wedding reception budget.
- 8:45 - 9:30 Basic budgeting and the role of budgeting.
- 9:30 - 10:30 Planning and Programming Budgeting System (PPBS) and Program Evaluation Review Technique (PERT).
- 10:30 - 10:45 Break
- 10:45 - 11:15 Zero Based Budgeting and Task Oriented Performance Chart (TOPIC).
- 11:15 - 12:00 Objectives, and criteria for writing objectives.
- 12:00 - 1:00 PM Lunch

COMBINATION SEMINAR SCHEDULE CONT.

Second Day Cont.

- 1:00 - 1:45 PM Small group exercise on writing three objectives for each individual's job.
- 1:45 - 2:15 Large group discussion analyzing sample objectives.
- 2:15 - 2:30 Break
- 2:30 - 3:30 Introduction to communication - types of communication.
- 3:30 - 3:45 Non-verbal communication.
- 3:45 - 4:30 Lecture on the basic communication model.

Third Day

- 8:00 - 8:30 AM Introduction to the concept of assertion.
- 8:30 - 9:30 Characteristics of assertive, non-assertive and aggressive behavior.
- 9:30 - 9:45 Break
- 9:45 - 10:45 Film: "Assertive Training for Women: Part II" with discussion.
- 10:45 - 12:00 Group exercise in assertion including interviewing skills.
- 12:00 - 1:00 PM Lunch
- 1:00 - 1:45 Introduction to transactional analysis - three ego states, strokes.
- 1:45 - 2:15 Examples of transactional analysis.
- 2:15 - 2:45 Film: "Productivity and the Self-fulfilling Prophecy (The Pygmalion Effect)."
- 2:45 - 3:00 Break
- 3:00 - 4:00 Giving and receiving feedback and Johari Window concept.
- 4:00 - 4:30 Small group exercise on saying "No."

Fourth Day

- 8:00 - 8:30 AM Film: "Women: Up the Career Ladder." Small group discussion about women and career conflicts.

COMBINATION SEMINAR SCHEDULE CONT.

Fourth Day Cont.

8:30 - 9:15 AM Small group exercise on writing objectives to help women in business.

9:15 - 10:00 Brainstorming session.

10:00 - 10:15 Break

10:15 - 11:30 Small group exercise going through steps of problem solving to gain the objective established in earlier brainstorming session.

11:30 - 12:30 Lunch

12:30 - 1:30 PM Styles of leadership; McGregor's Theory X - Theory Y lecture.

1:30 - 2:30 Small group exercise-listening triads and paraphrasing.

2:30 - 2:45 Break

2:45 - 3:45 Styles of leadership and attitudes toward leadership.

3:45 - 4:30 Film: "Bolero."

Fifth Day

8:00 - 9:00 AM Skills in how to lead a meeting.

9:00 - 9:30 Discussion on group dynamics - how to perceive what is going on in a group meeting, and the construction of a sociogram.

9:30 - 10:00 Film: "Time of Your Life."

10:00 - 10:30 Discussion on time management.

10:30 - 10:45 Break

10:45 - 11:15 Small group discussion on constructing work goals based on time management.

11:15 - 12:00 Individual exercise constructing personal objectives.

12:00 - 1:00 PM Lunch

1:00 - 1:30 Film: "You Pack Your Own Chute."

1:30 - 2:00 Large group discussion of the movie.

COMBINATION SEMINAR SCHEDULE CONT.

Fifth Day Cont.

2:00 - 3:00

Small group discussion on each individual's personal and work objectives.

3:00 - 4:00

Verbal evaluation, giving feedback in small groups, written seminar evaluations and distribution of a bibliography on management.

FOOTNOTES: CHAPTER VIII

¹See R.L. Katz, "Skills of an Effective Administrator," Harvard Business Review, (Sept-Oct 1974), pp. 90-102, for a more detailed explanation of the three development skill areas and the relative importance of each area at different levels in an organization.

²Katz, p. 96.

³Rodney Brady, "MBO Goes to Work in the Public Sector," Harvard Business Review, (Mar-Apr 1973), p. 66.

⁴The summary of PPBS, PERT, AND TOPIC came from a handout at the seminar entitled "Planning Programming Budgeting System and Program Evaluation Review Technique".

⁵John E. Jones, The 1973 Annual Handbook for Group Facilitators, University Associates, p. 129.

CHAPTER IX

DESCRIPTION OF MODEL III SEMINAR

Model III of the Theoretical Framework involves altering the traditional assumptions and sex-role stereotypes held by present management about women. Intellectually most men feel that women should use their talents, but many present male managers are afraid of the changes necessary in the organizational norms if women do become managers. In addition, present managers often assume that men will be unwilling to work for women because women do not have the drive to manage men and the men resent taking orders from women. Model III assumes women have the necessary psychological drive and skills for management positions, but that women need support from their managers before they can effectively advance.

SUPERVISOR AWARENESS SEMINAR

The Supervisor Awareness Seminar was based on the normative re-educative theory of change. According to this theory, to effect a change in an individual's pattern of action and behavior, changes in attitudes and values are essential. An analysis of the sociocultural norms and institutional relationships that help reinforce traditional views and roles are important to understand the basis of each individual's attitudes and values. Through the dissemination of information and the re-educative process, individuals can examine the validity of traditional norms and values and examine new patterns of action. This goal can be accomplished through experience based learning.¹

To promote positive changes on the individual level, experience based learning utilizes small group exercises to allow personal confrontation of beliefs and attitudes in a non-threatening environment. As Benne and Chin stated, re-educative training seminars are:

Committed to re-education of persons as integral to effective change in human systems...openness of communication, trust between persons, lowering of status barriers between parts of the system, and mutuality between parts as necessary conditions of the re-educative process.²

The premise of experience based learning is that individuals are capable of creative, life-affirming action and responses if conditions are established which are supportive of those actions and responses.

Individual attitudes are also important within the business environment. Traditional roles of women in business have denied women access to management positions. In order to increase the number and success of women in upper level management positions, it may be necessary to maintain an environment supportive to her success. Regardless of the capabilities of a female supervisor, an environment that includes peers, subordinates, or supervisors hostile to her in a supervisory role can make an effective job performance difficult or even impossible. To the extent that this workshop was able to change the attitudes of present managers, it follows Model III of the Theoretical Framework.

Awareness workshops attempt to create an atmosphere that is conducive to a re-examination of personal biases without being threatened by negative consequences. Workshop instructors act as change agents and intervene collaboratively, and not as lecturers imparting knowledge. The primary learning tool is group exercises designed to examine an individual's pattern of action in a safe, non-threatening environment, and to allow individuals to evaluate and experiment with their forms of action.

The Supervisor Awareness Seminar was a three day workshop conducted on consecutive days. The overall objective of the program was to develop more effective ways to improve working relationships between men and women by examining how male and female socialization affects interactions in the work situation.

The instructors for the seminar were a male/female team with the man's background in education and philosophy and the woman's in counseling. Both instructors had contributed to the original design of the program and had conducted the same workshop numerous times.

Course Content

The main objective of this male/female awareness seminar was to establish better working relationships between men and women. Additional objectives included the identification of problem areas and the establishment of continuing support groups.

Portions of the first two days of the workshop were spent in all female and all male groups with the instructor of the same sex. Each group participated in an exercise listing what "men are or are supposed to be," what "women are or are supposed to be," and listing ideas why "men are on the top in business," and why "women aren't." The similarity of responses from both groups was discussed as evidence of the stereotypes associated with a particular sex and then accepted by both sexes.

The positive and negative consequences of these stereotypes were explored in an exercise examining the Great American Male Stereotype (GAMS) and the Great American Female Stereotype (GAFS). The male stereotype as defined by the participants was that he is successful in business, financially productive, sexually attractive, physically productive (things and children), aloof, and knowledgeable about worldly matters. The benefits of this role include popularity, satisfaction, security and power, but the negative consequences include heart disease, ulcers, fatigue, anger, and hostility.

The Great American Female Stereotype as defined by participants was

a sexually attractive woman with a happy family life who is always a good hostess, keeps a spotless house, and is always nice. Pursuing this ideal allows women to live longer, show their emotions, and usually to be more creative and intuitive than men. The negative consequences of this role include guilt, low self-esteem, passivity, and the feeling that careers and femininity are incompatible.

Discussion then centered on the relevance of these stereotypes today, especially in business. The concept of androgyny was discussed as an alternative concept where traits that have been sex-typed are combined and are acceptable for either men or women. Instead of women and men seeking an unrealistic standardized role, it would then be possible for each person to select whatever characteristics suit her or him best.

Communication techniques were also presented as skills useful in improving work relationships between men and women. In small groups, eliciting (and giving) feedback was practiced as a skill and a good technique to discover how one is regarded by others. Listening skills were stressed for men while assertive skills were emphasized for women.

An exercise in building group consensus was also completed where mixed sex groups were given a problem and asked to reach a consensus on a solution. Afterwards, the roles each individual had taken in the groups in the process of reaching the consensus were examined. In general, certain types of behavior could be attributed to each sex. The women in the groups usually harmonized, listened, spoke in personal terms, avoided taking definite positions, addressed their comments to the men in the group, and looked to the men for approval. The males usually dominated the conversations, interrupted others, made factual statements to the entire group, and behaved competitively toward the other men in the group.

On the second day, the workshop extended into the evening with a session where participants were asked to invite spouses or attaches. A few participants invited their supervisors, instead. The purpose of the session was to alert "significant others" to the workshop and to allay any fears about its content or purpose. One half of the film, "Men's Lives," was shown and the visitors received an overview of the seminar's content.

On the third and last day, the focus turned to the organizations each participant represented. From an organizational viewpoint, the actions that had helped or hindered participants in their jobs and careers were discussed within small mixed groups. Participants were then divided into support groups of three which determined whether the roles of confronter, comforter, or clarifier were necessary for each to achieve personal growth. For example, a person volunteering to be another's "confronter" might be charged with encouraging that person to complete his/her dissertation. The support groups were encouraged to meet in the future, although no one individual was given the responsibility to contact the others for a later meeting.

Group Response

At the beginning of the workshop, many participants expressed concern about the purpose of the workshop and the reason they were chosen to attend. Some of the participants viewed their attendance as a form of punishment or type of evaluation. After an explanation of the selection process and a more detailed overview of the workshop, the atmosphere of the workshop changed considerably and participants were able to relax and participate.

The small group exercises were all very lively, although a few of the participants were uncomfortable about role-playing. The formal evaluations completed at the conclusion of the three day seminar indicated that the

interaction of the various groups was enjoyed and hope was expressed that the support groups would continue to meet.

The feeling was expressed by the participants from organizations without a representative from top management that they were going to be less effective after returning to work than the participants who did have a management representative from their organizations. The instructors also felt that top management's support and attendance did much to legitimize and validate the workshop itself, as well as the follow-up. Appendix K contains a summary of the evaluations of the seminar by the participants.

SUPERVISOR AWARENESS SEMINAR SCHEDULE

First Day

9:30 - 10:30 AM	Orientation
10:30 - 12:00	Sharing Perceptions a. What is exciting about this workshop? b. What is disturbing about this workshop?
12:00 - 1:00 PM	Lunch
1:00 - 2:30	Men and Women: How we see the other side and a list of Stereotypes.
2:30 - 4:00	GAMS and GAFS
4:00 - 4:30	Androgyny
4:30 - 5:30	Feedback

Second Day

9:00 - 10:00 AM	Reorientation
10:00 - 12:00	Small group exercises. a. Problems in the office b. Role-playing c. Behavior practices
12:00 - 1:00 PM	Lunch
1:00 - 2:00	Leadership roles
2:00 - 3:30	Consensus exercise in small groups.
3:30 - 5:00	Typical male and female roles.
5:00 - 6:00	Dinner
6:00 - 7:00	Discussion
7:00 - 8:00	First half of film: "Men's Lives."

Third Day

9:00 - 10:00 AM	Reorientation
10:00 - 12:00	Looking at the organization. What has helped or hindered you in your career?

SUPERVISOR AWARENESS SEMINAR SCHEDULE (CONT.)

Third Day Cont.

12:00 - 1:00 PM	Lunch
1:00 - 2:00	Strategies for building support groups.
2:00 - 3:00	Remaining half of film: "Men's Lives."

FOOTNOTES: CHAPTER IX

¹W.G. Bennis, K.D. Benne, and Robert Chin (eds.), The Planning of Change, (New York: Holt, Rhinehart and Winston, Inc., 1976), p. 34.

²W.G. Bennis, K.D. Benne, and Robert Chin (eds.), pp. 49,50.

FOOTNOTES, CHAPTER 13

(1963) *ADMINISTRATIVE SYSTEMS REORGANIZATION*
K. E. Senoff, K. D. Jones, and Robert Otto (eds.), *The Planning of Change*,
(New York: Holt, Rinehart and Winston, Inc., 1963), p. 32.

K. E. Senoff, K. D. Jones, and Robert Otto (eds.), pp. 19, 20.
pp. 20-21 - 20-21

pp. 20-21 - 20-21

pp. 20-21 - 20-21

INTRODUCTION TO PART IV

Donald Kirkpatrick has outlined four steps in evaluating the effectiveness of management training seminars. These steps include: 1) the immediate reaction to the seminars or the measurement of how the participants liked the seminars; 2) the tangible results of the seminars, such as the increase in pay women receive because of their participation in a particular management training seminar; 3) techniques, ideas, and skills learned in the seminars; and 4) the change(s) in the participants' behavior resulting from attending the seminars.*

This research project followed these steps in evaluating the effectiveness of the Model I and Model II management training seminars for women. The first chapter of this final part (Chapter X) will examine the techniques, ideas, and skills learned in the seminars through a subjective analysis of evaluations of the seminars by the participants after a year. This chapter will also compare these one year evaluations with the responses received from participants immediately after the seminar. (The actual tabulations of these immediate evaluations are found in Appendix J.)

Chapter XI presents the statistical findings for the hypotheses for the Model I and Model II seminars and the significant changes in the demographics of the participants. In the first section, "Hypotheses Concerning the Seminars," the tangible results of and the behavioral changes due to the seminars are examined. The other two sections examine the effects of various demographic variables of the female employees and of the companies that participated in this study.

Chapter XII presents the findings from the case study or the Model III seminar. This seminar was examined only by evaluating attitudes of the participants. Because this seminar's objective was changing attitudes and

*See page 5 of this report for further explanation.

behavior, the other two steps were considered difficult to test without direct access to company files (the tangible results) or were secondary to behavior changes (techniques and skills learned) and therefore were not studied. The immediate reactions to this seminar can be found in Appendix K.

The final chapter in the study presents the conclusions of the research. Included in this chapter is a section on the practical application of the findings for both employers and female employees. Also the applicability of the four models to the underemployment and underutilization of women in management is addressed.

CHAPTER X

MODEL I AND MODEL II EVALUATION RESULTS

ONE YEAR EVALUATIONS

As part of the one year post-test, a series of open-ended questions were asked to subjectively test the techniques, ideas, and skills learned by the participants at the seminars. In this step evaluation included not only what was learned but also what skills, ideas, and techniques were used on the job and in the participants' personal lives. The assumption is that a concept, technique, or skill would be used only if it were learned.

Because these questions were open-ended, effective coding of the questions for statistical analysis was not possible. Responses were, however, grouped into categories and analyzed. These responses can provide a meaningful comparison of the concepts and techniques that the participants incorporated into their work and personal lives.

Chart X-1 shows the eight open-ended questions included on the post-test. Questions 21, 24, 27, and 28 can be compared across seminars since they addressed topics applicable to all seminars. Questions 22, 23, 25, and 26, however, cannot be compared across seminars since they addressed the different concepts, ideas and techniques each seminar taught.

Comparative Analysis

Question 21, asking for the main objective of the seminar, was designed to determine how many participants accurately remembered the seminars they attended. Responses were grouped into three categories: 1) accurately remembered the objective; 2) vaguely remembered the objective, or 3) no response or could not accurately remember the objective. Chart X-2 summarizes the responses for this question.

CHART X-1

Think back to the training seminar you attended last January and please answer the following questions concerning the seminar:

21. What was the main objective or the primary focus of the seminar you attended?
22. What was the one idea, concept or technique presented during the seminar which you have used most in your job?
23. What would you like to see changed in the seminar you attended?
24. If support groups were formed in your seminar, have you met with yours?
Yes _____ No _____ Not Applicable _____
If yes, when was the last time you met? _____ month
25. Did the seminar help you in your working career? Yes _____ No _____
If yes, please explain how it has helped you.
26. Did you seminar help you in your personal life? Yes _____ No _____
If yes, please explain how it has helped you.
27. Would you recommend the seminar to your co-workers? Yes _____ No _____
Why?
28. If you were given the opportunity to attend a management training seminar, would you attend? Yes _____ No _____ Why?

CHART X-2

Question 21: What was the main objective or the primary focus of the seminar you attended?

RESPONSES	SEMINARS				
	Achievement	Assertion	Task	Communi- cation	Combination
Could not remember	4	1	2	0	2
Vaguely remembered	9	12	10	14	6
Accurately remembered	14	13	11	9	16
Total	27	26	23	23	24

CHART X-3

Question 24: If support groups were formed in your seminar, have you met with yours?

RESPONSE	SEMINARS				
	Achievement	Assertion	Task	Communi- cation	Combination
Not Applicable	2	14	14	16	16
No, support group has not met	5	11	8	7	5
Support group met, but not since June 1977	3	-	1	-	2
Support group met between June and December 1977	17	-	-	-	-
Total	27	25	23	23	23

As the chart indicates, most respondents could at least vaguely remember and recall the objective of their seminar. Only nine participants failed to remember or could not even vaguely describe the objective; four of these participants were in the Achievement Motivation Seminar. In conclusion, all of the seminars did have some major impact on the participants, since after one year over half of the participants could still adequately recall the main objective of the seminar they attended.

Question 24 was designed to help assess the importance of formal support groups, formed in the Achievement Motivation Seminar, and informal support groups, formed in the Assertion Seminar. The results of this question are contained in Chart X-3. In the three management training seminars, most participants either realized that support groups were not applicable or had not met. Informal support groups do not seem to be effective, as indicated by the Assertion Seminar where no support groups had met.

The Achievement Motivation had greater success with support groups meeting after the end of the seminar. Seventeen of the participants indicated they had met with their support groups in the last six months, although a number of those had not met since August, 1977. It is also interesting to note that in the evaluations after the seminar the support groups were highly acclaimed as being a very important part of the Achievement Motivation Seminar, but there was only one positive reference to support groups in the answers to the questions in the one year evaluation for the Achievement Motivation Seminar. This might indicate that the importance of support groups diminishes as time passes after the completion of the seminar.

The last two questions of the one year evaluation, Questions 27 and 28, were interest questions. Chart X-4 summarizes the answers to the questions regarding whether the participants would recommend the seminar to

CHART X-4

Question 27: Would you recommend the seminar to your co-workers?

RESPONSES	SEMINAR				
	Achievement	Assertion	Task	Communi- cation	Combination
NO	4	1	2	1	1
YES	21	25	21	22	23

CHART X-5

Question 28: If you were given the opportunity to attend a management training seminar, would you attend?

RESPONSES	SEMINAR				
	Achievement	Assertion	Task	Communi- cation	Combination
NO	3	3	2	2	1
YES	23	23	21	22	23

co-workers. The only surprise was that four participants of the Achievement Motivation Seminar said they would not recommend the seminar to co-workers.

Chart X-5 summarizes the responses to the question regarding whether the participants would attend another management training program. Eleven participants said they would not. However, a number of these cited time constraints on their job as the reason why they would not want to attend.

Chart X-6 shows the comparative responses to Question 25, which asked if the seminar helped in the participants' working career. The responses to Question 26, which asked if the seminar helped in the participants' personal lives are found in Chart X-7. For these questions, any answers which were ambivalent or had question marks beside the yes/no part of the question were counted as "no" answers. If the space was left blank after the open-ended part of the question, the question was counted as "no response."

Seminar Analysis

The main techniques, skills, and ideas learned in the Model I and Model II seminars usually corresponded to the appropriate model but exceptions did occur. The major techniques and skills learned in the Model I seminars usually centered around the theorized psychological skills, such as assertiveness, overcoming fears, and thinking in an achievement oriented fashion. However, the participants of the Model I seminars also mentioned business skills, such as setting moderate goals and greater organizational abilities. These latter skills were more appropriate to Model II seminars.

The Model II seminars are especially hard to interpret categorically. Assertion was most often mentioned as the primary technique or skill learned in both the Communication and Combination Seminars. However, assertiveness is presently in vogue and is often mentioned as an important skill for women.

CHART X-6

Question 25: Did the seminar help you in your working career?

RESPONSES	SEMINAR				
	Achievement	Assertion	Task	Communi- cation	Combination
NO	5	5	3	5	5
YES	20	20	20	18	19

CHART X-7

Question 26: Did the seminar help you in your personal life?

RESPONSES	SEMINAR				
	Achievement	Assertion	Task	Communi- cation	Combination
NO	5	7	5	5	0
YES	20	18	18	18	24

Assertiveness was taught as a concept in these two Model II seminars as opposed to the behavioral modification technique taught in the Assertion Seminar.

A skill often mentioned in the Model II seminars, particularly the Task Seminar, was time management. This skill was felt to be applicable to both the work and personal lives of the participants. From the responses, time management should probably be taught more often in management training seminars. Other important business skills which were often mentioned in the Model II one year evaluations included goal setting, organizational skills, and better communication skills.

ACHIEVEMENT MOTIVATION: Except for the decline in the importance of support groups, the one year evaluations of this seminar did not produce any notable changes from the first evaluation. For Question 22, which asked about the technique used most during the year, the response that the seminar helped in organizing work was mentioned three times in the one year evaluation while it was not mentioned at all in the first evaluation. As the memory of the seminar dimmed, the idea that attitudes can be changed did not seem to hold as the most beneficial concept.

In response to how the seminar should be changed (Question 23), a variety of suggestions were received. This question brought the only response about the support groups. Two people were sorry that they could not change their support groups when they realized their groups were not going to hold together. One person wished there had been more time in support groups. Three participants felt that nothing should be changed, seven did not respond to the question.

Goal setting and thinking of future career plans and goals seemed to have been the primary way the seminar helped the participants in their jobs.

CHART X-8

ACHIEVEMENT MOTIVATION SEMINAR

Question 22: What was the one idea, concept or technique presented during the seminar which you have used most on your job?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S *</u>	
	<u>One Year Evaluations (December 1977)</u>	<u>First Evaluation</u>
Setting moderate goals	9	10
Thinking as achievers and learning about achievement	5	7
Being true to my feelings and overcoming fears	5	3
Learning to control myself	3	4
Being more organized	3	-
Thinking positively	1	1
Brainstorming	1	-
Attitudes can be changed	-	3
No response	3	-
Did not attend seminar	1	1

Question 23: What would you like to see changed in the seminar you attended?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S O N O N E Y E A R E V A L U A T I O N S</u>
Nothing	3
Fewer lectures	2
Chance to change support groups	2
Follow-up session	2
Felt out of place	2
More time with support groups	1
More sessions per week	1
A bibliography	1
Many things	1
Eliminate TAT	1
Add a day devoted to women's problems	1
Fewer games	1
More communication and feedback	1
More time between sessions	1
More on position thinking	1
No response	7
Did not attend	1

*Some participants gave more than one answer.

CHART X-8 (Cont.)

ACHIEVEMENT MOTIVATION SEMINAR

Question 25: Did the seminar help you in your working career? If yes, please explain how it helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
More conscious of job goals and goal setting	8
Higher self-esteem	4
More achievement oriented on job	3
Better organizer and planner	3
Helped in career planning	2
Helped maintain motivation	1
Did not help	4
No response	2
Did not attend	1

Question 26: Did the seminar help you in your personal life? If yes, please explain how it has helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
Setting realistic goals	11
Increased self-confidence	6
Increased self-understanding	4
Better communication	1
No response	2
Did not help	4
Did not attend	1

A number of the participants also cited a sense of greater self-esteem as the way in which the seminar benefited them on the job.

In response to how the seminar helped in the participants' personal lives, goal setting was again mentioned most often. A greater sense of self-confidence and self-esteem were the other two most frequent responses. The categorizations of the responses for the Achievement Motivation Seminar for Questions 22, 23, 25, and 26 are given in Chart X-8.

ASSERTION: The major surprise with the Assertion Seminar was the number of people who indicated the seminar did not help them in their personal lives. Seven participants (see Chart X-7) indicated that the seminar did not help them or were unaware if it helped in their personal lives while five indicated the seminar did not help them on their jobs. This finding is troubling because this seminar, more than the other four, was designed for personal as well as job behavior. Yet the participants in the other four seminars indicated that the seminar helped in their personal lives.

No significant differences were found between the two evaluations on Question 22. Making one's feelings known to others and greater confidence were cited as the techniques and ideas used most often. One change suggested for the seminar was overwhelming. That change was having more time in the seminar either by having longer sessions or by having more sessions. Five participants felt that nothing should be changed in the seminar, while two did not respond.

Becoming more assertive and being better able to communicate on the job were the two major responses to how the seminar helped on the job. Also mentioned were increased self-confidence and a stronger self-image. The ability to express true feelings and a stronger self-image were the responses most often given to the question on how the Assertion Seminar

CHART X-9

ASSERTION

Question 22: What was the one idea, concept or technique presented during the seminar which you have used most on your job?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S *</u>	
	<u>One year Evaluations (December 1977)</u>	<u>First Evaluation</u>
Making feelings known to others	7	5
More assertive	4	2
More confidence	3	6
Being honest with myself	3	2
More relaxed	2	1
Knowing my rights	1	4
Insight into other's behavior	-	3
Never hurts to try	-	2
Better communication skills	2	-
Did not know	3	-
Did not attend	1	-

Question 23: What would you like to see changed in the seminar you attended?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S O N O N E Y E A R E V A L U A T I O N S</u>
Longer or more sessions	11
Open to more diverse groups	3
Fewer participants	2
Gear the class to younger women rather than those over 40	1
Have males in the class	1
Needed to be more concentrated	1
More emphasis on aggressive people	1
More stress on individual worth	1
Have refresher sessions	1
Nothing	5
No response	2
Did not attend	1

*Some participants gave more than one answer.

CHART X-9 (Cont.)

ASSERTION

Question 25: Did the seminar help you in your working career? If yes, please explain how it helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u>		
	<u>O N</u>	<u>O N E</u>	<u>E V A L U A T I O N S</u>
Became more assertive			7
Ability to communicate on the job			5
Strengthened self-image			3
More confidence			2
Have become more aggressive			1
A greater power of decision making			1
Tamed my aggression			1
Received more respect from others			1
Did not help			4
Am not sure			2
Did not attend			1

Question 26: Did the seminar help you in your personal life? If yes, please explain how it has helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u>		
	<u>O N</u>	<u>O N E</u>	<u>E V A L U A T I O N S</u>
Helped to express true feelings			7
Strengthened self-image			3
More respect from others			2
Helped plan my life			1
More aware of my passivity			1
More independent person			1
More concerned with my happiness			1
More assertive			1
Did not help			5
Not sure			2
No response			1
Did not attend			1

helped in their personal lives. Chart X-9 shows the categorization of the responses to these four questions on the one year evaluations of the Assertion Seminar.

MANAGEMENT TASK: In this seminar, there was an indication that the one year evaluations did not correspond with the evaluations given directly after the seminar, particularly in the identification of the one technique that was used the most. Eight people immediately following the seminar indicated that goal setting and writing objectives would be used most often, while only two identified that skill as actually being the most useful after one year. On the other hand, ten people identified time management as a technique used most often after one year, while only four thought that it would be used most often immediately after the seminar.

The major changes suggested for the seminar included changing the budgeting section (the suggestion recommended most often immediately after the seminar) and having more time for the seminar. Five people thought nothing should be changed and five people did not respond.

A greater confidence in their abilities was most often cited as the way the seminar helped the participants on the job. Secondly, time management, and thirdly, a better idea of career goals were given as answers to this question. Three women said the seminar did not help them in their working career.

In response to how the seminar helped them in their personal lives, confidence and goal setting were most often cited. Five participants felt the seminar did not help them in their personal lives. Chart X-10 includes the categorization of the responses to these four questions on the one year evaluations for the Management Task Seminar.

MANAGEMENT COMMUNICATION: The year evaluations did not produce any

CHART X-10

TASK SEMINAR

Question 22: What was the one idea, concept or technique presented during the seminar which you have used most on your job?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S*</u>	
	<u>One Year Evaluations (December 1977)</u>	<u>First Evaluation</u>
Time management	10	4
To be forward about my feelings	3	3
Goal setting and writing objectives	2	8
Trying to get along with other people	3	3
Organizing work	2	1
Women can become as good at management as men	2	1
Self-discipline	1	1
Learned to respect management thinking	1	1
Brainstorming	1	-
Pygmalion effect	-	1
Steps in problem solving	-	1
Career planning	-	1
Writing job descriptions	-	1
Nothing	1	-
No response	1	-

Question 23: What would you like to see changed in the seminar you attended?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S O N O N E Y E A R E V A L U A T I O N S</u>
Change budget section	5
More time	4
Shorter sessions	1
More focus on advancement into supervisory positions	1
More information on touchy management situations	1
More small group discussions	1
Nothing	5
No response	5

*Some participants gave more than one answer.

CHART X-10 (Cont.)

TASK SEMINAR

Question 25: Did the seminar help you in your working career? If yes, please explain how it helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
More confidence	6
Time management	4
More career goal-oriented	3
Made me more objective	1
Awareness of job expectations	1
More aware of my part in management	1
Getting along with others	2
Helped understanding of budgeting process	1
Incentive to take outside courses	1
Heped me when moved to supervisory position	1
Did not help	3
No response	1
Did not attend	1

Question 26: Did the seminar help you in your personal life? If yes, please explain how it has helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
Helped set goals	4
More confidence	4
Organizing tasks	3
Became more assertive	2
More tolerant of others	2
Time management	1
Communication with children	1
Did not help	5
Did not attend	1

great differences from the first evaluation of the Communication Seminar. Many communication skills taught in the seminar were listed on both evaluations. The concept of assertiveness was still named as the most used technique from the seminar. The other primary skill mentioned in the first year evaluation was a better ability to relate to others. In the first evaluation, four people mentioned they learned about dealing honestly with themselves, while no one in the year post-test specifically mentioned this skill.

The change most often mentioned was that the seminar needed more time. Other specific changes were only mentioned by one person. Six people said nothing should be changed, two people did not respond to the question.

A number of responses were given to the question concerning how the seminar helped their working careers. Four participants answered that the seminar gave them more confidence and helped them increase their communication skills. Also three participants responded that they were more assertive on the job. Two people said the seminar did not help them in their working careers.

Similar responses were also given to the question as to how the seminar helped them in their personal lives. Five respondents said the seminar did not help them in their personal lives. The categorizations of responses for the four questions are found in Chart X-11 for the Communication Seminar.

COMBINATION TASK AND COMMUNICATION: In the year evaluation, no notable changes from the first evaluation were noticed. Assertiveness was most often mentioned as the one technique or concept which was used during the year. Time management and better communication skills were also mentioned. Goal setting and writing objectives were mentioned by five participants in the first evaluation while only one person mentioned this technique on the one year evaluation. This suggests that the communication skills were

CHART X-11
COMMUNICATION SEMINAR

Question 22: What was the one idea, concept or technique presented during the seminar which you have used most on your job?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S *</u>	
	One Year Evaluations (December 1977)	First Evaluation
Assertiveness	8	13
Able to relate to others better	4	3
Honestly dealing with self	-	4
Positive thinking	2	-
Conducting meetings	1	1
More confidence in controlling situations	2	-
Presenting myself as a businesswoman	1	-
Setting long-range goals	1	-
Body language	-	1
Better able to deal with management	-	1
Pygmalion effect	-	1
Ability to be good supervisor	-	1
Transactional analysis	1	1
Nothing	2	-
Did not attend	2	-
No response	1	-

Question 23: What would you like to see changed in the seminar you attended?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
More time	5
Have fewer models	1
More individual attention	1
More sessions	1
More follow-up or more workshops; to help in applying skills on the job	2
Smaller discussion groups	1
A little less informal	1
Tips on management from various companies	1
More positive approach	1
Nothing	6
No response	4
Did not attend	2

*Some participants gave more than one answer.

CHART X-11 (Cont.)

COMMUNICATION SEMINAR

Question 25: Did the seminar help you in your working career? If yes, please explain how it helped you.

<u>RESPONSES</u>	<u>NUMBER OF RESPONSES ON ONE YEAR EVALUATIONS</u>
More confidence	4
Better communication skills	4
Being more assertive	3
More aware of working surroundings and people	2
Learned how to say "no"	2
Knowing more about supervision	1
Looked at career goals	1
Learned about my work rights	1
Better organized	1
Did not help	2
No response	2
Did not attend	2

Question 26: Did the seminar help you in your personal life? If yes, please explain how it has helped you.

<u>RESPONSES</u>	<u>NUMBER OF RESPONSES ON ONE YEAR EVALUATIONS</u>
More assertive	4
Better communication skills	3
Learned to say "no"	3
Became more independent	2
Became more adventuresome	1
More positive attitude	1
Helped examine long-term goals	1
Helped in working with children	1
No response	2
Did not help	5
Did not attend	2

used more than the task skills from this seminar.

The change most often mentioned for this seminar was the need for more time. More discussion and a follow-up session were also suggestions that were made by more than one participant. Twelve people said nothing should be changed, the highest number of people for any of the five Model I and Model II seminars.

A number of responses were elicited from the question concerning how the seminar helped in their working careers. Included in these responses were more confidence in their work, a greater effectiveness in dealing with people, a clearer understanding of management, a greater ability in organizing their work and a greater tendency to be more assertive on the job. Four participants responded that the seminar did not help them in their working careers.

Two main responses were received from the question of how the seminar helped the participants in their personal lives. These two responses were that the seminar helped in family life and the seminar helped in their ability to communicate with others. No one in the Combination Seminar responded that the seminar did not help them in their personal lives, suggesting that this seminar, more than the other seminars, was applicable in some way to the participants' personal lives. The Combination Seminar had, overall, the best evaluation results on both the first evaluation and the one year evaluation. The responses to the four questions concerning the Combination Task and Communication Seminar are summarized in Chart X-12.

CHART X-12
COMBINATION SEMINAR

Question 22: What was the one idea, concept of technique presented during the seminar which you have used most on your job?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S *</u>	
	<u>One Year Evaluations (December 1977)</u>	<u>First Evaluation</u>
Assertiveness	11	12
Better communication skills	4	2
Time management	4	4
Setting objectives and goals	1	5
Active listening and feedback	1	3
Overcoming dominate people	2	-
Brainstorming	1	-
Budgeting	-	2
Transactional analysis	-	1
Pygmalion effect	-	1
I'm responsible for myself	-	1
No response	1	-
Did not attend	2	-
Did not help	1	-

Question 23: What would you like to see changed in the seminar you attended?

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S O N O N E Y E A R E V A L U A T I O N S</u>
More time	6
A follow-up session(s)	2
More discussion	2
Leave out budgeting	1
More practice in assertion training	1
More on studying people and how they feel	1
Nothing	12
Did not attend	2

*Some participants gave more than one answer.

CHART X-12 (Cont.)

COMMUNICATION SEMINAR

Question 25: Did the seminar help you in your working career? If yes, please explain how it helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
More effective in dealing with people	3
More confidence	3
Aware of management	3
Helped organize work	3
More assertive	3
Better communication	2
Make career plans	1
Feel job is more important	1
Time management	1
No response	1
Did not help	4
Did not attend	2

Question 26: Did the seminar help you in your personal life? If yes, please explain how it has helped you.

<u>R E S P O N S E S</u>	<u>N U M B E R O F R E S P O N S E S</u> <u>O N O N E Y E A R E V A L U A T I O N S</u>
Better communication	6
More confidence	6
Helped family life	5
Setting career goals	1
Took other management courses	1
More aggressive	1
More discussions with friends about job opportunities	1
Get along better with others	1
No response	2
Did not attend	2

CHAPTER XI

RESULTS OF MODEL I AND MODEL II HYPOTHESES

INTRODUCTION

This chapter presents the statistical results of the Model I and Model II hypotheses presented in Chapter III. The chapter also includes a breakdown of the number of participants who changed jobs or are currently unemployed and the survey return rate by seminar and company.

Most of the Model I and Model II hypotheses were tested both six months and one year after the seminars. The six month results, when applicable, are also presented. The appropriate six month charts are found in Appendix M, while the one year charts are contained in this chapter. A discussion of the results and conclusions is presented in Chapter XIII.

DESCRIPTION OF RESPONDENTS

Responses to the one year post-test were received from 155 of the 180 women participating in this research, making an overall return rate of 86 percent. The return rates for each seminar ranged from 77 percent to 93 percent as shown in Chart XI-1. Chart XI-2 presents the return rates from each company, which ranged from 67 to 94 percent. The higher return rates were received from companies which allowed administration of the questionnaire at the work site.

Charts XI-1 and XI-2 also include information on the employment status of respondents. The majority of respondents, 83 percent, were still employed with the company they worked for at the time of the seminars one year earlier. Twenty-one of the respondents had changed jobs at least once during the year. The greatest number of women changing jobs

CHART XI-1

EMPLOYMENT STATUS OF RESPONDENTS
AND RETURN RATES BY SEMINAR

RESPONSES	SEMINAR						Total
	Achieve- ment	Assertion	Task	Communi- cation	Combina- tion	Control	
With original company	20	22	21	23	23	20	129
Have changed jobs	8	3	1	1	2	6	21
Unemployed	0	1	1	1	1	1	5
Total	28	26	23	25	26	27	155
Return Rate	93%	87%	77%	83%	87%	90%	86%

CHART XI-2

EMPLOYMENT STATUS OF RESPONDENTS
AND RETURN RATES BY COMAPNY

RESPONSES	COMPANY										TOTAL
	A	B	C	D	E	F	G	H	I	J	
With original company	15	12	9	14	16	11	15	10	16	11	129
Have change jobs	1	4	1	-	1	3	1	5	1	4	21
Unemployed	1	-	2	1	-	-	-	1	-	-	5
Total	17	16	12	15	17	14	16	16	17	15	155
Return Rate	94%	89%	67%	83%	94%	78%	89%	89%	94%	83%	86%

by seminar was 8 from the Achievement Motivation Seminar and 6 from the control group. Five of the respondents were unemployed at the time of the post-test; three listed themselves as full-time homemakers and two as looking for work.

During the testing period more than 55 percent of the participants completed a continuing education class, a business related class, or a college class and more than 20 percent of the participants took more than one course. In addition, 17 of 27 control group members took some type of course during the year. Chart XI-3 summarizes the other training courses taken by the participants by seminar groups. These figures indicate that the isolation of the results of the training seminars conducted by this project was more difficult because of the uncontrollable, extraneous variable of other training taken by the participants.

HYPOTHESES RELATING TO THE SEMINARS

Results from the Seminars

The first hypothesis concerned the increase in wages of the participants:

Hypothesis 1.1 The female participants will receive a greater increase and a greater percentage increase in wages when compared to the control group.

This hypothesis was examined closely. For the six month results, wages were examined by: 1) breakdown (the comparison of the averages of each of the treatments); 2) analysis of variance tests (for an explanation of analysis of variance see Appendix B); and 3) analysis of the percentage wage increase. All of these tests revealed insignificant results at the .05 level of significance chosen as the critical level.

CHART XI-3

OTHER TRAINING COMPLETED BY PARTICIPANTS
DURING 1976-77 BY SEMINAR

OTHER TRAINING	SEMINAR						Total	
	Achieve- ment	Assertion	Task	Communi- cation	Combina- tion	Control	#	%
No other training	13	11	10	9	14	10	67	44.7
One continuing education course	3	1	3	7	2	2	18	12.0
More than one continuing education course	2	1	0	1	3	0	7	4.7
One college or business related course	3	5	6	3	4	9	30	20.0
More than one college or business related course	7	7	2	4	2	6	28	18.7
Total	28	25	21	24	25	27	150	100

The analysis of the one year statistical results revealed a similar pattern and the same methods were employed. Chart XI-4 shows the one year average increase in wages and Chart XI-5 presents the one year average percentage increase in wages. The overall average increase for the subjects in this research was \$1,395.45, while the average percentage increase was 17.72 percent.

Proportionately, the variability in the increase in wages between seminars was less for the one year analysis than for the six month analysis. For the one year analysis, average increases ranged from \$1,121 for the Communication Seminar to \$1,480 for the Assertion Seminar, with the other seminars and the control group averaging around \$1,425. For the six month analysis, the range of average increases was from \$131 for the Assertion Seminar to \$767 for the Achievement Motivation Seminar.

The increase in wages can be compared to the increase and the percentage increase for the participants during the previous (1975-76) one year period. The 1975 salary information was obtained in the pre-test questionnaire. This information is presented in Charts XI-6 and XI-7. The percentage wage increase was greater in 1975-76, probably reflecting lower beginning salaries. The overall increase was \$1,135, less than the 1976-77 year increase. Including the effects of inflation this amount is not significantly less than the 1976-77 wage increase.

For the 1976-77 year period, the significance of the main effects F ratio is .697 for the increase in wages and .849 for the percentage increase in wages. The only interpretation possible for these F tests is that the results are attributed to chance, rather than attendance in any one of the five seminars. Since the main hypothesis, 1.1, could not be accepted, the corollary hypothesis was not tested.

CHART XI-4

1976 TO 1977 WAGE INCREASE (IN DOLLARS)

EXCLUDING THOSE UNEMPLOYED IN 1977

SEMINAR

Company	Achievement	Assertion	Task	Communication	Combination	Control
A	1296.00	1860.00	1520.00	1088.00	1380.00	1120.00
B	1248.00	1300.00	341.33	1094.67	967.33	1326.67
C	1142.00	338.00	3936.00	1614.00	1235.00	4682.00
D	1948.00	1200.00	2322.00	1950.00	1572.00	1264.00
E	957.50	1578.67	1061.67	1113.00	1731.00	1178.67
F	230.00	960.00	1090.00	1300.00	1470.00	1102.67
G	2069.33	1496.00	2100.00	448.00	1470.00	794.00
H	1490.67	2102.00	-1125.50	478.00	1874.67	2214.00
I	2100.00	908.00	2215.00	1400.00	1842.00	1800.00
J	992.00	1746.67	2544.00	794.67	294.00	1250.00
Average Increase	1412.63	1480.73	1472.82	1121.17	1426.36	1471.25
n	24	22	22	24	25	24

Overall Average Increase = 1395.45

Overall n = 141

Anova Table - One Year Average Increase in Wages
(Excluding Unemployed) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	14314820.41	14	1022487.17	.770	.697
Seminars	2489187.82	5	497837.56	.375	.864
Companies	12048730.41	9	1338747.82	1.009	.440
2-Way Interactions	58239470.78	45	1294210.46	.975	.528
Explained	72554291.18	59	1229733.75	.927	.618
Residual	107490815.68	81	1327047.107		
Total	180045106.85	140	1286036.48		

CHART XI-5

1976 TO 1977 PERCENTAGE WAGE INCREASE

EXCLUDING THOSE UNEMPLOYED IN 1977

SEMINAR

Company	Achievement	Assertion	Task	Communication	Combination	Control
A	12.43	19.55	15.58	11.09	13.23	11.15
B	19.64	9.29	4.20	16.31	11.59	34.84
C	8.73	4.73	24.40	17.00	17.75	65.03
D	24.77	14.53	24.10	20.74	19.80	16.29
E	12.11	15.62	9.09	14.55	19.59	12.70
F	0.22	9.52	14.08	22.78	15.18	16.49
G	33.97	20.25	25.00	7.24	20.07	11.91
H	16.98	36.62	- 7.96	7.41	57.13	22.86
I	25.41	13.11	35.48	16.15	21.34	19.42
J	7.81	17.83	30.52	8.22	4.27	9.04
Average Increase	17.20	18.24	15.97	13.94	21.18	19.54
n	24	22	22	24	25	24

Overall Average Increase = 17.72

Overall n = 141

Anova Table - One Year Average Percent Increase in Wages
(Excluding Unemployed) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	3125.93	14	223.28	.610	.849
Seminars	682.28	5	136.46	.373	.866
Companies	2325.14	9	258.35	.706	.702
2-Way Interactions	13705.11	45	304.56	.833	.746
Explained	16831.04	59	285.27	.780	.842
Residual	29632.29	81	365.83		
Total	46463.33	140	331.88		

CHART XI-6

1975 TO 1976 WAGE INCREASE (IN DOLLARS)

EXCLUDING THOSE UNEMPLOYED IN 1975

SEMINAR						
Company	Achievement	Assertion	Task	Communication	Combination	Control
A	2566.67	1305.00	840.00	960.00	593.33	2194.67
B	2600.00	1515.00	554.67	1000.00	2366.00	450.67
C	1800.00	286.00	1428.00	- 888.67	1196.00	1749.00
D	1440.00	1500.00	1972.00	2033.33	2374.67	1706.00
E	922.00	1558.67	1248.33	1976.00	409.00	811.33
F	2356.00	-1272.00	1780.00	640.00	2354.67	849.33
G	208.00	1050.00	1190.00	1234.67	723.00	1755.33
H	- 180.00	- 896.00	- 546.67	156.00	377.33	880.00
I	1500.00	392.00	760.00	1040.00	933.33	1874.67
J	1156.00	1377.67	824.00	769.67	953.00	1696.00
Average Increase	1451.91	764.96	1118.28	921.81	1188.54	1391.33
n	23	26	25	26	28	27

Overall Average Increase = 1135.82

Overall n = 155

With 6.5 inflation = 1213.19 Overall Increase

CHART XI-7

1975 TO 1976 PERCENTAGE WAGE INCREASE

EXCLUDING THOSE UNEMPLOYED IN 1975

SEMINARS

Company	Achievement	Assertion	Task	Communication	Combination	Control
A	42.55	20.33	18.42	10.80	7.33	43.44
B	50.00	15.39	7.66	7.69	30.97	13.33
C	32.71	4.17	11.31	- 9.43	18.20	39.73
D	17.77	22.30	32.72	32.53	41.68	32.20
E	13.81	16.38	11.69	53.39	7.94	10.65
F	63.81	- 9.73	28.73	11.92	47.50	14.66
G	3.44	17.10	-13.39	32.41	24.98	41.41
H	- 2.57	-12.32	6.59	2.54	7.20	13.22
I	21.21	5.78	11.73	14.65	14.41	33.87
J	10.01	18.11	10.53	9.07	14.27	16.53
Average Increase	26.19	10.84	11.61	17.95	21.22	25.63
n	23	26	26	26	28	27

Overall Average Increase = 18.84

Overall n = 156

Looking at Charts XI-4 and Chart XI-5, the residual sum of squares is larger than the explained sum of squares. This indicates that the seminars and companies explain very little of the differences between the wage increases of the participants.¹

Hypothesis 2.1 A greater proportion of the female participants will be placed in supervisory or management positions when compared to the control group.

In this hypothesis, the primary reference is to a change in the job level of the participants from non-supervisory to first line supervisory positions. Although the increase from first line supervisors to middle management is very important, this distinction is often unclear in many companies. The distinction between non-supervisory and first line supervisory positions, however, is more easily determined.

Chart XI-8 shows the 1976 and 1977 job levels of the participants by seminar and the increase in job levels during this time period. The control group had more women entering first line supervision from non-supervisory positions than did any single seminar. Therefore, the hypothesis cannot be accepted. Twenty women did move from non-supervisory positions to first line supervisory positions or above, but this movement cannot be attributed to the training seminars. The Combination Seminar had the greatest number of women indicating they entered middle management from first line supervisory positions.

Hypothesis 2.2 The female participants will receive a greater number of promotions when compared to the control group.

No statistical significance was found for this hypothesis. Chart XI-9 summarizes the findings for the number of promotions. Although the control group had the lowest average number of promotions, the significance of the F ratio for the main effects was .429 which is far from the

CHART XI-8

1976 SUPERVISORY LEVELS OF PARTICIPANTS

SEMINARS							
Level	Achievement	Assertion	Task	Communication	Combination	Control	Total
Non-Supervisor	19	19	14	16	16	20	104
First Line Supervisor	9	5	9	8	9	7	47
Middle Management	0	0	0	1	1	0	2
Total	28	24	23	25	26	27	153

1977 SUPERVISORY LEVELS OF PARTICIPANTS

SEMINARS							
Level	Achievement	Assertion	Task	Communication	Combination	Control	Total
Non-Supervisor	18	15	12	13	13	13	84
First Line Supervisor	6	6	4	7	6	10	39
Middle Management	3	4	4	4	6	2	23
Total	27	25	20	24	25	25	146

INCREASE IN SUPERVISORY LEVELS 1976-1977

SEMINARS							
Level	Achievement	Assertion	Task	Communication	Combination	Control	Total
Non-Supervisor	-1	-4	-2	-3	-3	-7	-20
First Line Supervisor	-3	+1	-5	-1	-3	+3	-8
Middle Management	+3	+4	+4	+3	+5	+2	+21
Total	-1	+1	-3	-1	-1	-2	-7

CHART XI-9

AVERAGE NUMBER OF PROMOTIONS 1976 TO 1977

Company	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	1.00	0.67	0	0.67	1.00	0
B	0	0	2.67	0.50	1.33	0.67
C	0	0	1.00	0	0.50	1.00
D	0.33	1.00	1.00	1.50	0.67	0.50
E	1.33	0.67	0.67	1.00	1.00	0.33
F	0.33	1.00	0.67	1.00	0	0.67
G	0.67	1.33	1.00	1.33	1.00	1.00
H	0	0.67	0.50	0	1.00	1.00
I	1.33	0.33	1.00	0.67	0.33	0.67
J	1.00	0.50	0	0	0	0
Average Increase	0.64	0.63	0.91	0.69	0.72	0.58
n	28	24	22	23	25	26

Overall Average Increase = 0.69

Overall n = 148

Anova Table - Average Number of Promotions In 1977 By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	Significance of F Ratio
Main Effects	9.915	14	.708	1.033	.429
Seminars	1.871	5	.374	.546	.741
Companies	8.340	9	.927	1.352	.223
2-Way Interactions	29.454	45	.655	.955	.560
Explained	39.37	59	.667	.973	.539
Residual	60.33	88	.686		
Total	99.70	147	.678		

level needed for significance. Also, no apparent company effects were found. Since this hypothesis could not be accepted, the corollary hypothesis was not tested.

The authority or responsibility variable was tested by three separate measures: task authority, personnel authority, and autonomy on the job. These three measures were determined by subtracting the sum of the scores for questions relating to each area on the one year analysis from corresponding scores on the pre-test. The increase in the three areas is the score that is analyzed and reported below for the following three hypotheses.

Hypothesis 3.1 The female participants will have a greater increase in task authority when compared to the control group.

The statistical tests conducted for this hypothesis for both the six month and one year analysis were not significant and no trends could be established. The overall average increase was 2.95. The Achievement Motivation Seminar participants averaged the greatest increase, but the increase was not substantially greater than the other seminars. The control group average was higher than both the Communication and Combination Seminars. The F ratio for the main effects was .790 which indicates the results can be attributed to chance. No discernible patterns were found among the companies, indicating that neither the companies nor the seminars explained the differences in the increase in task authority among the participants. Chart XI-10 presents the findings for the increase in task authority.

Hypothesis 3.3 The female participants will have a greater increase in personnel authority when compared to the control group.

The increase in personnel authority was not statistically significant when using the independent variables of seminars and companies for either

CHART XI-10

AVERAGE INCREASE IN TASK AUTHORITY 1976 TO 1977

Company	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	6.67	6.67	8.00	1.33	1.50	1.67
B	9.50	3.50	-1.00	3.67	3.00	-8.00
C	0.5	1.00	15.00	-12.00	-7.50	5.00
D	5.00	0	5.50	2.00	-1.00	10.00
E	13.00	3.33	1.00	- 5.50	5.00	0.33
F	- 2.50	4.00	1.67	8.00	-1.00	6.67
G	6.00	0.67	4.00	7.33	5.50	8.00
H	- 3.33	5.33	0.50	0	5.33	7.00
I	7.33	2.33	9.00	4.67	3.33	2.00
J	1.00	4.67	1.00	-1.00	10.50	0.50
Average Increase	4.12	3.28	3.43	1.38	2.60	2.88
n	25	25	21	24	25	25

Overall Average Increase = 2.95

Overall n = 145

Anova Table - One Year Average Increase in Task Authority By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	535.04	14	38.22	.677	.790
Seminars	109.62	5	21.92	.389	.855
Companies	430.66	9	47.85	.848	.574
2-Way Interactions	2500.95	45	55.58	.985	.512
Explained	3035.99	59	51.46	.912	.643
Residual	4738.67	84	56.41		
Total	7774.66	143	54.37		

the six month or one year analysis. The overall average increase in personnel authority was 2.08 and the Management Task Seminar had the greatest increase with an average of 2.81. The control group's average increase was higher than both the Achievement and Assertion Seminar. The main effects F ratio was .770 and not significant. Again, there was no pattern distinguished among the companies. The increase in personnel authority is shown in Chart XI-11.

Hypothesis 3.5 The female participants will have a greater increase in autonomy on the job when compared to the control group.

No significance was found in the statistical tests concerning autonomy on the job. The range for this increase among the seminars and control group was greater than for the other two authority variables, but the variability within each seminar was also large. The overall average increase was 2.49 with the Achievement Motivation Seminar measuring the greatest average increase of 4.85 while the Combination Seminar had the lowest increase at 0.84. The control group had a 1.04 average increase. The company variable also was not significant. The main effects F ratio was .628 with the seminar F ratio at .243. However, the results could have been due to random selection rather than the seminars. The results of the autonomy on the job measure are found in Chart XI-12. Since none of the three authority measures was significant, the respective corollary hypotheses were not tested.

None of the hypotheses relating to the results of the seminar could be accepted. The tangible results of the seminars measured over a one year period were negligible as measured by the variables of pay, promotion and increase in job authority. Even though these hypotheses could not be accepted, the seminars still could have had an important impact

CHART XI-11

AVERAGE INCREASE IN PERSONNEL AUTHORITY 1976 TO 1977

Company	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	4.67	3.67	3.00	6.00	0	2.33
B	4.00	6.50	4.00	1.00	1.33	-1.00
C	-3.00	-0.50	8.00	-2.00	-4.00	0
D	-0.33	-0.50	3.50	1.50	0	0.50
E	5.00	5.00	4.67	1.50	4.00	-0.67
F	1.00	0	0	1.50	-2.50	0.33
G	0	1.33	1.00	7.33	11.00	0.67
H	0	1.33	0.50	-4.00	6.00	5.50
I	3.67	1.00	2.00	0.33	0	8.00
J	-1.00	1.00	3.00	2.33	2.50	5.50
Average Increase	1.35	2.04	2.81	2.17	2.20	2.08
n	26	25	21	24	25	25

Overall Average Increase = 2.08

Overall n = 146

Anova Table - One Year Average Increase in Personnel Authority By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	336.27	14	24.02	.698	.770
Seminars	30.98	5	6.20	.180	.969
Companies	310.20	9	34.47	1.002	.445
2-Way Interactions	928.84	45	20.64	.600	.969
Explained	1265.12	59	21.44	.623	.972
Residual	2924.33	85	34.40		
Total	4189.45	144	29.09		

CHART XI-12

AVERAGE INCREASE IN AUTONOMY ON THE JOB 1976 TO 1977

Company	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	8.00	3.00	7.50	3.67	2.00	1.00
B	12.50	4.00	-3.33	6.33	1.00	-9.67
C	1.00	4.00	8.00	-8.50	1.00	10.00
D	5.67	4.00	5.00	6.00	0.33	8.00
E	12.50	2.67	-0.33	-3.50	6.00	1.00
F	5.50	2.00	2.00	7.00	-0.50	3.67
G	3.00	0.33	-7.00	4.00	-2.00	2.00
H	0.67	9.33	4.50	-1.00	-2.33	5.00
I	7.67	-1.67	7.50	2.00	2.33	-0.33
J	-4.00	8.67	1.00	0.33	3.00	-1.50
Average Increase	4.85	3.72	2.24	2.08	0.84	1.04
n	26	25	21	24	25	25

Overall Average Increase = 2.49

Overall n = 146

Anova Table - One Year Average Increase in Autonomy on the Job
By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	519.57	14	37.11	.837	.628
Seminars	303.79	5	60.76	1.37	.243
Companies	219.39	9	24.38	.55	.834
2-Way Interactions	2258.50	45	50.19	1.13	.307
Explained	2778.07	59	47.09	1.06	.395
Residual	3768.17	85	44.33		
Total	6546.23	144	45.46		

upon the participants. The impact, however, was not felt in the area of increased promotions, income or responsibilities.

Behavioral Changes from the Seminars

Since none of the hypotheses were found to be significant in the previous section, hypothesis 4.2 regarding job satisfaction was examined.

Hypothesis 4.2 The female participants will have less job satisfaction in each of the three dimensions than the control group if none of the following hypotheses are confirmed: 1.1, 2.1, 2.2, 3.1, 3.3, 3.5.

Another control group was added for the job satisfaction variable. This control group was drawn from respondents from the first year of this study and the sample fulfilled the same qualifications as the participants. Since the companies were different for this second control group, only a one way analysis of variance was used.

Three dimensions of the Job Description Index were tested. These dimensions included: 1) satisfaction with present work; 2) satisfaction with opportunities for promotion; and 3) satisfaction with present pay. The three dimensions were tested separately.

On two of these dimensions, satisfaction with present work and satisfaction with present pay, the F ratios were significant to the .05 level. Charts XI-13, XI-14, and XI-15 summarize the results on the three dimensions of job satisfaction. Interestingly, the Combination Seminar had the lowest average job satisfaction for both of the significant dimensions.

Further analyses of the results on the two significant dimensions were undertaken to establish if: 1) differences between Model I and Model II seminars could be found; 2) differences between the seminars and the primary control group could be found; and 3) differences between the two control groups could be established.

CHART XI-13

SATISFACTION WITH PRESENT WORK
(WITH SECOND CONTROL GROUP) BY SEMINAR

SEMINAR	AVERAGE RESPONSE	N
Achievement	38.52	27
Assertion	40.52	25
Task	39.33	21
Communication	34.67	24
Combination	30.96	25
Control I	36.32	25
Control II	36.60	30

Overall Average = 36.67

Overall n = 177

Single ANOVA Table - Satisfaction With Present Job
(With Second Control Group) By Seminar

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects-Seminars	1478.87	6	246.48	2.251	.041
Explained	1478.87	6	246.48	2.251	.041
Residual	18287.16	167	109.50		
Total	19766.03	173	114.26		

CHART XI-14

SATISFACTION WITH OPPORTUNITIES FOR PROMOTION

(WITH SECOND CONTROL) BY SEMINAR

SEMINAR	AVERAGE RESPONSES	N
Achievement	18.42	26
Assertion	16.04	24
Task	17.71	21
Communication	15.04	23
Combination	13.72	25
Control I	16.00	25
Control II	11.53	30

Overall Average = 15.35

Overall n = 174

Single ANOVA Table - Satisfaction With Present Opportunities For Promotion (With Second Control Group) By Seminar

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects-Seminar	890.56	6	148.43	2.121	.053
Explained	890.56	6	148.43	2.121	.053
Residual	11685.05	167	69.97		
Total	12575.62	173	72.69		

CHART XI-15

SATISFACTION WITH PRESENT PAY (WITH SECOND CONTROL GROUP)

BY SEMINAR

SEMINAR	AVERAGE RESPONSE	N
Achievement	15.81	27
Assertion	15.04	25
Task	15.64	22
Communication	12.08	24
Combination	10.60	25
Control I	11.84	25
Control II	14.50	30

Overall Average = 13.67

Overall n = 178

Single ANOVA Table - Satisfaction With Present Pay
(With Second Control Group) By Seminar

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects-Seminar	702.12	6	117.02	2.992	.008
Explained	702.12	6	117.02	2.992	.008
Residual	6531.19	167	39.11		
Total	6531.19	173	41.81		

The method of orthogonal contrasts² was employed to find if any differences existed between Model I and Model II seminars. An F ratio of 0.93 was found between the explained sum of squares due to the differences between the two models and the residual mean square for the dimension of satisfaction with present pay. This F ratio was not significant so the difference between the two models could not be established. The F ratio comparing the Model I and Model II seminars on the dimension of satisfaction with present work was also not significant.

Dunnett's t statistic³ was used to compare the five seminars with the primary control group. The t statistics for the dimension of satisfaction with pay for the five seminars are shown below:

Control group with:	Dunnett's t statistic
Achievement	2.24
Assertion	1.81
Task	2.14
Communication	0.14
Combination	0.70

Critical value $t_{.95}(7,120) = 2.32$

Although both the Achievement and Management Task Seminars approach the critical value, the differences cannot be statistically accepted. None of the Dunnett's t statistics for the dimension of satisfaction with present work approached the critical value. The value of Dunnett's t statistic comparing the two control groups was also not significant. The t value for that comparison was 1.50.

The three dimensions of job satisfaction were also tested by two way analysis of variance, dropping the second control group and testing for company effects. In the dimension of satisfaction with present pay, the company effects were significant at the .05 level. The F ratio for the company effects for this dimension was .033. Chart XI-16, XI-17, and XI-18, summarize the two way analysis of variance for the three job satisfaction dimensions.

CHART XI-16

SATISFACTION WITH PRESENT WORK

(WITHOUT SECOND CONTROL GROUP) BY SEMINAR AND COMPANY

SEMINAR

Company	Achievement	Assertion	Task	Communication	Combination	Control
A	41.33	37.00	38.50	38.67	42.00	37.33
B	36.00	42.00	39.33	30.67	45.00	19.00
C	31.50	38.00	42.00	22.00	23.00	54.00
D	38.00	46.50	47.00	39.50	30.00	46.50
E	40.67	45.33	42.33	28.00	28.00	43.67
F	42.50	36.00	41.67	35.00	41.00	28.67
G	29.67	33.33	40.00	34.33	18.33	33.00
H	38.00	41.33	35.50	43.00	22.33	33.50
I	48.00	39.33	21.50	35.00	33.67	44.67
J	37.67	45.00	44.50	41.33	29.00	37.50
Average Response	38.52	40.52	39.33	34.67	30.96	36.32
n	27	25	21	24	25	25

Overall Average = 36.69

Overall n = 147

ANOVA Table - Satisfaction With Present Job
(Without Second Control Group) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	2776.04	14	198.29	1.782	.055
Seminars	1396.77	5	279.35	2.511	.036
Companies	1297.18	9	144.13	1.296	.252
2-Way Interactions	5489.62	45	121.99	1.097	.352
Explained	8265.66	59	140.10	1.259	.165
Residual	9345.17	84	111.25		
Total	17610.83	143	123.15		

CHART XI-17

SATISFACTION WITH OPPORTUNITIES FOR PROMOTION
(WITHOUT SECOND CONTROL GROUP) BY SEMINAR AND COMPANY

Company	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	23.00	22.33	19.50	13.67	18.50	16.33
B	14.00	10.50	19.33	16.50	19.33	22.67
C	17.50	20.00	27.00	14.50	5.50	23.00
D	16.33	12.50	24.00	23.00	11.67	23.00
E	15.50	22.50	19.33	7.50	7.50	13.33
F	17.50	27.00	18.00	13.50	21.50	12.00
G	15.33	20.67	24.00	25.33	10.67	23.33
H	18.33	9.00	6.50	15.00	19.00	5.50
I	27.00	10.67	14.00	14.33	14.00	14.33
J	16.67	13.00	11.50	7.00	6.50	7.00
Average Response	18.42	16.04	17.71	15.04	13.72	16.00
n	26	24	21	23	25	25

Overall Average = 16.15

Overall n = 144

ANOVA Table - Satisfaction With Present Opportunities For Promotion
(Without Second Control Group) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	1430.89	14	102.21	1.51	.126
Seminars	405.26	5	81.05	1.20	.319
Companies	1068.54	9	118.73	1.75	.090
2-Way Interactions	3050.21	45	67.78	.999	.490
Explained	4481.10	59	75.95	1.120	.314
Residual	5696.83	84	67.82		
Total	10177.94	143	71.17		

CHART XI-18

SATISFACTION WITH PRESENT PAY

(WITHOUT SECOND CONTROL GROUP) BY SEMINAR AND COMPANY

SEMINAR

Company	Achievement	Assertion	Task	Communication	Combination	Control
A	22.33	18.33	12.50	8.67	18.00	12.67
B	15.00	8.00	14.00	12.33	14.00	7.00
C	14.00	15.00	18.00	19.50	11.50	14.00
D	17.67	18.50	18.50	15.50	13.33	18.50
E	17.00	19.33	22.00	7.00	10.50	13.67
F	19.50	16.00	16.67	4.00	20.50	7.33
G	6.00	10.00	15.00	12.00	1.67	15.00
H	17.00	12.33	13.00	1.00	3.00	12.00
I	17.00	16.67	8.00	17.00	9.00	11.67
J	13.00	15.67	17.00	15.67	10.50	9.50
Average Response	15.81	15.04	15.64	12.08	10.60	11.84
n	27	25	22	24	25	25

Overall Average = 13.50

Overall n = 148

ANOVA Table - Satisfaction With Present Pay
(Without Second Control Group) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	1353.03	14	96.65	2.778	.002
Seminars	650.79	5	130.16	3.741	.004
Companies	676.78	9	75.20	2.161	.033
2-Way Interactions	2172.41	45	48.28	1.388	.098
Explained	3525.44	59	59.75	1.717	.011
Residual	2922.50	84	34.79		
Total	6447.94	143	45.19		

To determine if there were other explanations for the differences in the participants' job satisfaction, the effects of longevity with the company were considered. A regression analysis was tested with the three dimensions of job satisfaction and longevity with the company. Chart XI-19 summarizes the regression analysis. Longevity with the company significantly contributes to the amount of satisfaction with present work and pay.

Satisfaction with present pay and present work tended to increase with longer employment in a company. Since the r is small, the relationship is relatively weak, however. This relationship does not explain the large differences in the averages between the Combination Seminar and the other seminars, particularly the Achievement Motivation Seminar.

Hypothesis 5.1 The supervisors of the female participants will proportionately increase their evaluation ratings on all items when compared to the supervisors of the control group.

No significant behavioral changes from attendance at the seminars were found from the supervisors' evaluations. None of the increase in the items on the supervisory evaluations were found to be significantly different from the items on the supervisory evaluations of the control group. Chart XI-20 shows the averages of all the items on the supervisors' questionnaires (including both what the supervisors judged for average employees as well as the ratings for participants) in 1976 and 1977. The questionnaire for supervisors can be found in Appendix F and was not administered after six months.

Participants' averages were always higher than the averages which supervisors felt were typical of the ordinary individual. This does not necessarily indicate that the supervisors thought the participants, as a group, were above average, but it may indicate that people tend to judge others less harshly when they know and work with them. Since Hypothesis 5.1

CHART XI-19

LONGEVITY WITH COMPANY AND JOB SATISFACTION
(REGRESSION ANALYSIS)

Present Work

Regression equation:

$$\text{Present Work} = .833(\text{Years with Company}) + 34.38$$

$$r = .167$$

$$r^2 = .028$$

Significance of $r = .02$

Present Opportunities for Promotion

Regression equation:

$$\text{Opportunities for Promotion} = -.41(\text{Years with Company}) + 17.43$$

$$r = -.10$$

$$r^2 = .01$$

Significance of $r = .11$

Present Pay

Regression equation:

$$\text{Present pay} = .474(\text{Year with Company}) + 12.13$$

$$r = .15$$

$$r^2 = .024$$

Significance of $r = .031$

CHART XI-20

AVERAGE RESPONSES TO SUPERVISOR QUESTIONNAIRE FOR 1976 AND 1977

CATEGORIES BY SEMINARS	AVERAGE RESPONSES			
	Average Individual 1976	Average Individual 1977	Participant 1976	Participant 1977
Supervisory Potential - Overall	3.17	3.26	4.67	4.70
Achievement	3.10	2.85	4.50	4.60
Assertion	3.10	3.48	4.76	4.81
Task	3.36	3.36	5.09	5.22
Communication	3.06	3.22	4.53	4.39
Combination	3.09	3.48	4.57	4.35
Control	3.29	3.09	4.52	4.81
Ability to Express Feelings and Handle Conflict - Overall	3.40	3.64	4.57	4.82
Achievement	3.35	3.25	4.40	4.75
Assertion	3.52	3.95	4.76	4.95
Task	3.59	3.52	4.68	5.18
Communication	3.41	3.72	4.53	4.61
Combination	3.30	3.74	4.48	4.44
Control	3.24	3.62	4.57	4.95
Personal Initiative - Overall	3.47	3.69	5.11	5.39
Achievement	3.35	3.45	4.74	5.85
Assertion	3.38	3.90	5.09	5.45
Task	3.68	3.86	5.50	5.86
Communication	3.41	3.72	4.88	4.78
Combination	3.43	3.70	5.30	5.00
Control	3.52	3.48	5.00	5.38
Interpersonal Skills - Overall	3.50	3.68	4.90	5.01
Achievement	3.45	3.65	4.67	5.25
Assertion	3.43	3.95	5.14	5.10
Task	3.68	3.59	5.14	5.28
Communication	3.53	3.61	4.82	4.89
Combination	3.39	3.65	4.87	4.65
Control	3.52	3.62	4.71	4.91

CHART XI-20 (Cont.)

AVERAGE RESPONSES TO SUPERVISOR QUESTIONNAIRE FOR 1976 AND 1977

CATEGORIES BY SEMINARS	AVERAGE RESPONSES			
	Average Individual 1976	Average Individual 1977	Participant 1976	Participant 1977
Ability to Plan and Carry Out Work - Overall	3.49	3.65	5.09	5.37
Achievement	3.45	3.40	4.68	5.50
Assertion	3.38	3.86	5.00	5.29
Task	3.77	3.73	5.27	5.77
Communication	3.71	3.67	5.18	5.11
Combination	3.26	3.61	5.26	5.22
Control	3.43	3.62	5.10	5.29
Overall Job Performance - Overall	3.74	3.86	5.18	5.36
Achievement	3.60	3.65	4.89	5.60
Assertion	3.86	4.05	5.19	5.33
Task	3.82	3.95	5.36	5.95
Communication	3.94	3.83	5.29	5.06
Combination	3.57	3.87	5.09	4.96
Control	3.71	3.76	5.24	5.24
Left Ladder (Present Job) - Overall			3.04	3.10
Achievement			3.00	3.06
Assertion			2.90	3.05
Task			3.24	3.29
Communication			3.23	2.94
Combination			2.87	2.90
Control			3.05	3.33
Right Ladder (Future Potential) - Overall			4.46	4.36
Achievement			4.45	4.39
Assertion			4.38	4.21
Task			4.67	4.62
Communication			4.41	3.94
Combination			4.48	4.10
Control			4.35	4.81

1976 Overall n = 125
 1977 Overall n = 125
 Achievement n = 20
 Assertion n = 21

Task n = 22
 Communication n = 18
 Combination n = 23
 Control n = 21

was not confirmed on any of the items, none of the corollary hypotheses were tested.

HYPOTHESES RELATING TO THE FEMALE EMPLOYEES

Hypothesis 6.1 The variables of age, marital status, number of children, and amount of education will have no significant effect upon the number of promotions, the increase in wages, and the increase in authority of the female participants.

Only one relationship from this hypothesis was found to be significantly related, age by autonomy on the job. The younger women indicated they received a greater increase in their autonomy on the job than older women. Since younger women tend to hold entry level jobs, this relates to a greater increase of autonomy on the job after an initial probationary period with a company. Chart XI-21 shows the increase of autonomy on the job by age group.

Two other relationships were found to be approaching the .05 level of significance, the significance needed before the relationship is considered important. These two relationships were the number of promotions by education, with the participants who had two years of college or more receiving more promotions; and increase in task authority by age, with the youngest groups receiving the greatest increase in task authority.

Chart XI-22 shows the F ratios for the one way analysis of variance tests completed for this hypothesis. For the six month analysis, none of the relationships were found to be significant.

Hypothesis 7.1 The female employees with the lowest 1976 wages will receive the lowest increase and the lowest percentage increase in wages the following year.

This hypothesis was tested by regression analysis and no significant findings were found for the first part of the hypothesis. The multiple r statistic was .136 and r^2 was .018, meaning that the variable of beginning

CHART XI-21

AGE BY INCREASE IN AUTONOMY ON THE JOB

AGE	INCREASE IN AUTONOMY ON THE JOB	N
Under 25	5.02	48
25 to 34	1.95	67
35 to 44	-0.93	16
45 to 54	1.10	10
55 and over	1.00	5
Overall Increase	2.55	146

CHART XI-22

F Ratios of the Effects of Four Demographic Characteristics of the Participants Upon The Rate of Promotions, Increase In Pay and Increase in Authority.

DEMOGRAPHIC CHARACTERISTIC	INCREASE IN WAGES	NUMBER OF PROMOTIONS	INCREASE IN TASK AUTHORITY	INCREASE IN PERSONNEL AUTHORITY	INCREASE IN AUTONOMY ON THE JOB
Marital Status	.009	.451	.000	.380	.097
Number of Children	.278	.950	1.205	.348	1.703
Education	.256	2.085*	1.019	.497	1.263
Age	.626	.760	2.410*	.475	3.012**

* Significant to .10 level

** Significant to .05 level

mean wages is not a good predictor for the amount of increase in wages of the participants.

The participants with the lowest wages in 1976, however, received a statistically significant greater percentage increase in wages than those participants who received higher wages in 1976. This relationship is opposite to the hypothesized relationship and probably infers that across the board the participants' increase in wages tended to be similar. Those earning the lowest wages, therefore, received the greatest percentage increase in wages. The regression equation is given below:

$$\text{Percentage increase} = -.196 (1976 \text{ Wage}) + 34.49$$

This equation is significant to the .001 level, with a multiple r of .272 and r^2 of .074. These statistics signify, however, that the participants' beginning wages are not a primary predictor of the year's percent wage increase.

Hypothesis 8.1 The female employees who have been employed the longest with their particular company will have the greatest increase in personnel authority, task authority, and autonomy on the job.

It was found from the analysis of variance tests of the three authority measures that the authority measures are related to longevity with company. Chart XI-23 shows the average increase in the authority measures by the number of years the participants have been employed with their company and the F ratios involved. Those that had been employed longer than one year but less than two years received the greatest increase in their authority.

The orthogonal contrasts were significant for both the task authority and autonomy on the job measures. This means that if a participant was employed more than one year but less than four years, she probably received a greater increase in task authority and autonomy on the job than participants

CHART XI-23

YEARS, WITH COMPANY AND THE INCREASE IN AUTHORITY

YEARS WITH COMPANY	Average Increase In Task Authority		Average Increase In Personnel Authority		Average Increase In Autonomy on the Job	
	Increase	#	Increase	#	Increase	#
Less than 1 Year	0.47	19	0.70	20	0.75	20
More than 1 and less than 2	6.57	35	4.37	35	6.17	35
More than 2 and less than 4	2.68	44	1.00	44	2.09	44
More than 4 and less than 6	1.00	35	1.06	35	0.40	35
More than 6 Years	2.92	12	4.17	12	3.00	12
Overall Average	2.95	145	2.04	146	2.55	146

F RATIOS

Authority Measure	F Ratio	Significance of F Ratio
Task Authority	3.53	.009
Personnel Authority	3.63	.008
Autonomy on the Job	3.95	.005

who were employed with their companies less than a year or more than four years. The personnel authority measure is interesting. This measure indicates that participants who were employed more than one year but less than two and those employed more than six years received greater increases in personnel authority.

The importance of these findings is that the authority measure is partially dependent upon the number of years a participant has been employed with her company. It also indicates that women tend to receive their greatest increases in authority after one year of employment with a company. For the measures of personnel authority, however, another increase came after six years of employment.

Hypothesis 9.1 The female participants who were first line supervisors or above in December 1976 will have a greater increase in wages and a greater percentage increase in wages and a greater increase in authority compared to those female participants who were not supervisors at that time.

No significant relationship was found between the increase in wages and percentage increase in wages and supervisory level. The F ratio for the increase in wages with supervisory level was 0.66 with a significance level of .42. For the relationship between the percent increase in wages and supervisory level the F ratio was 0.73, with a significance level of .39.

Comparing the relationship between the authority measures and supervisory level produced two significant relationships. The increases in task authority and autonomy on the job measures were related to beginning supervisory level. For the relationship between autonomy on the job and beginning supervisory level, the F ratio was 13.31 with a significance level of .001. The non-supervisory participants indicated an average increase of 3.89 on their autonomy on the job, while the supervisory participants averaged a 0.44 decrease. For the relationship between the increase

in task authority and beginning supervisory level, the F ratio was 7.62 with a significance level of .007. The non-supervisory participants indicated an average increase of 4.05, while the supervisory participants averaged an increase of 0.49. Again, these results are related to the increased duties of those women who began working for their companies shortly before 1976, and who tended to be in entry level positions as opposed to participants who were supervisors and had been with their companies for a number of years. This interpretation seems particularly valid since the personnel authority was not significant, with a F ratio of 0.47, and a noticeable increase in personnel authority was indicated for those participants who had been with their company for over six years, many of whom were in supervisory positions.

Hypothesis 10.1 The female participants who received the greatest support from their supervisors to attend the seminars will have the greatest number of promotions and the greatest increase in wages when compared to the female participants who did not receive support from their supervisors.

No significant relationships were established between the support from the participants' supervisors, as indicated on the evaluation survey administered on the final day of the seminars, and the number of promotions and increase in wages. For the relationship between support of the supervisors and the number of promotions, the chi-square significance was at the .102 level, which is approaching the necessary level of significance. The number of promotions did increase as the support of the supervisor increased. The F ratio for the analysis of variance test between the support of the supervisor and increase in wages was 0.68.

HYPOTHESES RELATING TO THE COMPANIES

Hypothesis 11.1 The companies employing the greatest proportion of female managers will have the highest number of participants promoted within their company.

For this hypothesis no significant relationship was found as tested by regression analysis. The significance was found to be .534 with an r of .223 and an r^2 of .05.

Hypothesis 12.1 The companies with the lowest beginning mean wages (experimental and control groups) for the female employees will give their participants the lowest increase and the lowest percentage increase in mean wages and the fewest promotions.

One significant relationship was found from examining this hypothesis. The relationship, however, was not in the direction hypothesized. It was observed that companies with the lowest beginning mean wages tended to have the greatest increase in promotions. The significance of the regression analysis was to the .044 level and the multiple r was a large .646 with r^2 being equal to .417. The predicted regression equation was:

$$\text{Number of promotions} = -.133 (\text{Beginning mean salary}) + 20.99$$

Several factors could explain this relationship. First, this probably reflects the low level positions held by the participants. The participants in lower level, entry positions could easily translate any increase in responsibilities as a promotion, when in fact, added responsibilities could reflect greater proficiency in their current job. Second, the pressures of an increased minimum wage could have increased salaries in the lower level positions, and this could have been interpreted as a promotion by the participants or even by the companies. Third, companies with lower salary scales could reward their employees with promotions rather than with salary increases.

Although the other two hypothesized relationships were not significant, a definite trend was established for the relationship between the beginning mean salary and the average increase in salary. The significance level of

this relationship was .16, but the r statistic was .48 and the r^2 statistic was .23. The significance of the relationship between the average percentage increase in wages and lowest beginning mean wages was .42, and therefore the relationship was not considered significant.

Hypothesis 13.1 The service companies will have the highest rate of promotions (for their female participants) of any represented industry.

There was no significant relationship between the type of industry and the total number of promotions. The F ratio was .62 and the significance of the F ratio was .63. The sample of companies and industries was too small to conclude that this relationship might not exist in the total population of companies. For this sample, nevertheless, there was no indication that the type of industry influences the rate of the advancement of their female employees.

Hypothesis 14.1 The companies with the greatest number of employees (both male and female) will have the highest rate of promotions for their female participants.

For this hypothesis, no significant relationship was found between size of company and number of promotions of its female employees. The F ratio was only .068, indicating that almost no correlation existed between these two variables.

Hypothesis 15.1 The companies with the largest proportion of female employees will give their female participants the smallest increase in mean wages.

This hypothesized relationship was not established after being statistically tested, although a trend in the direction of the hypothesis was detected. The significance of the regression analysis was .30, but the multiple r was .36 with the r^2 statistic being .13. Once again, the results of the hypothesis should be interpreted cautiously. Since the sample

of companies was small (10 companies) a relationship could exist in the population of companies between the proportion of female employees and increase in wages, but it could not be detected from this sample.

The interpretations of the hypotheses relating to the seminars are contained in Chapter XIII. The other two sets of hypotheses produced inconclusive results. A relationship was established between the companies' pay scale and number of promotions. This relationship, however, could be more dependent upon the participants' ideas of promotions than company trends. Since our sample of 10 companies was so small, insignificant results, coupled with relatively large r statistics point to the need for more research into the structure of companies and the advancement of female employees (Model IV).

No demographic characteristics were found to be significant in predicting the participants' increase in wages and authority and the number of promotions. The authority measures, however, were related to age, supervisory level, and longevity with the company. This points to the need for research into the area of measuring authority increases.

FOOTNOTES: CHAPTER XI

¹In addition to the analysis of variance test, an analysis of the residuals obtained from the ANOVA test was performed. No pattern in the residuals was distinguished, and therefore, it can be interpreted that none of the assumptions underlying the ANOVA test were obviously violated. For the procedures involved in analysis of residuals for ANOVA tests see J. Neter and W. Wasserman, Applied Linear Statistical Models. (Homewood, Illinois: Richard D. Irwin, 1974), Chapter 14.

²B.J. Winer, Statistical Principles in Experimental Design, (New York: McGraw-Hill, 1971), pp. 170-174.

³Winer, pp. 201-204.

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CHAPTER XII

RESULTS FROM MODEL III HYPOTHESES

INTRODUCTION

Model III hypothesized that women are underutilized and underemployed in managerial positions due to the socialization and sex stereotypes of the present business leadership. Two sets of data collected from participants in various sessions of the Supervisor Awareness Seminar were used to test the validity of Model III. First, the Employment Project conducted a Supervisor Awareness Seminar for 18 male and female supervisors from four Des Moines companies. Plans were to evaluate the seminar's effects on participants in this multi-company study. Second, the Employment Project studied the effects within a single company, where two thirds of the management had previously participated in the seminar. In this case study of a Des Moines firm, referred to as Company X, employees had attended various sessions of the seminar over a two year period, sponsored by Company X.

For both the multi-company study and the case study, comparison of participants' responses to the Model III survey with those of a control group(s) served as the basis for evaluation of the seminar's effectiveness. The participants of the multi-company study were administered the survey six months subsequent to the seminar. In addition, these participants completed a seminar evaluation form directly after the seminar. (See Chapter V for a detailed explanation of the survey and methodology and Appendix K for a summary of the evaluations.) All of the case study participants were administered the questionnaire in July, 1977, without regard to when they attended the seminar. The case study participants were not asked to complete evaluation questionnaires.

The Model III survey was modeled after a questionnaire originally written by Rosen and Jerdee in the Harvard Business Review.¹ The Rosen and Jerdee questionnaire analyzed three areas of business decision-making: 1) career demands and family obligations; 2) personal conduct on the job; and 3) promotion and career development. The questionnaire used in this study covered the same three areas, however, promotion and career development received major emphasis.

The Model III survey utilized the same questionnaire format as that of Rosen and Jerdee. Respondents were instructed to imagine themselves as vice presidents of a hypothetical company. Eight problems or situations requiring a decision were presented to them in memo form. Each memo described a situation requiring a decision regarding an individual or subject. Respondents were asked to select a response to the situation from a list of alternatives provided. The respondents were also required to explain the reasons for their choices.

Each respondent in the participant and control groups was randomly administered one of the two versions of the Model III survey. The only difference between the two versions was the sex of the subject in each problem situation. In one version (Form 1) of the questionnaire, the subject of the initial memo was identified as male and the subject in the second memo was identified as female, with this pattern repeated for the remaining memos. The second version (Form 2) reversed the pattern with memo one presenting a female subject and memo two identifying the subject as male and so forth. For example, both versions presented identical resumes in the first memo, but Form 1 stated it was Roger Davis's resume, where Form 2 listed it as Diane Davis's.

The fifth, sixth, and seventh memos of the questionnaire were taken verbatim from the original questionnaire by Rosen and Jerdee. Consequently,

our findings for these three memos are compared with those reported in the Harvard Business Review article.

The main hypothesis tested from the Model III survey is:

Hypothesis 16.1 The participants of the seminar will not have significantly different mean scores for all questions between Form 1 and Form 2 while the control group(s) will have significantly different mean scores on all questions between Form 1 and Form 2.

In addition to testing this hypothesis, "factors of sex" were also computed and compared. Factors of sex included any stereotype or sex related comment cited as a justification for the response chosen. For example, in a decision on whether a male or female should attend a seminar, a factor of sex would be: "Cheryl may end up getting married and leaving the company, so she shouldn't be chosen."

The return rate from the six month post-test survey of the participants in the multi-company study proved insufficient for analysis and evaluation. Despite repeated attempts to elicit cooperation, the survey return rate was under fifty percent. Given this low return rate, an analysis of the responses was considered unproductive and was not undertaken.

CASE STUDY

For the case study, the survey return rate was acceptable for analysis. Three different groups of men and women completed surveys: 1) participants from Company X in Des Moines who had attended the Supervisor Awareness Seminar, 2) a control group from Company X, and 3) a control group from Company Z. Company Z is similar to Company X in type of industry, size of firm and company philosophy. Company Z, however, is located in a smaller community in northeast Iowa. Eighty-three percent of the participants and 87 percent of the control group from Company X returned surveys.

Company Z had a 92 percent return rate. A comparison of the characteristics between Harvard's sample and the three groups in our study is shown in Chart XII-1.² The results of the eight memos in the Model III survey are presented below for the case study.

First Memo

The first memo of the survey presented a resume identified as belonging to either Roger or Diane Davis. Respondents were asked to evaluate the subject on the basis of the resume presented for a vacant position in the company. The position was director of a research project studying alternative fuel supplies and extensive travel was required. Possible responses to the resume were: 1) recommend selection and immediate hiring for the position; 2) favorable rating but interview again; 3) favorable rating of potential, but not really suited for job; and 4) unfavorable rating, not suited for job.

Responses for the three groups are shown in Chart XII-2. An interesting pattern evolved from the responses. The control group from Company Z recommended hiring Roger Davis immediately, while recommending interviewing Diane Davis a second time. The control group from Company X had similar recommendations for both the male and female subjects. The participant group was more in favor of hiring Mrs. Davis. The main hypothesis was not supported by these results, since the control group From Company X had similar responses to the two forms, and the participants' responses favored Mrs. Davis.

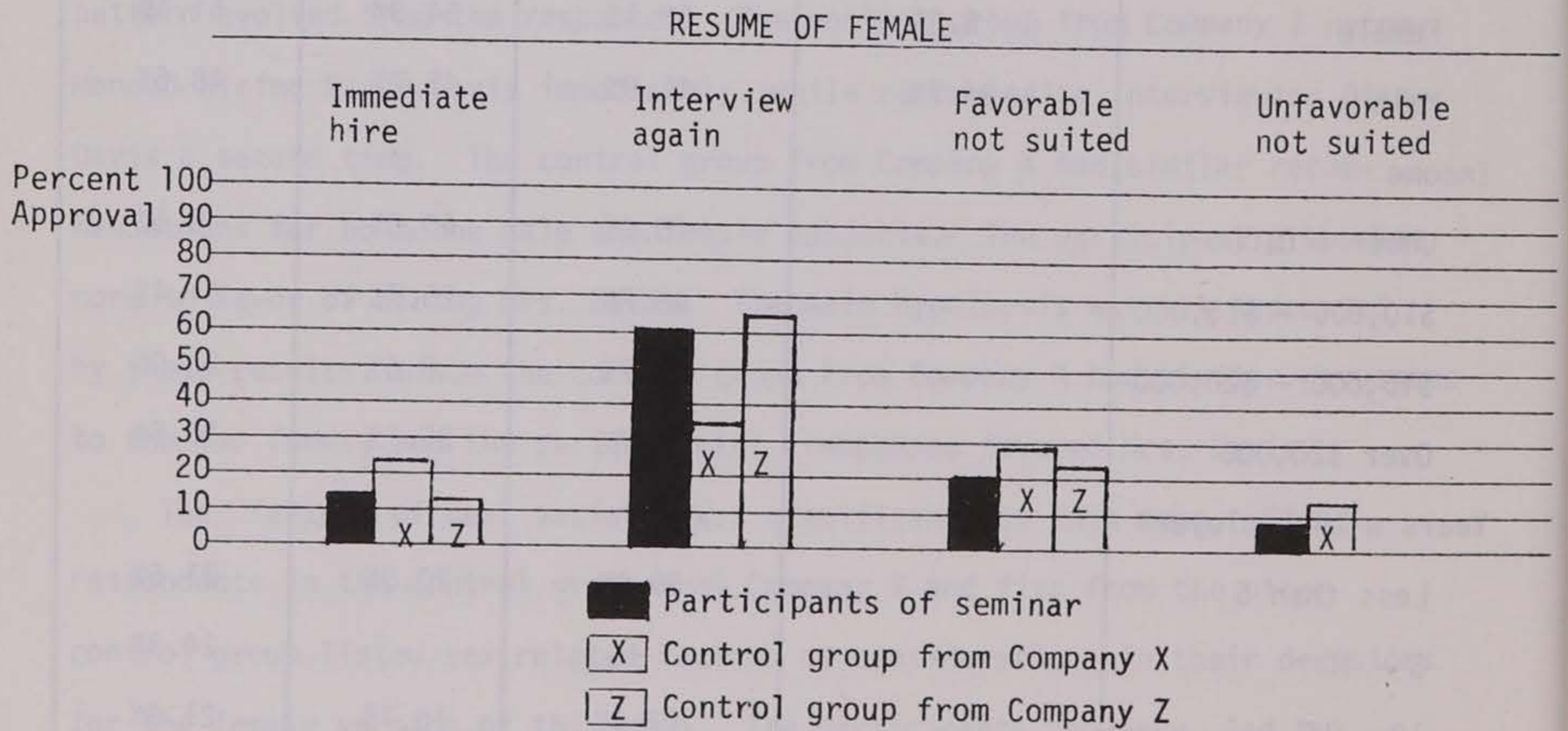
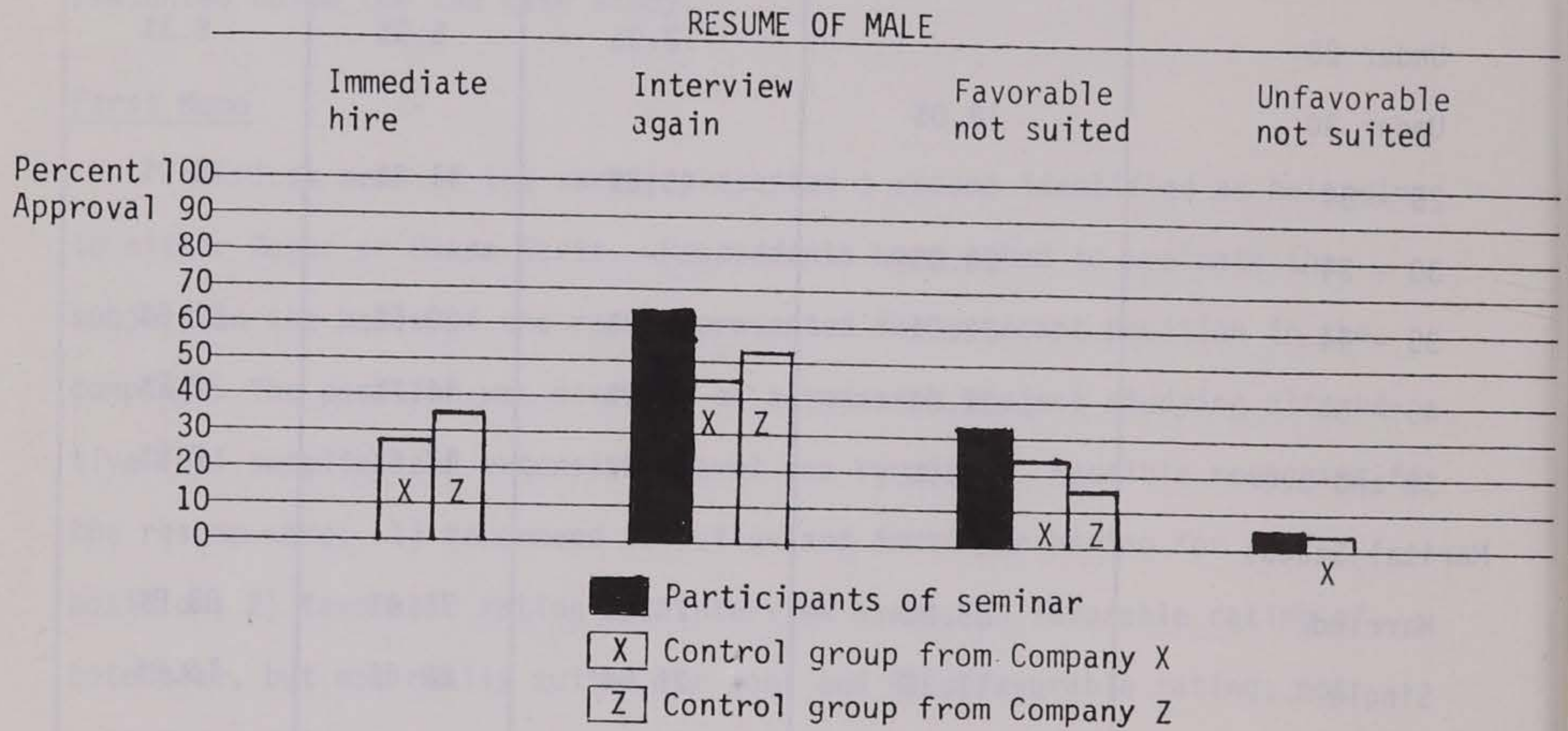
The "factors of sex" variable was significant for this memo. Eight respondents in the control group from Company X and five from the other control group listed sex related factors as considerations in their decisions for the female version of this memo. The participants, however, had two

CHART XII-1
SAMPLE CHARACTERISTICS

CHARACTERISTIC	SAMPLE			
	Harvard Business Review	Participants Company X	Control Company X	Control Company Z
Age				
Under 25	-	12.9%	5.9%	8.3%
Under 30	18.0%	-	-	-
25 - 34	-	45.2%	41.2%	38.9%
30 - 34	20.0%	-	-	-
35 - 44	22.0%	25.8%	20.6%	27.8%
45 - 54	22.0%	12.9%	14.7%	22.2%
55 and over	8.0%	3.2%	17.6%	2.8%
Marital Status				
Married	85.0%	74.2%	71.4%	83.8%
Single	11.3%	25.8%	28.6%	16.2%
Other	3.7%	-	-	-
Sex				
Female	5.3%	58.1%	54.3%	51.4%
Male	94.7%	41.9%	45.7%	48.6%
Income				
Under \$10,000	-	10.0%	40.0%	8.1%
\$10,000 - \$15,000	-	46.7%	25.7%	51.4%
\$15,000 - \$20,000	-	6.7%	8.6%	27.0%
Over \$20,000	-	36.7%	25.7%	13.5%
Years with Employer				
Less than 5	-	39.1%	20.8%	21.6%
5 - 10	-	-	-	24.3%
10 - 15	-	17.4%	16.7%	21.6%
Over 15	-	43.5%	62.5%	32.4%

CHART XII-2

RESPONSES TO FIRST MEMO



factors of sex for the male version of this memo and four factors of sex in the female version. Most of the sex related comments on the female version questioned Mrs. Davis's willingness to travel because of assumed family responsibilities and obligations. This was the only memo where the factor of sex was significant. In the other memos where factors of sex were scored, most were found in the memos depicting females. However, there were also a few factors of sex counted in the male versions. The control group from Company X had the largest number of factors of sex scored.

Second Memo

The only memo involving personal conduct on the job was the second memo. John Bailey (Mary Bailey), a rate analyst, is portrayed as an incessant talker. This employee's use of the phone during business hours for personal calls was annoying the entire department. Respondents were required to choose one of the following disciplinary actions: 1) suspend for a week if excessive use of the phone continues; 2) threaten to fire and follow through if necessary; and 4) don't make an issue out of excessive use of the phone.

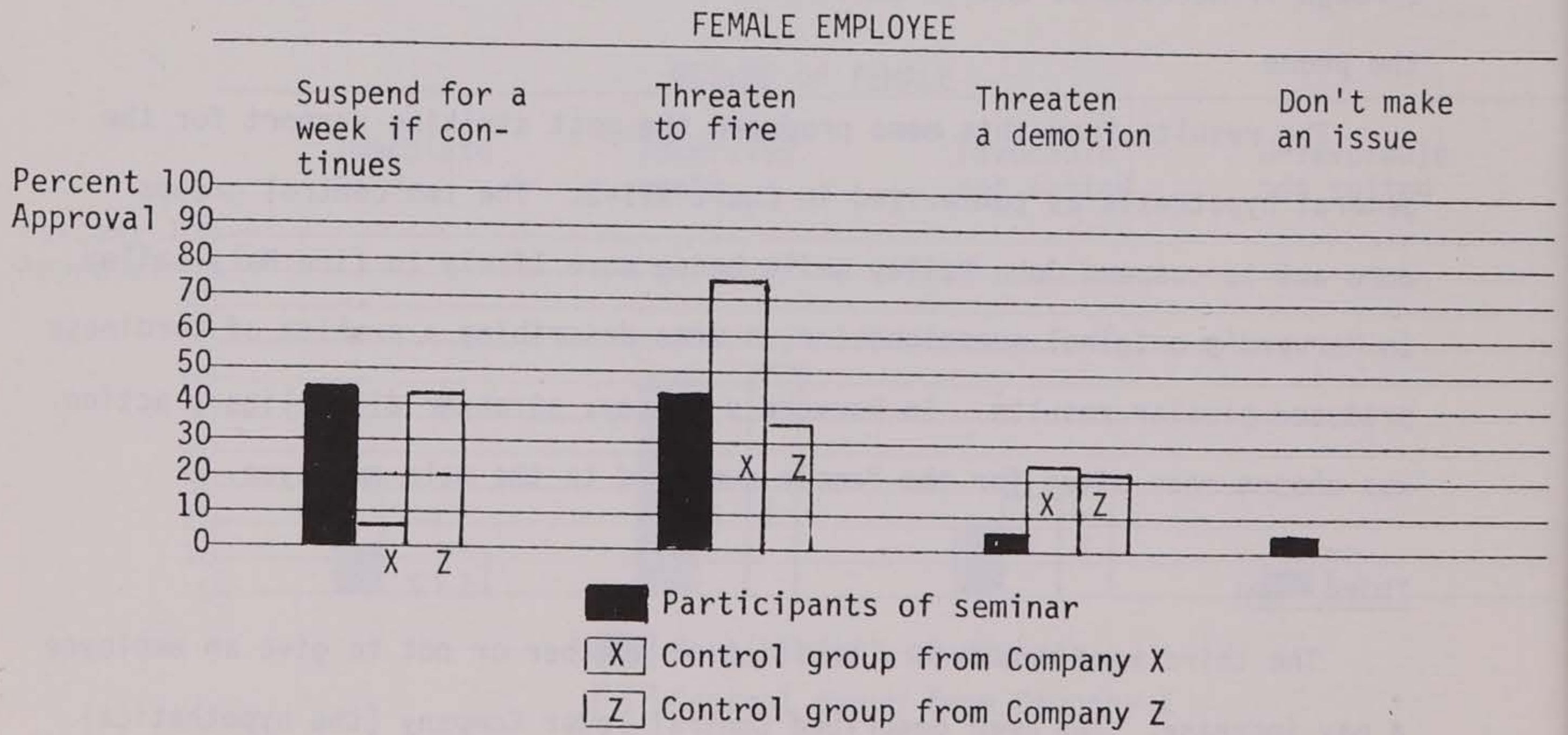
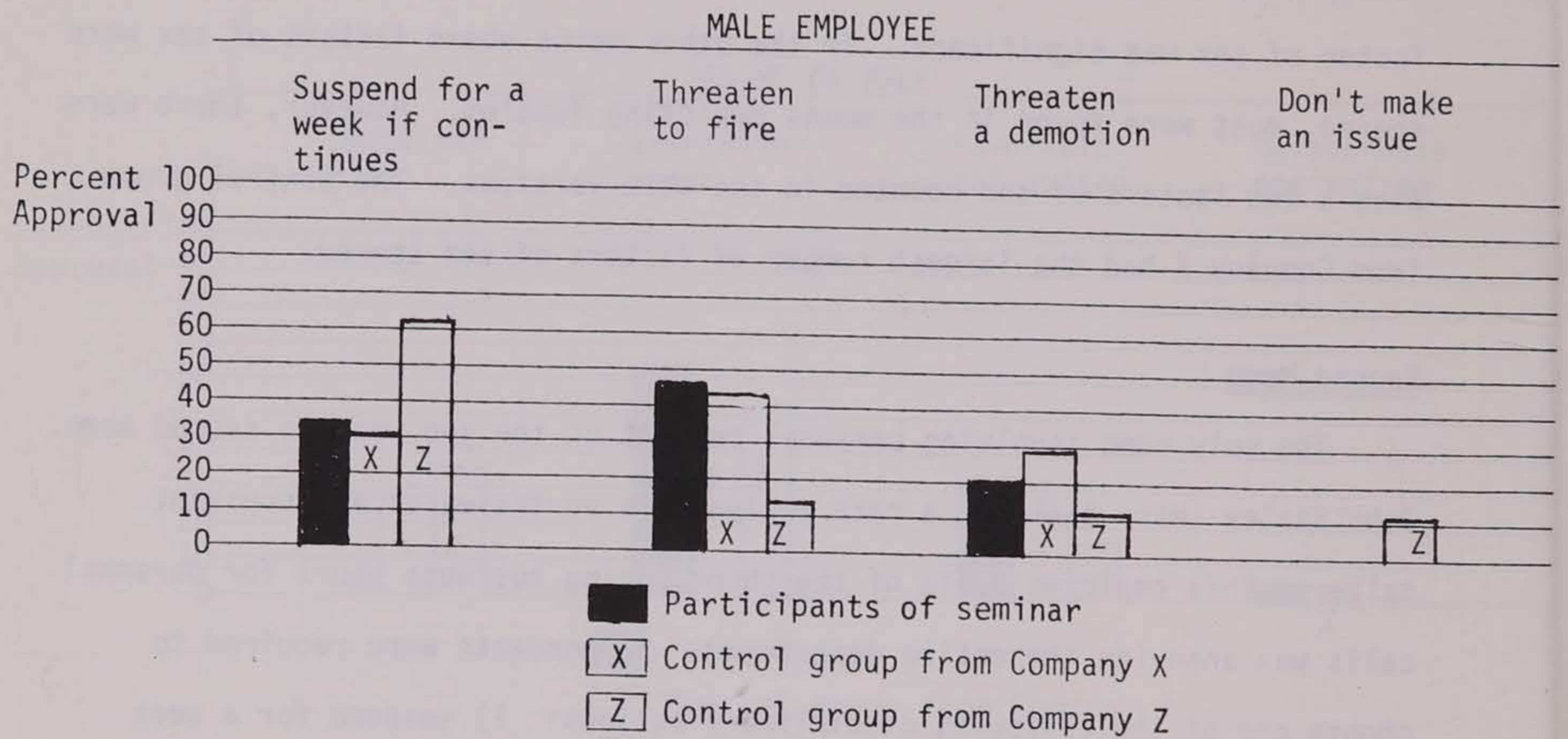
The results from this memo produced the most striking support for the general hypothesis as summarized in Chart XII-3. The two control groups were apt to suspend John Bailey while being more likely to fire Mary Bailey. In Harvard's original questionnaire, a memo describing a problem of tardiness produced similar results. In Harvard's survey, stronger disciplinary action was chosen more often for the female compared to the male employee.

Third Memo

The third memo required a decision on whether or not to give an employee a pay increase. The memo described Central Power Company (the hypothetical

CHART XII-3

RESPONSES TO SECOND MEMO



company) as attempting to limit all pay increases to 4 percent. The company's best junior analyst, Jeanne Jones (Thomas Jones), requested a pay increase of 10 percent. The following responses were presented as options: 1) offer the employee a 5 percent pay increase above and beyond the 4 percent; 2) promote the employee; 3) promote the employee only after she (he) has finally quit; and 4) do nothing.

No differences were detected between the three groups' responses, as shown in Chart XII-4. All three groups tended to recommend no action more often for the female employee than for the male employee and recommended promotion more often for the male than for the female employee.

Fourth Memo

The fourth memo described a situation where an employee was asking advice about an immediate boss and supervisor, Doug Clayton (Ruth Clayton). The problem concerned the immediate supervisor's inability to delegate work and responsibility to the employee. Four possible solutions were included in the responses: 1) call the employee in and make it his/her responsibility to solve the problem with Mr. (Miss) Clayton; 2) call Mr. (Miss) Clayton in to explain the problem and proceed with a correctional interview; 3) call a meeting with the employee and the supervisor to settle the issue; and 4) take no action until the problem has been researched.

The results obtained from the three groups (see Chart XII-5) indicated that the participants and the control group from Company Z were more likely to call in Ruth Clayton for a correctional interview than Doug Clayton. This response perhaps indicates a greater tendency to be paternalistic with the female supervisor as compared to the male supervisor. The control group from Company X, however, chose the various responses for the two forms in

CHART XII-4
 RESPONSES TO THIRD MEMO

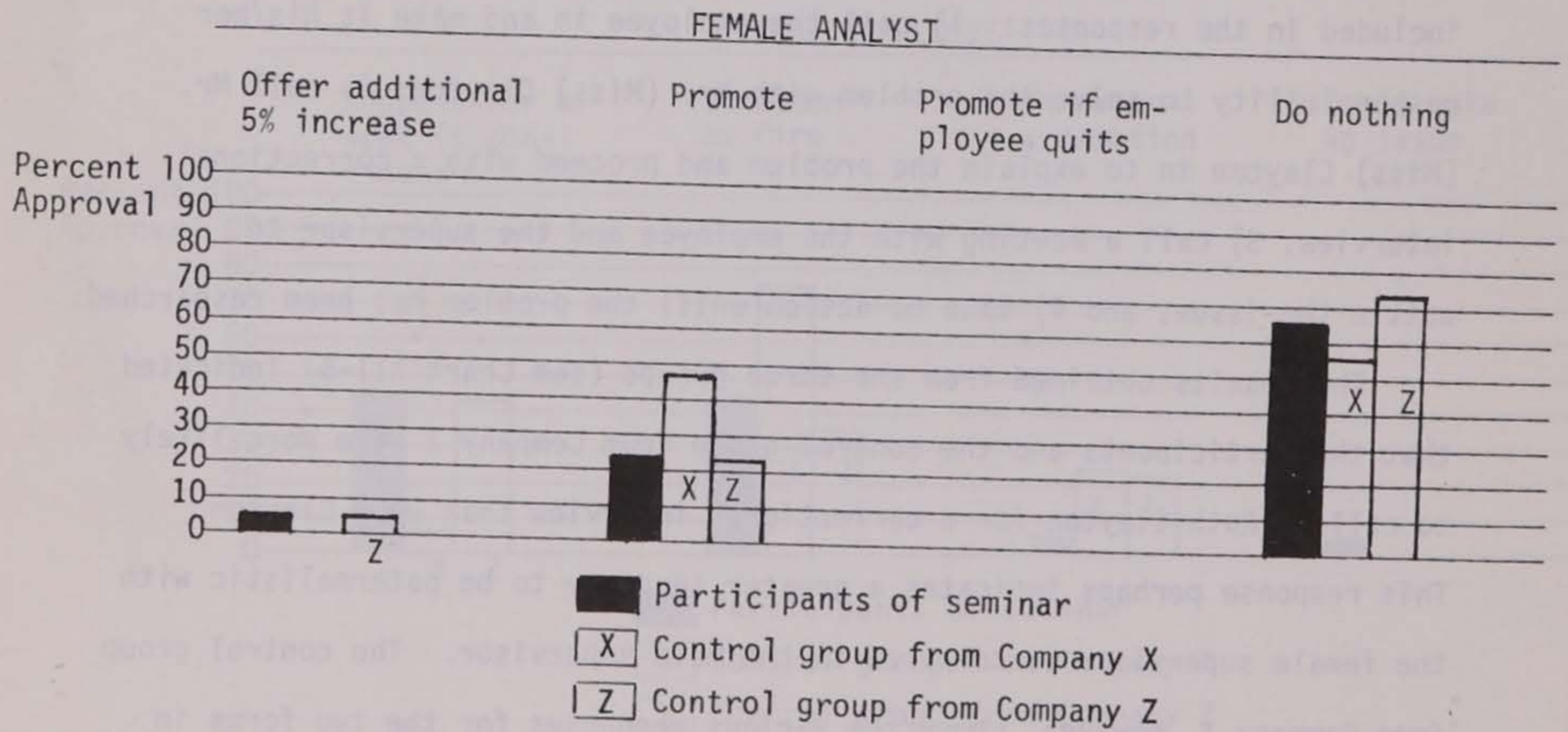
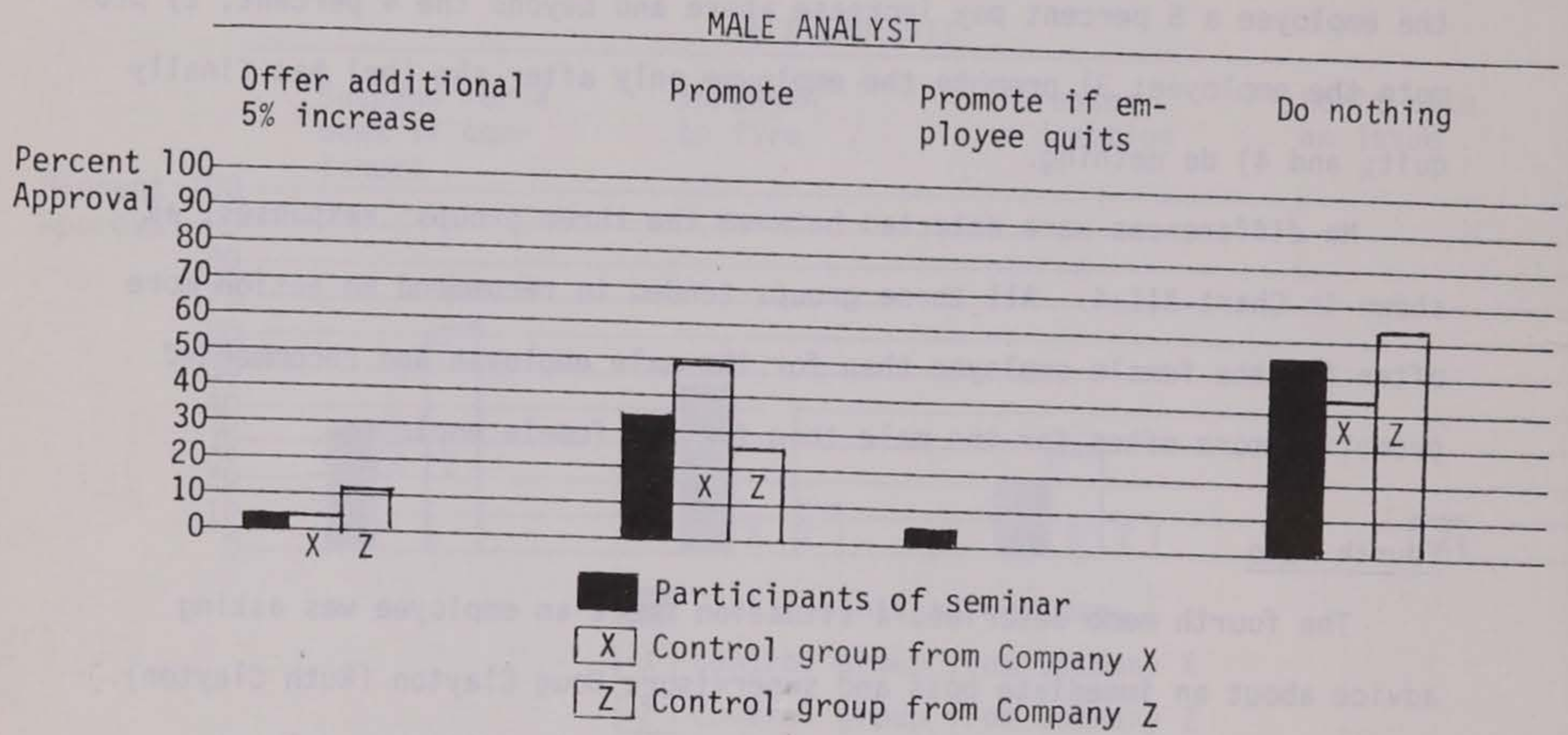
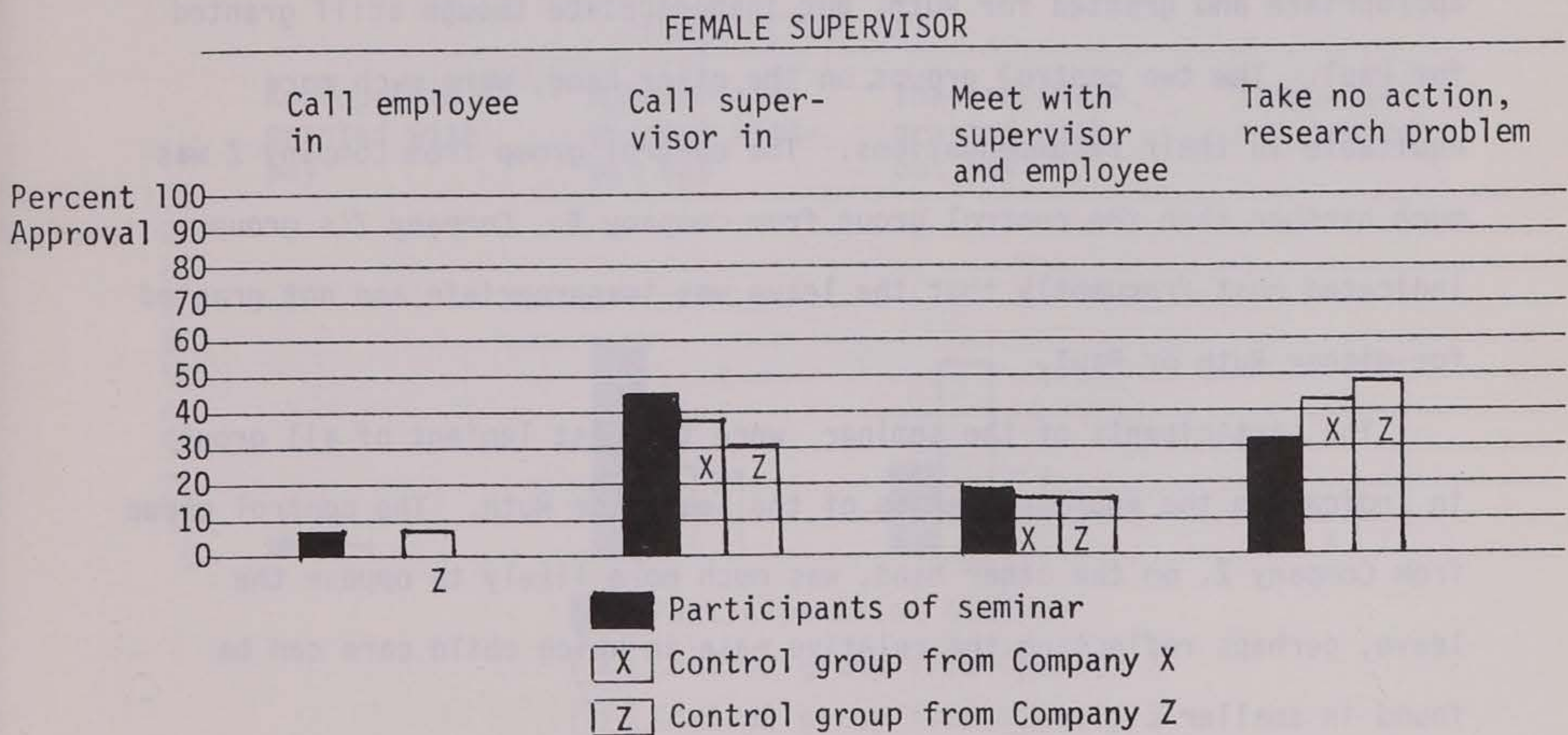
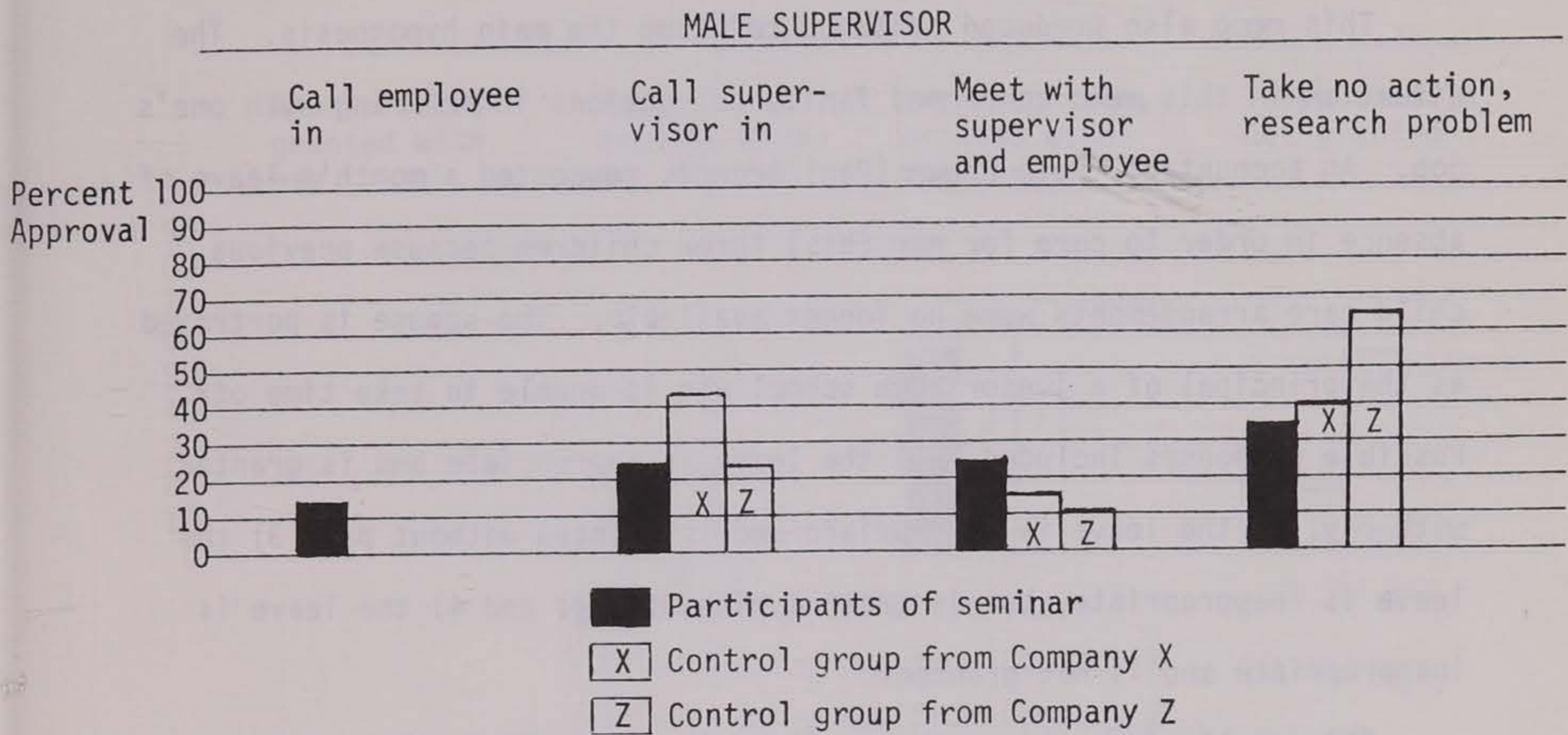


CHART XII-5

RESPONSES TO FOURTH MEMO



approximately equal proportions. This memo did not support the general hypothesis.

Fifth Memo

This memo also produced evidence refuting the main hypothesis. The situation in this memo concerned family obligations interfering with one's job. An accountant, Ruth Brown (Paul Brown), requested a month's leave of absence in order to care for her (his) three children because previous child care arrangements were no longer available. The spouse is portrayed as the principal of a junior high school who is unable to take time off. Possible responses included: 1) the leave is appropriate and is granted with pay; 2) the leave is appropriate and is granted without pay; 3) the leave is inappropriate, but is granted without pay; and 4) the leave is inappropriate and is not granted.

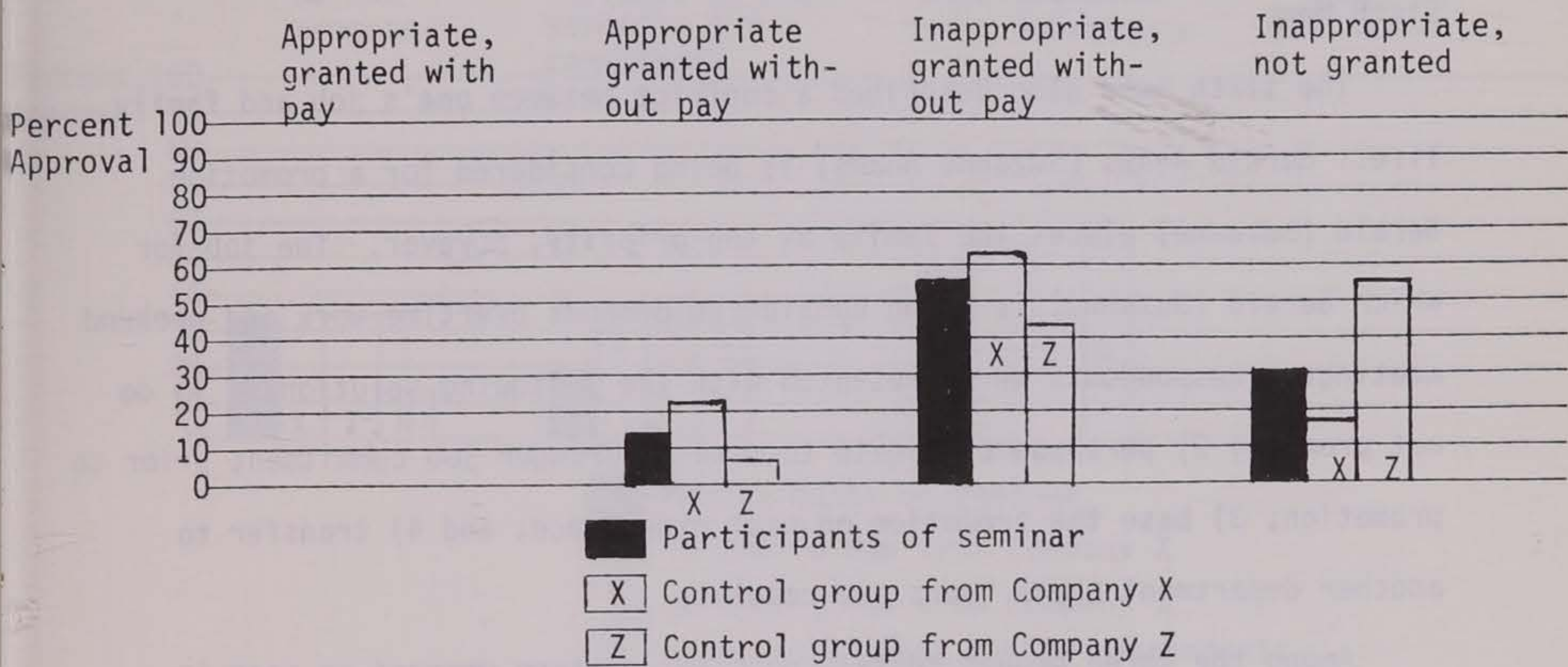
The results from this memo are given in Chart XII-6. The participants of the seminar were more likely to indicate that the leave of absence was appropriate and granted for Ruth, but inappropriate though still granted for Paul. The two control groups, on the other hand, were much more equitable in their recommendations. The control group from Company Z was much harsher than the control group from Company X. Company Z's group indicated most frequently that the leave was inappropriate and not granted for either Ruth or Paul.

The participants of the seminar were the most lenient of all groups in indicating the appropriateness of the leave for Ruth. The control group from Company Z, on the other hand, was much more likely to oppose the leave, perhaps reflecting the relative ease in which child care can be found in smaller cities.

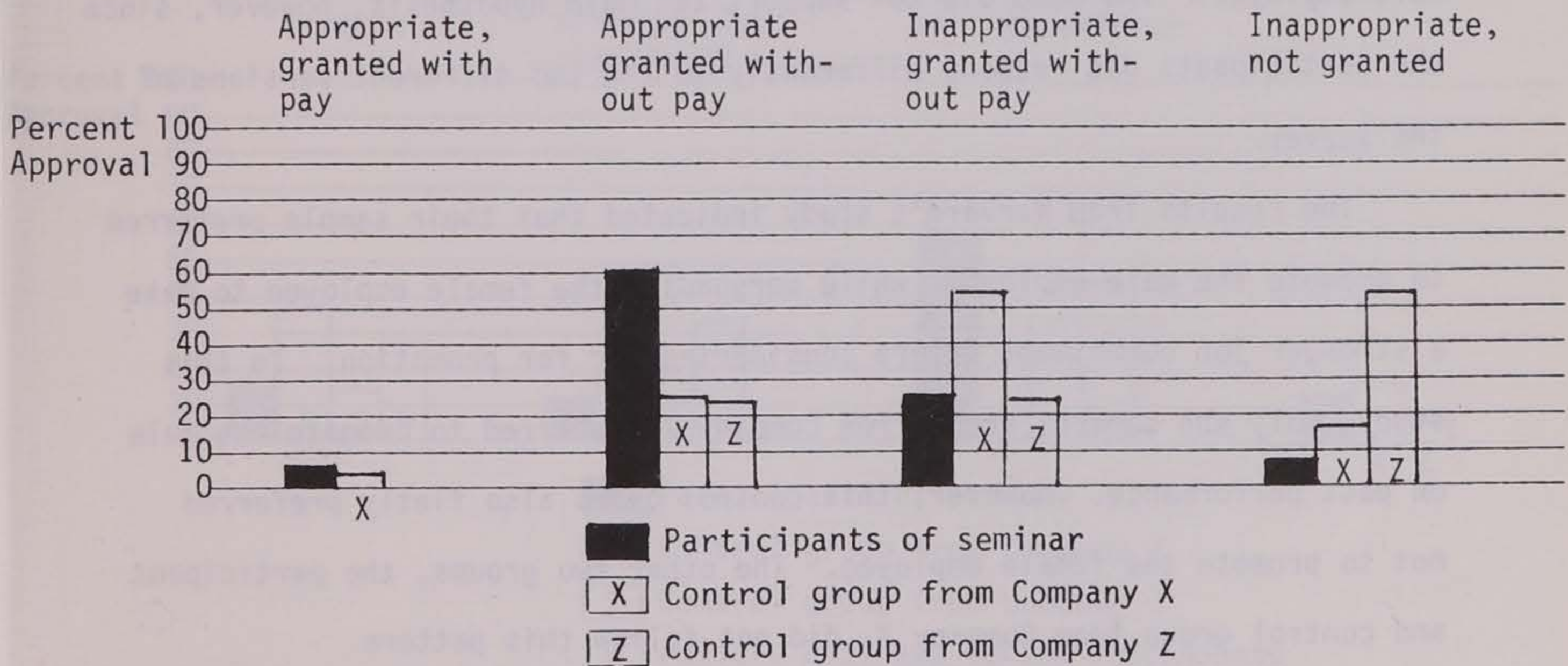
CHART XII-6

RESPONSES TO FIFTH MEMO

MALE ACCOUNTANT



FEMALE ACCOUNTANT



Harvard's survey results for this memo corresponded more with the participant group than with the control groups of our survey. Harvard's results indicated that managers tend to feel that it is more appropriate to give females time off for family obligations than for male employees.³

Sixth Memo

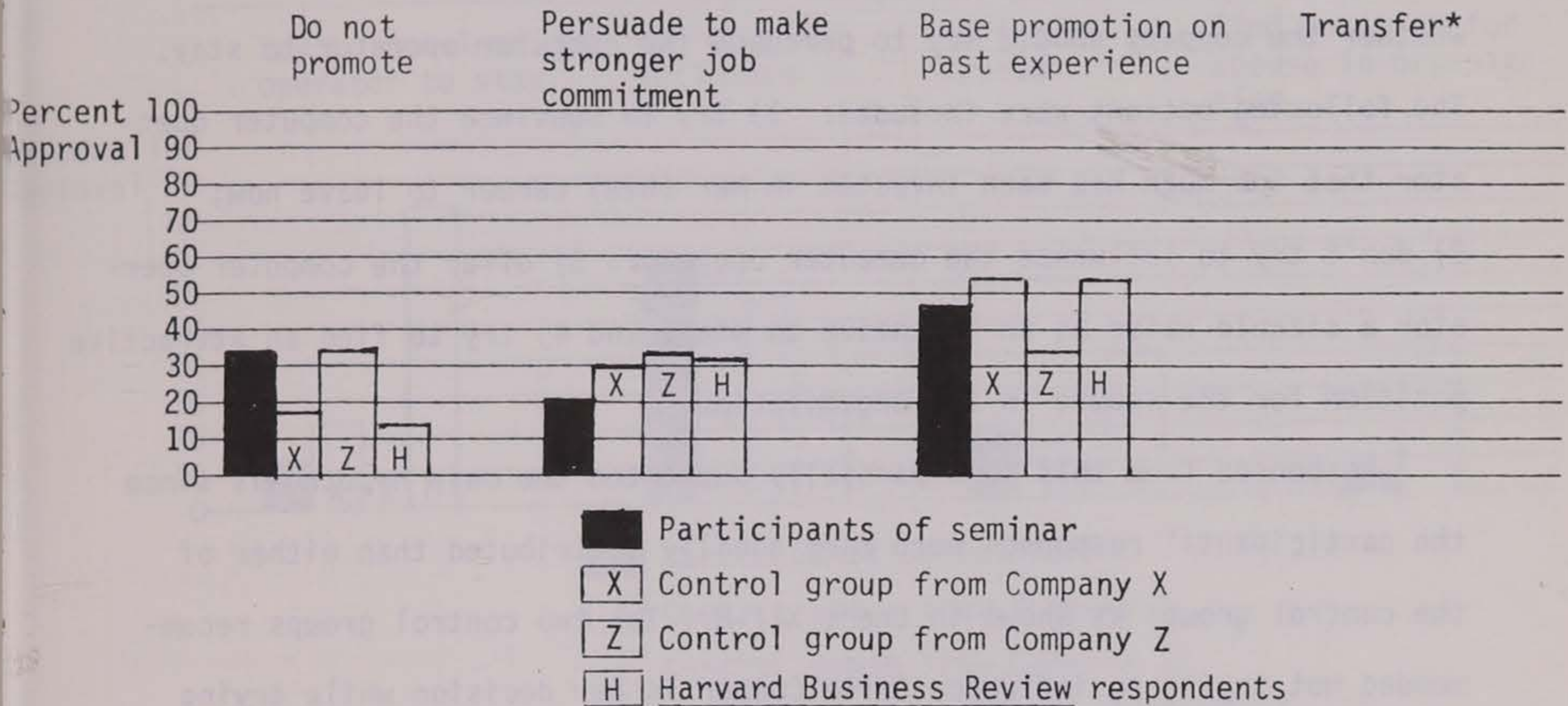
The sixth memo also described a conflict between one's job and family life. Gerald Adams (Suzanne Adams) is being considered for a promotion. Gerald (Suzanne) places the family as top priority, however. The job for which Gerald (Suzanne) is being considered demands overtime work and weekend meetings. Respondents were presented with the following solutions: 1) do not promote; 2) persuade candidate to make a stronger job commitment prior to promotion; 3) base the promotion on past experience; and 4) transfer to another department where hours are regular.

Among the three groups tested, no clear pattern emerged as seen in Chart XII-7. All three groups had some persons who recommended transferring the woman to a job with regular hours, but none recommended transferring the male employee. The memo did not support the main hypothesis, however, since the participants did respond differently to the two different versions of the survey.

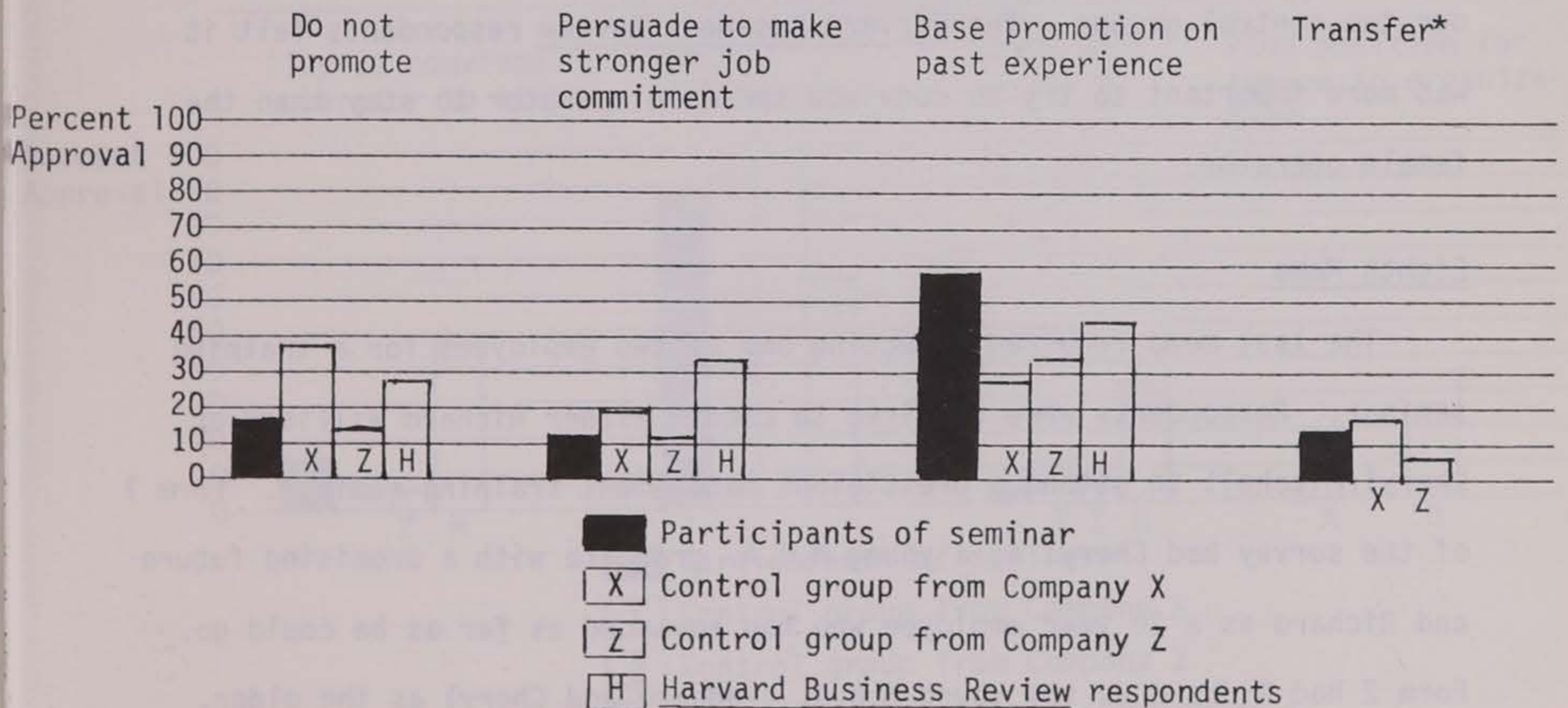
The results from Harvard's study indicated that their sample preferred to promote the male employee, while persuading the female employee to make a stronger job commitment before considering her for promotion. In this study, only the control group from Company X preferred to promote the male on past performance. However, this control group also flatly preferred not to promote the female employee. The other two groups, the participant and control group from Company Z, did not follow this pattern.

CHART XII-7
 RESPONSES TO SIXTH MEMO

MALE CANDIDATE



FEMALE CANDIDATE



*NOTE: The option to transfer was not included on the Harvard Business Review survey

The results from this memo did not support the hypothesis. The control group from Company Z, as seen in Chart XII-9, chose the young employee of either sex three times as often as the older employee. The participant group, on the other hand, tended to choose the younger employee but picked Richard more often on both forms of the survey. The control group from Company X chose Richard (either young or old) twice as often as they picked Cheryl.

In a similar memo, the respondents of the Harvard Business Review survey chose the older employee regardless of sex more often than the younger employee. When the younger employee was picked, however, the male was chosen more often than the female.

RESULTS OF THE HYPOTHESES

The main hypothesis to the Model III seminar, the Supervisor Awareness Seminar, is reiterated below:

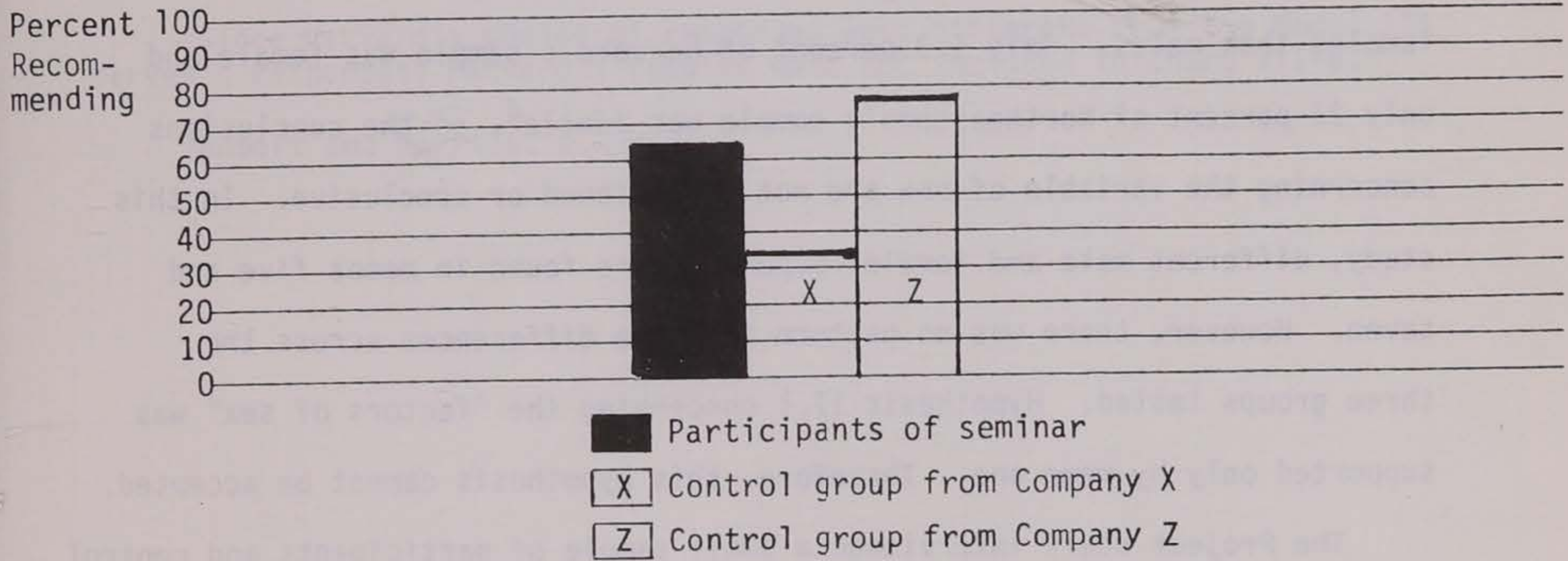
Hypothesis 16.1 The participants of the seminar will not have significantly different mean scores for all questions between Form 1 and Form 2 while the control group(s) will have significantly different mean scores on all questions between Form 1 and Form 2.

The results of the Employment Project survey did not support the general hypothesis. There were some trends in the direction of the hypothesis, however. Memo two supported the hypothesis and memo seven partially supported it. In several other memos, the participants and the control group from Company Z had similar responses on both forms of the survey. This indicates a more equal treatment of the sexes in business in our study when compared to the results of Harvard's survey. This result cannot be attributed to the Supervisor Awareness Seminar, however, since the control group from Company Z had similar responses to the participants of the seminar.

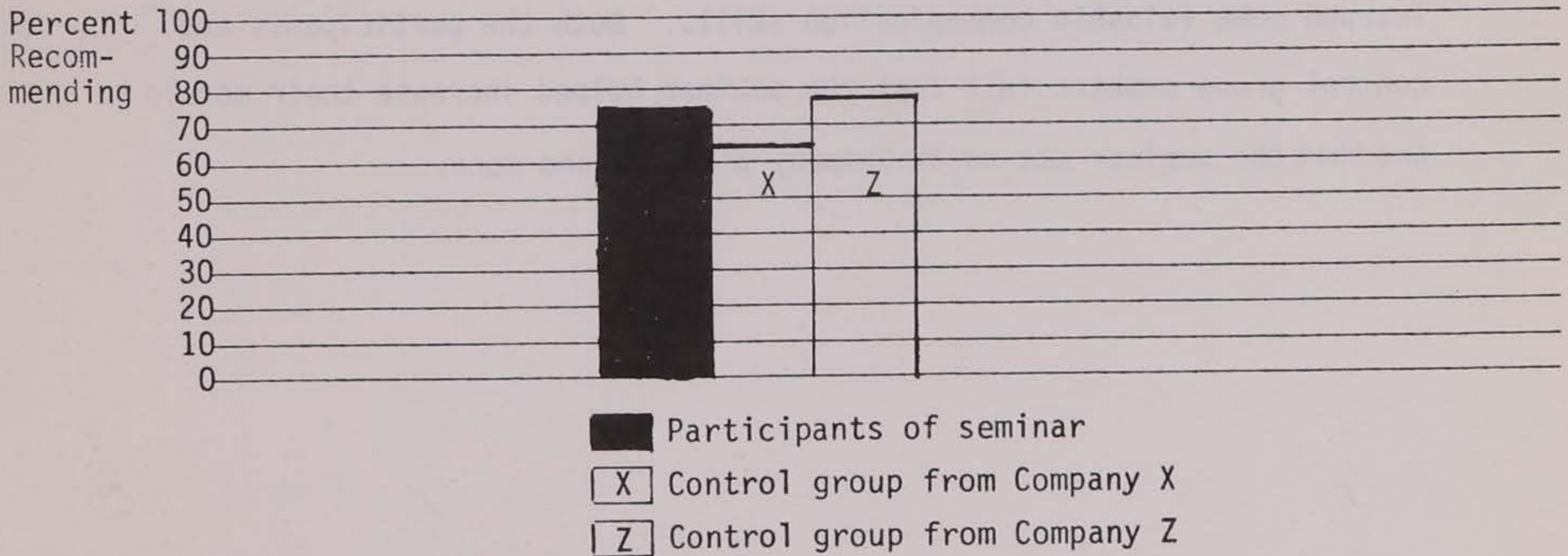
CHART XII-9

RESPONSES TO EIGHTH MEMO

YOUNG FEMALE EMPLOYEE



YOUNG MALE EMPLOYEE



Other variables mentioned in Hypothesis 16.1, which might have influenced the respondents' recommendations on the memos, were found to be insignificant. Since the sample sizes were small, any significant extraneous variables might be veiled. For example, both the Harvard sample and a sample from a Northeastern University study found differences in male and female responses to the memos. However, both samples included fewer females than males. Only 5.3 percent of Harvard's sample was female and only 23 percent of Northeastern's sample was female⁴, so the conclusions concerning the variable of sex are not established or conclusive. In this study, different male and female responses were found in memos five and seven. However, there was no pattern in these differences across the three groups tested. Hypothesis 17.1 concerning the "factors of sex" was supported only by memo one. Therefore, this hypothesis cannot be accepted.

The Project staff interviewed a small sample of participants and control group members from Company X to determine if any secondary seminar effects or benefits could be established. From the participant interviews, two benefits were most often mentioned. First, the participants indicated they had an increased awareness of sex stereotypes. Second, they felt they learned some valuable communication skills. Both the participants and control group members felt that the seminar helped increase their morale and that the seminar was worth Company X's time and money.

FOOTNOTES: CHAPTER XII

¹Rosen and Jerdee's questionnaire and results can be found in "Sex Stereotyping in the Executive Suite," Harvard Business Review, (March-April, 1974), pp. 45-58.

²Christine Hobart and Karen Harries, "Sex-Role Stereotyping Among Future Managers," in Donald Jewell (ed.), Women and Management: An Expanding Role, (Atlanta: Publishing Services Division, Georgia State University, 1977), p. 201.

³Since Harvard's choice of responses were different from the Model III survey's responses, Harvard's results were not included in Chart XII-6.

⁴Hobart and Harries, p. 201.

CHAPTER XIII

CONCLUSIONS

INTRODUCTION

Many important conclusions about the effects of management training seminars and the advancement of women into management and supervisory positions were documented in this research. This chapter summarizes these findings and examines some practical applications of the findings for the employer who wants to use training seminars and for the female employee who desires training.

The research results are limited, however, since only six management training seminars were tested. Other seminars could yield different results; the same seminars offered at other times and taught by other instructors could also produce different results. The one year testing period may have been an inadequate time span for observing appreciable results from the participants. The fact that this sample was restricted to female employees who aspired to management positions and had completed at least one year of college also limits the scope of the findings. In addition, many participants enrolled in other classes and training seminars throughout the year. The effects of additional seminars and classes could easily influence the results obtained from this research. Finally, our sample size was relatively small for testing so many variables. With these limitations in mind, it is still possible to gain many insights into the results and effects of training seminars on the promotability of women in business.

WHAT DO TRAINING SEMINARS ACCOMPLISH?

Primarily, the training seminars offered the participants an opportunity to explore new ideas and techniques. The seminars provided safe,

supportive environments for participants to examine their daily routines and evaluate their ability to effectively accomplish their goals in their work and personal lives.

The training seminars offered new choices and alternatives for more effective use of personnel, time, and talent in the participant's work environment. The training seminars, however, could only offer new choices to their participants; they could not force the participants to incorporate the new skills and techniques into their daily lives. Also, the seminars did not alter the participants' work environment. The old problems, the same supervisors, and the established policies and routines were awaiting the participants when they returned back to work.

For some participants, the seminars offered a change in their routines and a chance to escape their work situations. It became a time for them to ponder their work and personal problems and to seek help and new ideas from others with similar problems. The seminars provided new perspectives and gave the women an opportunity to discover other work settings, new solutions to problems and career choices, as well as to meet new people and learn about their employment and problems.

Are Training Seminars Successful in Advancing Women Into Management Positions?

In determining if training seminars helped advance women into management positions, this research examined three variables over a one year span. These variables were: increase in pay, number of promotions, and increase in authority. None of these variables were found to be significantly affected by attendance in any of the training seminars as compared to a control group who did not attend any of the seminars. Although the trend in the number of promotions was toward more promotions for seminar participants,

none of the changes in the three main variables approached a statistically significant level.

This does not mean, however, that some participants were not helped by the seminars or that the seminars did not enhance the promotability of some participants. It does mean that a training seminar could not be isolated as the decisive factor in determining whether a participant was advanced. Other factors such as experience, personality, performance, and job vacancies must be considered in determining advancement. These factors were not tested in this research.

Are Training Seminars Successful in Helping Develop Women for Management Positions?

From these research findings, management training seminars were not, in and of themselves, able to develop women for management positions. The development of managers still is a long process which involves many areas and abilities including supervising, decision-making, budgeting, delegating, planning, organizing, taking direction, and effectively controlling the day to day activities of the work unit. No evidence was found in this research to suggest that training seminars either substantially helped or hindered in this process.

We did observe, however, that training seminars were helpful to non-supervisory personnel in determining whether they wanted to become managers or train to become managers. A short seminar on management skills gave them an opportunity to learn about the role of management, skills necessary for managers, and general problems faced by managers.

Some participants noted on their evaluations that a number of the skills presented in the training seminars were not applicable to their job situations. Even if a woman learns a skill and wants to use the skill on the

job, her particular job situation may not allow her to do so. For example, even though a participant learns about management by objectives, if her company does not use the technique the woman probably would have difficulty gaining the support to incorporate the technique into her unit's operation. In this sense, the one year time frame for this research could easily be inadequate. The new skills taught in the training seminars and necessary for the development of women managers might require more time for practical application.

In researching the development of the female participants, we asked their supervisors to rate participants' supervisory potential and their overall job performance. This questionnaire was administered both before the seminars and one year after the seminars. No differences in the average responses were noted, and no differences between the seminar participants and the control group were ascertained. The research questions used, however, may not have been accurate in measuring the development of women as potential managers since the questions relied on the supervisors' perceptions.

Which Types of Training Seminars are Most Successful in Advancing Women Into Management?

For this research, the training seminars conducted were divided into three models. Model I included training seminars which attempted to change women's attitudes about themselves and their potential. The seminars conducted under this model included the Achievement Motivation Seminar and the Assertion Training Seminar. Model II seminars were designed to introduce and develop business skills in the women. Under this model, the seminars conducted included the Management Task Seminar, the Management Communication Seminar and the Combination Management Task and Communication Seminar.

Model III included the seminar which attempted to alter both male and female supervisors' attitudes toward having female managers in their companies. The Supervisor Awareness Seminar was the one seminar conducted under Model III.

No significant differences in the success of the Model I and Model II seminars were detected. In fact, no statistical differences were detected between the participants who went through training and the women in the control group. The lack of differences does not alter the validity of the models, but does indicate that training seminars, in and of themselves, do not alter the general underutilization of women in management positions. The skills postulated in both Model I and Model II were considered necessary and useful by the seminar participants. The question remains, though, at which point the acquisition of these skills, as outlined in the models (see Chart II-2), enables women to advance into management positions in greater numbers.

The results of the Model III seminar, the Supervisor Awareness Seminar, were also inconclusive. The seminar did receive support and positive recommendations from the case study company which had sent most of its managers through the seminar. There were some indications that the seminar contributed to the development of attitudes that considered subordinates' qualifications rather than gender in business situations. This same seminar, however, received scant recognition and mediocre recommendations from the supervisors who attended the seminar conducted by this research project. This suggests that the seminar's success is dependent upon the support of the company and that the seminar might be more successful if a large proportion of a company's management attends the seminar. No direct evidence was gathered to determine if this seminar actually helped promote women into

management positions. Further research into the models and their relative importance should be conducted to determine which suggested change factors in the models can most easily be employed to help qualified women advance to management positions.

Are New Skills and Techniques Learned and
Used from Training Seminars?

From the subjective one year evaluations of the Model I and Model II training seminars by the participants, there was a strong indication that the participants acquired new skills and techniques and used them in their work and personal lives. The skills and techniques most often mentioned in the evaluations, as noted in Chapter XI, included assertive techniques, time management, communication skills, construction of realistic goals, and the writing of objectives. Time management, in particular, seemed to have been used most frequently by the participants, since the skill is easily applied to both work and personal lives.

THE PRACTICAL APPLICABILITY OF THESE RESEARCH FINDINGS

Several important findings and applications can be drawn from this research on the six management training seminars. These observed and documented findings are important for both the employer who is considering using training seminars and the female employee who desires training. These findings are presented below. Many of the following suggestions are equally applicable to both employers and employees.

For the Employer

1. These seminars taught skills which could be utilized by participants in all the industries represented in this research which were finance, insurance, service and retail trade. It also appeared beneficial for the participants

to see the similarities and differences between types of industries and different companies.

2. The support given to the participants by the company and their supervisors was important. The participants from one company, in particular, felt their work was more pressing than the seminars and indicated they could not take the time from company matters to attend. However, some of the participants from this company expressed dissatisfaction at their inability to attend all the sessions. The continuity of the seminars was often interrupted by participants entering and leaving at odd times and asking questions which earlier had been answered.

3. The morale of the employees was improved by seminar attendance. This was indicated in our interviews with both participants and control group members from the case study company who attended the Supervisor Awareness Seminar. The employees strongly indicated that they felt closer to the company since the company invested its time and money in their progress. From this standpoint, the employees indicated the seminar had been worth the company's time and money.

4. The employer should know the objectives of the training seminars and ask the instructor(s) to specify the goals of the seminars. Do these goals and objectives meet the needs of the company? If not, then some other seminars may be preferable. This implies, of course, that a company has defined its training needs. The participants of seminars feel more positive toward a seminar if they understand its goals and why they were asked to attend. For this reason alone, a company should know its own training objectives and the specific goals of any seminars the company conducts.

5. Employers should understand the philosophical and academic assumptions underlying a seminar. In other words, do the company philosophy and policies correspond with the seminar's philosophy? The Achievement Motivation

Seminar, for example, stresses individual initiative and is not intended to motivate people to team cooperation. Also, this seminar appeared to activate feelings of dissatisfaction since more women who attended this seminar changed companies than women in any of the other seminars. Without understanding the theory of Achievement Motivation, the objective of this seminar might easily be misinterpreted or misapplied.

6. Attending sessions of different seminars is a good way to compare them. This is the best way to understand the techniques being taught, to compare the styles and the effectiveness of the seminar leaders, and to judge both the participants' acquisition of the skills and their enthusiasm for the seminar.

7. Seminar support groups were found to be most effective when formed early in the seminar and continued throughout. Close support groups are a good method for developing relationships between people. Support groups do involve potential drawbacks, however. If members of a support group do not get along, the participants will be deterred from learning what the seminar has to offer.

8. The scheduling of seminars is important. If seminars are to be held once a week, Fridays are not good days since the skills learned will be somewhat dimmed by Monday. Seminars which are held for less than 2 or 3 hours at a time have difficulty completing the objectives outlined. For the benefit of the participants' schedules and for reviewing and reinforcing skills taught in the seminar, meeting once a week for a period of weeks appeared to be the most effective schedule.

9. Evaluations of the seminars are important. Evaluations help determine if the seminars were enjoyed and effectively taught. Most importantly, the proper evaluation procedures can also test the amount learned, the

behavioral changes, and the tangible results of the seminars. It is important for both the company and the training leaders to determine if the objectives and goals of the seminar were met. This research found that evaluations given immediately after the seminar were similar to the evaluations administered one year later with regard to perceptions of the skills learned and used.

10. Management training seminars should not be viewed as the only tool necessary to promote more women into management and supervisory positions. Instead, management training seminars can serve as a supplement to Affirmative Action plans to help women decide whether they desire supervisory positions and to help them learn the skills necessary for those positions. Training seminars also help the employer identify the women who desire and are motivated for management positions and as a guide to women's skill development.

For the Female Employee

1. Each employee personally selecting training should evaluate her training needs, and then try to find a seminar that meets those needs. Decide, at least, if you want a seminar that concentrates on learning business skills or learning attitudinal and psychological techniques. The most enthusiastic participants seemed to be the women who knew what they wanted to learn from seminars.

2. Try to find out about the seminar leaders and their style of teaching. Informal styles seemed to relax the participants better than formal lecture styles. In addition, we found that women's problems were best discussed in the seminars that addressed the problems indirectly. The Model II seminars, especially the Communication Seminars, allowed discussion of family and work related problems through the learning of techniques and skills.

3. If you want to try to solve problems directly relating to your needs as a woman, such as how to resolve child care problems or how to supervise hostile male employees, enroll in a seminar that has at least one female instructor. We found that female instructors have more empathy towards these type of problems, since they have experienced many of the problems themselves. If this area is a major concern to you, try to ask someone who has previously attended the seminar about the instructor's attitudes or try to talk personally with the instructor. Not all female instructors will be empathetic, and not all male instructors will be insensitive to these problems. It is better to determine the instructor's style before the seminar has started.

4. If you are uncertain about entering a management or supervisory position, a general Model II training seminar or management skills seminar with an overview of necessary skills should help you decide.

5. Be cautious about a training seminar that offers sweeping promises for personal change or growth. Seminars that promise promotion, pay increases, or major changes in your attitudes, motivation, or behavior are probably overstating their effects. Ask a seminar leader before the seminar for proof of their promises and make a judgement on their reliability. Disappointment in a seminar will undercut any value in the skills and techniques that are actually gained.

6. Women do have different work related problems from men. All female seminars are an excellent forum for discussing work problems that women encounter. In the groups with female instructors there seemed to be fewer social games played and the women seemed more relaxed and willing to share their concerns than in the seminars led by male instructors. Training seminars create a good opportunity and atmosphere for discussing work and

personal problems and it is important to feel comfortable in a seminar in order to identify and articulate problems and concerns.

SUGGESTIONS FOR FURTHER RESEARCH

Further research into the evaluation of the tangible results of management training seminars is necessary. Since this research has been one of the few studies attempting to measure seminar results over a period of time, the debate on the long range effects of training seminars is still open to controversy.

Variables and measuring instruments able to measure more subtle changes in the participants need to be developed and tested. Hard result variables that were used in this research, such as the increase in pay and authority and number of promotions, did not prove sensitive enough to reflect any substantial changes in seminar participants. The comparison of the effects of management training programs on male and female participants is also an important topic for future training and development research.

It is well documented that women are still underutilized in management positions. The struggle to get qualified women into these positions will continue. Further research into how to help women advance to management positions is vital and necessary. Over a year's time, management training seminars do not appear to facilitate the process of advancing women in general, although they may help a few individual women. To aid the transition toward greater equality of the sexes in management positions, other methods and procedures should be researched and tested for benefit of the employers as well as for the underutilized female employees.

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APPENDIX A

ADVISORY TASK FORCE MEMBERS

Edward Anson, Edward Anson and Associates, Sioux City

Frances Calhoon, security guard and member, Iowa Commission on the Status of Women, Ames

Betty Durden, Director of Personnel and Special Assistant for Equal Opportunity Programs, Drake University, Des Moines; former chairperson, Governor Robert D. Ray's Commission on the Status of Women and former member, Iowa Commission on the Status of Women

Dr. Thomas W. Ferratt, Associate Professor of Management, College of Business Administration, Drake University, Des Moines

Dr. Edwin Lewis, Professor of Psychology and Assistant Vice President for Academic Affairs, Iowa State University; former member, Governor Robert D. Ray's Commission on the Status of Women, Ames

Mary Riche-Warren, General Manager, Mainstreet Enterprises; former Director of the Employment Project, Des Moines

Dalles L. Schroeder, Vice President-Personnel, The Bankers Life Company, Des Moines

Dr. Larry E. Short, Associate Professor of Management, College of Business Administration, Drake University, Des Moines

Keith Schroeder, Director of Staff Services, Job Service of Iowa, Des Moines

Will C. Smith, Vice President-Personnel, Iowa Des Moines National Bank, Des Moines

Betty Talkington, Director of Women's Activities, Iowa Federation of Labor; former member and officer, Governor Harold Hughes' Commission on the Status of Women, Des Moines

Frances Van Winkle, Deputy Director, Iowa Merit Employment Department; member, Iowa Commission on the Status of Women, Des Moines

IOWA COMMISSION ON THE STATUS OF WOMEN

Phyllis Howlett, Chairperson Des Moines	Glenna H. Johnson Ottumwa
Edward M. Anson Sioux City	Juanita Lopez Davenport
Joseph Bertroche Indianola	Mary Jean Montgomery Spencer
Frances Calhoon Huxley	Anita Northup Lenox
Kathleen Davis Burlington	Kristelle Petersen Des Moines
Mary Peterson-Drennan Shelby	Joan Poe Cedar Falls
Marilyn J. Dunn Cedar Rapids	Edith Sackett Spencer
Mildred I. Free1 Iowa City	Sister Madeleine Marie Schmidt Ottumwa
Patricia Geadelmann Cedar Falls	Dr. David E. Scott Des Moines
Kathleen M. Green Lawton	Frances Van Winkle Des Moines
Carolyn Hannan Council Bluffs	Sandra Williams Davenport
Rosa Lucia Howell Des Moines	

APPENDIX B

EXPLANATION OF STATISTICAL PROCEDURES

ANALYSIS OF VARIANCE

In analysis of variance, a factor is an independent variable under study. Factors may be divided into experimental or classification factors. In this research the seminars were the experimental factor, while the companies were used as the main classification factor. The seminar factor was considered the most important, since it was the experimental factor.

Each combination of factors is called a treatment. In this study, we have six seminars (which includes the control group) and ten companies or a total of sixty treatment levels. Each treatment level contained three subjects or female employees to equal the 180 total women who participated. For any one variable, such as pay, the three subjects' pay increases were averaged together at each treatment level and compared to the other treatments.

Analysis of variance is based on the difference between the group averages (for example, the average pay increase of the ten factor levels included in a seminar, which would equal the average pay increases of the thirty women who attended a particular seminar) versus the overall total average (the average pay increase of the 180 women). The primary test is to determine if the variances within each group (or within each seminar) are less than the variance between the groups' averages.

The primary function of the analysis of variance model is to determine if the factor(s) chosen helps predict the outcome of the dependent variable significantly better than the use of the overall mean. For example, using the pay variable as an illustration, analysis of variance tested whether knowing the average increase of the women from seminar A and the women from company M

helped predict the salary increases of the women who attended seminar A and who worked at company M better than the overall average salary increase of the 180 women.

The basic two factor or two-way analysis of variance is shown below:¹

Equation 1
$$Y_{ijk} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij} + \epsilon_{ijk}$$

The basic one factor or one-way analysis of variance, on the other hand is:

Equation 2
$$Y_{ijk} = \mu + \alpha_i + \epsilon_{ijk}$$

Where:

Y_{ijk} is k-th female employee assigned to the i-th training seminar from j-th company.

μ is a constant.

α_i are constants subject to the restriction that the sum of all α_i is equal to 0.

β_j are constants subject to the restriction that all β_j is equal to 0.

$(\alpha\beta)_{ij}$ are constants subject to the restriction that the sum of all $(\alpha\beta)_{ij}$ is equal to 0 for both the i's and the j's.

ϵ_{ijk} is the error term which is independent with a normal distribution, a mean of 0, and a variance of σ^2 (or a homogeneous variance).

The one-way analysis of variance differs from the two-way analysis of variance only by the exclusion of one of the factors. Therefore, the interaction part of the equation $(\alpha\beta)_{ij}$ is also eliminated, since only the effects of one factor are being tested in the one-way analysis of variance.

A further breakdown of Equation 1 can be made as follows:

Equation 3
$$Y_{ijk} = (\mu + \alpha_i + \beta_j + (\alpha\beta)_{ij}) + \epsilon_{ijk}$$

or

$$\text{Total deviation} = \begin{array}{l} \text{(Deviation of factor} \\ \text{averages from over-} \\ \text{all average)} \end{array} + \begin{array}{l} \text{(Deviation within} \\ \text{each factor from} \\ \text{each factor average)} \end{array}$$

or

$$\text{Total Sum of Squares} = \begin{array}{l} \text{(Explained Sum} \\ \text{of Squares)} \end{array} + \begin{array}{l} \text{(Residual Sum of} \\ \text{Squares)} \end{array}$$

This equation is helpful in understanding the various parts of the basic analysis of variance (ANOVA) table. The mathematical equations used in computing

the various components of the ANOVA table will not be presented here, but can be found in most statistical textbooks.²

A hypothetical example of an ANOVA table, used only for illustrative purposes, showing the effects of the seminars and companies on the women's pay increases is shown below:

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main effects	24.25	14	1.73	2.73	.002
Seminar	2.80	5	.56	.88	.50
Company	21.45	9	2.38	3.75	.001
2-Way Interaction	14.11	45	.314	.494	.996
Explained	38.36	59	.650	1.02	.450
Residual	68.54	108	.635		
Total	106.95	167	.64		

As indicated in Equation 3 above, the total sum of squares equals the explained sum of squares plus the residual sum of squares. Equation 4 below divides the explained sum of squares:

$$\text{Equation 4} \quad \text{Explained Sum of Squares} = (\text{Main effects Sum of Squares}) + (\text{2-Way Interaction Sum of Squares})$$

The main effects can be divided into the following:

$$\text{Equation 5} \quad \text{Main effects Sum of Squares} = (\text{Seminar Sum of Squares}) + (\text{Company Sum of Squares})$$

The seminar sum of squares measures the variability of the seminar factor averages, while the company sum of squares measures the variability of the company factor averages. The greater the variance between the averages of the five seminars and the control group and between the ten companies, the bigger

the seminar and company main effects, and the more likely the two factors help predict the dependent variable of pay. The residual sum of squares measures the variability within each seminar or within each company group. The more variable the averages within each group, the less likely the two factors help predict the independent variable.

In addition, examining the effects of the two-way interaction between the seminars and companies indicates if the two factors are distinct or if they are measuring the same effects. The smaller the interaction sum of squares, the less the two factors interacted within the model. If the interaction effects prove to be statistically significant, special interpretation of the results is necessary.

The degrees of freedom are related to the number of independent pieces of information and number of unknowns or constraints related to the different parts of the above equations. The mean squares are obtained by dividing the appropriate sum of squares by the corresponding degrees of freedom. For example, using the above ANOVA table, the mean square of the main effects:

$$\text{Equation 6} \quad \text{Main Effects Mean Squares} = \frac{\text{Main Effects Sum of Squares}}{\text{Degrees of Freedom}}$$

or

$$1.73 = \frac{24.25}{14}$$

The mean squares are not additive as were the sum of squares. In interpreting the mean squares, it is important to notice if the explained mean square is larger than the residual mean square. For only if the explained mean square is much larger (for this research, at least double the size) than the residual mean square, can it be said that the model helps to predict the amount of pay increases of the subjects.

Three primary F statistical tests are made from the two-way analysis of

variance model. First, the seminar effects are measured by the following ratio:

$$\text{Equation 7} \quad F_{\text{seminar}} = \frac{\text{Seminar mean square}}{\text{Residual mean square}}$$

Second, the F test measuring the company factor effects is:

$$\text{Equation 8} \quad F_{\text{company}} = \frac{\text{Company mean square}}{\text{Residual mean square}}$$

Third, the F test measuring the two-way interaction effects between the company factor and the seminar factor:

$$\text{Equation 9} \quad F_{\text{Two-way interaction}} = \frac{\text{Two-way interaction mean square}}{\text{Residual mean square}}$$

In the one-way analysis of variance model, the F test shown in Equation 7 is appropriate.

In the ANOVA table above, the F ratio for the company factor was significant at the .001 level, which falls below the .05 level needed for acceptance. Therefore, in this hypothetical situation, the company where the subjects are employed seems to be significant in predicting pay increases of the participants. The variance of pay increases between companies was significantly larger than the variances within each company. The seminar factor, however, was not significant. The seminars, in this hypothetical example, did not seem to help predict the subjects' pay increases. Therefore, using this example, the seminars did not significantly contribute to any increase in the subjects' pay. The two-way interaction effect was also not significant, so the two variables measured distinctly different aspects of pay. The results of this hypothetical example seem to indicate that a single factor analysis of variance model using only the company variable would be more appropriate than the two-way analysis of variance model.

CHI-SQUARE TEST

The chi-square test is used to establish the existence and strength of the relationship between two nominal or classification variables. (Variables such as religion, sex, level of management, or the differences between responses in each memo of the Harvard Business Review questionnaire are examples of nominal or qualitative scale measurements.) The chi-square is needed to determine if frequencies found on a contingency table are significantly different than the expected frequencies when no differences exist.³ Below are two hypothetical examples showing the differences between a significant and a not significant chi-square contingency table. The relationship being tested is whether sex is a significant factor in determining who is a supervisor in two separate companies.

COMPANY 1

Level of Management	Females	Males	Total
Non-supervisors	10	11	21
Supervisors	6	5	11
Total	16	16	32

Chi-square = 0.14
Not significant

COMPANY 2

Level of Management	Females	Males	Total
Non-supervisors	14	7	21
Supervisors	2	9	11
Total	16	16	32

Chi-square = 6.78
Significant to .01 level

To achieve a significant chi-square at the .05 level in this case, a chi-square of 3.84 or higher was needed. Therefore, we can say that in Company 2, sex was a key determining characteristic of who was a supervisor, whereas in Company 1, sex was not a determining characteristic.

The chi-square statistic is sensitive to sample size and strength or degree of relationship. In other words, significance can easily be attained with small sample sizes and strong relationships or with very large samples and weak relationships.⁴ In this research, we have relatively small sample sizes, especially in the case study, and therefore strong relationships were needed to attain significance levels in order to accept our hypotheses.

REGRESSION ANALYSIS

For the section in Chapter III entitled "Hypotheses Relating to the Companies," if the analysis of variance tests proved to be significant, regression analysis was then employed. In regression analysis, each variable must be quantitative and therefore no descriptive or classification variables are allowed. Regression analysis determines how closely each individual case fits on an hypothesized line. This line is determined by the least squares method using the cases or data from the research.⁵ If no significant relationship exists, the best fitting line will approximate a horizontal line, determined by the overall average of the cases.

The most important test statistic for regression is r , or the correlation coefficient. The correlation coefficient or r is a measure of the linear relationship, measuring the closeness of fit of the hypothesized line to the individual case points. The range of r is from 1.0 to -1.0. When r is close to 0, it is an indication that there is no real significant linear relationship.

FOOTNOTES TO APPENDIX B

¹J. Neter and W. Wasserman, Applied Linear Statistical Models, (Homewood, Illinois: Richard D. Irwin, Inc., 1974), Chapters 13,17.

²See any of the statistical books listed in the Bibliography.

³Hubert Blalock, Social Statistics-Second Edition, (New York: McGraw-Hill, Inc., 1972), Chapter 15.

⁴Blalock, pp. 293-294.

⁵Neter and Wasserman, Chapter 2.

1. How is your current living situation? (Please check one)
a. Living with family
b. Living with a partner
c. Living alone

2. How long have you been in your current living situation?
a. Less than 1 year
b. 1-2 years
c. 3-5 years
d. More than 5 years

3. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

4. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

5. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

APPENDIX C
PARTICIPANT QUESTIONNAIRE

6. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

7. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

8. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

9. How do you feel about your current living situation?
a. Very satisfied
b. Satisfied
c. Dissatisfied
d. Very dissatisfied

APPENDIX B

1. G. A. Miller and G. W. Brown, *Applied Linear Algebra*, McGraw-Hill, New York, 1971, Chapter 10, pp. 10-1 to 10-10.

2. See any of the statistical books listed in the Bibliography.

3. Robert H. Stueck, *Applied Linear Algebra*, McGraw-Hill, New York, 1971, Chapter 10.

4. Stueck, pp. 10-1 to 10-10.

5. Stueck and Brown, Chapter 10.

APPENDIX C

STATISTICAL METHODS

Iowa is conducting a three phase research project to gather facts about working women in Iowa. In order to help us gather data in the second phase, please complete the following brief questionnaire. All information will be kept confidential. Thank you for your help.

1. Marital Status: (check one)

- Presently married
- Not presently married

2. How many children do you presently have living with you? (check one)

- None
- One
- More than one

3. Your highest level of education: (check one)

- High school diploma or below
- Vocational or technical training.
 - Indicate: a. number of years _____
 - b. last school attended _____

- Some college
 - Indicate: a. total credit hours earned: _____ quarter hrs.; or _____ semester hrs.
 - b. last school attended _____

- College degree
 - Indicate: a. highest degree _____
 - b. last school attended _____

4. Age on last birthday:

- Under 25
- 25 to 34
- 35 to 44
- 45 to 54
- 55 and over

5. Note the ladders below. Think of them as a general representation of the structure of your organization. The top of the ladder represents the highest position in your organization; the bottom of the ladder represents the lowest position in your organization. Your responses will only indicate your general impressions, and are not necessarily meant to be exact. Please mark a response for each ladder.

Circle the number on the ladder to the right indicating your present position.

7
6
5
4
3
2
1

Circle the number on the ladder to the right indicating the position you want to be in 5 years from now. If you don't expect to be working in 5 years, check here ____.

7
6
5
4
3
2
1

6. Consider your answer for question 5; does the position you wish to hold in 5 years include supervisory responsibilities?

- Yes
- No

7. The following is a list of occupations by job category. In the first column indicate the job category that best describes your present job by checking the one most appropriate box. In the second column indicate the job category you would like to hold five years from now by checking the one most appropriate box.

PRESENT JOB	JOB DESIRED FIVE YRS. FROM NOW	
<input type="checkbox"/>	<input type="checkbox"/>	<u>SERVICE WORKER</u> (orderly, waiter, waitress, janitor, nurse's aide, cook, guard, fire fighter, police officer, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>LABORER (UNSKILLED)</u> (car washer, gardener, ditch digger, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>OPERATIVE (SEMI-SKILLED)</u> (apprentice, truck driver, machine operator, welder, mine operative, dressmaker, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>CRAFTS (SKILLED)</u> (mechanic, electrician, brick layer, repairer, tailor, typesetter, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>OFFICE/CLERICAL</u> (typist, bookkeeper, secretary, telephone operator, cashier, bill collector, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>SALES</u> (real estate agent, broker, sales personnel, cashier-checker, grocery clerk, insurance agent, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>TECHNICIAN</u> (drafter, LPN, computer programmer/operator, medical technician, engineering aide, radio operator, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>PROFESSIONAL</u> (accountant, RN, auditor, engineer, teacher, personnel worker, lawyer, editor, physician, architect, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>MANAGER</u> (executive, department head, plant manager, middle management, purchasing agent and buyer, etc.)

8. Indicate which of the following best describes your present job level: (check one)

Non-Supervisory - personnel with no supervisory responsibilities.

First line supervisor - those who directly supervise non-supervisory personnel.

Middle management - those responsible for integration and execution of policies set by top management or those who supervise other supervisors.

Top Management - administrators responsible for making broad strategic policy decisions.

APPENDIX D

PRE-TEST QUESTIONNAIRE

CONFIDENTIAL
Employment Survey

NAME _____
HOME ADDRESS _____
CITY _____

HOME PHONE _____
DATE _____
NAME OF SUPERVISOR _____

1. Indicate which of the following best describes your job level: (check one)

- Non-Supervisory - personnel with no supervisory responsibilities.
 First line Supervisor - those who directly supervise non-supervisory personnel.
 Middle Management - those responsible for integration and execution of policies set by top management or those who supervise other supervisors.
 Top Management - administrators responsible for making broad strategic policy decisions.

2. Please list the jobs you have held since December 1, 1975 in chronological order. Also indicate company, dates you held the job, and whether or not it was a promotion (for example, an increase in job duties and responsibilities) from your previous job. List your present job first.

Job Title	Company	Month/Year-Month/Year	Promotion? Yes/No

3. What was your rate of pay on December 1, 1975? \$ _____
 (check one) hourly monthly
 weekly annual

4. What was your rate of pay on December 1, 1976? \$ _____
 (check one) hourly monthly
 weekly annual

Below is a list of job characteristics, qualities, and responsibilities. For each you should rate your job on a five point scale which looks like this:
 (minimum) 1 2 3 4 5 (maximum)

Please circle the number on the scale that represents the amount of the characteristic or responsibility being rated. Low numbers represent low or minimum amounts, and high numbers represent high or maximum amounts.

5. HOW MUCH AUTHORITY DO YOU HAVE:

	(min)				(max)
in your position?	1	2	3	4	5
in deciding how equipment and resources will be allocated?	1	2	3	4	5
in developing and spending a budget?	1	2	3	4	5
in setting quality standards?	1	2	3	4	5
in deciding how work tasks will be divided?	1	2	3	4	5
in deciding how much work should be done?	1	2	3	4	5
in deciding how fast work should be done?	1	2	3	4	5
in deciding how the work will actually be performed, the methods used, etc?	1	2	3	4	5

5. HOW MUCH AUTHORITY DO YOU HAVE: (con't)

	(min)				(max)
	1	2	3	4	5
in selecting new workers to fill vacancies?					
in evaluating the performance of other workers?					
in determining the pay of other workers?					
in deciding if other workers receive promotions?					
in deciding if other workers are fired or terminated?					
in determining work policies that directly affect your group?					
over what happens on your job?					

6. HOW MUCH OPPORTUNITY DO YOU HAVE:

for independent thought and action in your present position?	1	2	3	4	5
for participation in the setting of goals?	1	2	3	4	5
for participation in the determination of methods and procedures?	1	2	3	4	5
to do pretty much what you want to on your job?	1	2	3	4	5
to make decisions on your own?	1	2	3	4	5

7. The following is a list of occupations by job category. Please indicate the category that best describes your present job by checking the one most appropriate box.

- SERVICE WORKER
(orderly, waiter, waitress, janitor, nurse's aide, cook, guard, fire fighter, etc.)
- LABORER (UNSKILLED)
(car washer, gardener, ditch digger, etc.)
- OPERATIVE (SEMI-SKILLED)
(apprentice, truck driver, machine operator, welder, mine operative, dressmaker, etc.)
- CRAFTS (SKILLED)
(mechanic, electrician, brick layer, repairer, tailor, typesetter, etc.)
- OFFICE/CLERICAL
(typist, bookkeeper, secretary, telephone operator, cashier, bill collector, etc.)
- SALES
(real estate agent, broker, sales personnel, cashier-checker, grocery clerk insurance agent, etc.)
- TECHNICIAN
(drafter, LPN, computer programmer/operator, medical technician, engineering aide, radio operator, etc.)
- PROFESSIONAL
(accountant, RN, auditor, engineer, teacher, personnel worker, lawyer, editor, physician, architect, etc.)
- MANAGER
(executive, department head, plant manager, middle management, purchasing agent and buyer, etc.)

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Supervisor's Name: _____
Employee's Name: _____

The following questions are designed to provide a general impression of the attitudes of the individual named above. Please rate the responses on the provided scale to each of the characteristics listed below. With the same scale, please consider how you as the highest level supervisor would rate each of the characteristics listed below. Please circle a response on each scale.

- PERSONAL CHARACTERISTICS**
- a. How would you rate the average worker? 1 2 3 4 5
- b. How would you rate this individual? 1 2 3 4 5
- ABILITY TO RESPONSIBLY HANDLE PUBLIC COMPLAINTS**
- c. How would you rate the average worker? 1 2 3 4 5
- d. How would you rate this individual? 1 2 3 4 5

APPENDIX E
SUPERVISOR QUESTIONNAIRE

- PERSONAL CHARACTERISTICS**
- a. How would you rate the average worker? 1 2 3 4 5
- b. How would you rate this individual? 1 2 3 4 5
- ABILITY TO RESPONSIBLY HANDLE PUBLIC COMPLAINTS**
- c. How would you rate the average worker? 1 2 3 4 5
- d. How would you rate this individual? 1 2 3 4 5

From the letters below, think of what is a general representation of the attitudes of your organization. They are not necessarily meant to be exact representations. The job of the letter represents the highest position in your organization and holder of the letter represents the lowest position in your organization. Please mark a response for each letter.

Circle the number on the letter to the right indicated with individual's personal opinion.

Letter	1	2	3	4	5
Individual's personal opinion					

QUESTIONNAIRE FOR SUPERVISORS

Supervisor's Name _____

Employee's Name _____

The following questionnaire is intended to provide a brief appraisal of the individual named above. Please rate this individual and the average worker on each of the characteristics listed below. Note the seven point scales. Consider seven to be the highest level possible and one to be the lowest level possible. Please circle a response on each scale.

- | | (Min) | | | | | | (Max) |
|----------------------------------------------------|-------|---|---|---|---|---|-------|
| 1. SUPERVISORY POTENTIAL | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. ABILITY TO EXPRESS FEELINGS AND HANDLE CONFLICT | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. PERSONAL INITIATIVE | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. INTERPERSONAL SKILLS | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. ABILITY TO PLAN AND CARRY OUT WORK | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. OVERALL JOB PERFORMANCE | | | | | | | |
| a. How would you rate the average worker? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| b. How would you rate this individual? | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

7. Note the ladders below. Think of them as a general representation of the structure of your organization; they are not necessarily meant to be exact representations. The top of the ladder represents the highest position in your organization; the bottom of the ladder represents the lowest position in your organization. Please mark a response for each ladder.

Circle the number on the ladder to the right indicating this individual's present position.

7
6
5
4
3
2
1

Circle the number on the ladder to the right indicating the level in the organization you feel this individual is capable of holding.

7
6
5
4
3
2
1

APPENDIX F
SEMINAR EVALUATION
QUESTIONNAIRE

SEMINAR EVALUATION

Name _____
Date _____

Please answer the following questions which will be used to evaluate the effectiveness of this seminar. Your answers will remain confidential.

Below are several questions relating to your reactions to the seminar and to the instructors. For each question please rate your response on a five point scale, which looks like this:

1 - Not at all 2 - Very Little 3 - Some 4 - Quite a Bit 5 - A Great Deal

Please circle the number on the scale for your response to each question.

	<u>Not at All</u>	<u>Very Little</u>	<u>Some</u>	<u>Quite A Bit</u>	<u>A Great Deal</u>
1. Was the seminar able to maintain your interest?	1	2	3	4	5
2. Did you like the structure of the seminar?	1	2	3	4	5
3. Did the seminar succeed in meeting the goals and objectives set forth for the seminar as you understood them?	1	2	3	4	5
4. Did you feel the seminar was well organized?	1	2	3	4	5
5. Did you feel there was enough time for discussion?	1	2	3	4	5
6. Did you feel discussions were instructive and relevant?	1	2	3	4	5
7. Did you find the contact with women from other companies helpful and instructive?	1	2	3	4	5
8. Did you feel there was enough time for informal meetings with the instructors and with other participants?	1	2	3	4	5
9. Was the level of the seminar too advanced?	1	2	3	4	5
10. Was the level of the seminar too basic?	1	2	3	4	5
11. Do you feel you learned something in this seminar which you will try out on your present job?	1	2	3	4	5
12. Do you anticipate using the material you learned in future jobs?	1	2	3	4	5
13. Did this seminar alter your career plans in any way?	1	2	3	4	5

	<u>Not at All</u>	<u>Very Little</u>	<u>Some</u>	<u>Quite A Bit</u>	<u>A Great Deal</u>
14. Do you feel your supervisor supported you in attending this seminar?	1	2	3	4	5
15. Do you feel more capable of handling the problems facing a manager or a supervisor after this seminar?	1	2	3	4	5
16. Did the seminar leaders lecture in an interesting and understandable way?	1	2	3	4	5
17. Did the seminar leaders seem informed about the subject matter?	1	2	3	4	5
18. Did the leaders seem willing to teach and to share knowledge with the groups?	1	2	3	4	5
19. Did the leaders use the time provided in the most effective way?	1	2	3	4	5
20. Did the leaders help facilitate the group in sharing ideas with and learning from each other?	1	2	3	4	5
21. Did the leaders encourage questions and group discussion?	1	2	3	4	5

22. Please describe one outstanding thing (idea, concept, feeling, etc.) you learned or experienced in this seminar which you will use or would like to use in the future.

23. What did you most enjoy about the seminar?

24. What did you least enjoy about the seminar? What suggestions do you have to improve it?

25. Do you have any complaints concerning the physical aspects of the seminar (for example: the room was too hot/cold, there was too much outside noise, etc).

26. Did you miss any part of the seminar? Yes _____ No _____

If yes, which part(s) and why? _____

27. Would you like to receive any additional job-related training? If so please indicate the type of training. (For example: business skills, budgeting and problem solving, organizational skills, assertion training, career planning, interviewing skills, etc.)

28. Additional comments concerning the seminar:

This is the second part of a research project collecting data about working women. In order for us to gather data for this project, we would appreciate your filling out the following questionnaire. All information will be kept confidential.

Indicate which of the following best describes your present situation. (check one)

- 1. Home-Production - personal work in home, very irregular hours.
- 2. Part-time Employment - some who are fully employed but work only part-time.
- 3. Full-time Employment - full-time work in a regular job.
- 4. Unemployed - looking for work.
- 5. Retired - retired from work.

How long have you been working with your present employer? _____ months

How much overtime do you work on an average in job duties and responsibilities? _____ hours per week

What was your last promotion increase in job title and responsibilities? _____ %

If your present job is a promotion over your last job, please describe the promotion and responsibilities in your present job.

APPENDIX G
SIX MONTH POST-TEST
QUESTIONNAIRE

What is your present job title? _____

What is your present salary? _____ per year
(XXX in any blank)

Below is a list of job characteristics. The 1-5 are ratings from 1 = not at all to 5 = very much.

Please circle the number on the scale that represents the extent of the characteristic or responsibility during your last promotion.

Job Characteristic	1	2	3	4	5
1. In your position					
2. Handling new projects and responsibilities					
3. Responsibility and working a longer time					
4. Working with others					
5. Handling new work tasks					
6. Handling new work tasks					

NAME _____
 COMPANY _____

This is the second part of a research project collecting data about working women in Iowa. In order for us to gather data for this project, we would appreciate your filling out the following questionnaire. All information will be kept confidential.

1. Indicate which of the following best describes your present job level: (check one)

- Non-Supervisory - personnel with no supervisory responsibilities.
- First line Supervisor - those who directly supervise non-supervisory personnel.
- Middle Management - those responsible for integration and execution of policies set by top management or those who supervise other supervisors.
- Top Management - administrators responsible for making broad strategic policy decisions.

2. How long have you been working with your present employer? _____ Years _____ Months

3. How many promotions (an increase in job duties and responsibilities) have you received from your current employer? _____

4. When was your last promotion (increase in job duties and responsibilities)?
 _____ Month _____ Year _____ I have had no promotions.

5. If your present job is a promotion over your last job, please describe the increased job duties and responsibilities you presently perform.

6. What is your present job title? _____
 Does your present job include supervisory responsibilities? Yes _____ No _____
 If yes, how many people do you directly supervise? _____

7. What is your present salary? _____ per year
 (fill in one blank) \$ _____ per month
 \$ _____ per week
 \$ _____ per hour

Below is a list of job characteristics, qualities, and responsibilities. For each you should rate your job on a five point scale which looks like this:
 (minimum) 1 2 3 4 5 (maximum)

Please circle the number on the scale that represents the amount of the characteristic or responsibility being rated. Low numbers represent low or minimum amounts, and high numbers represent high or maximum amounts.

8. HOW MUCH AUTHORITY DO YOU HAVE:

	(min)				(max)
	1	2	3	4	5
in your position?					
in deciding how equipment and resources will be allocated?	1	2	3	4	5
in developing and spending a budget?	1	2	3	4	5
in setting quality standards?	1	2	3	4	5
in deciding how work tasks will be divided?	1	2	3	4	5
in deciding how much work should be done?	1	2	3	4	5

	(min)				(max)
	1	2	3	4	5
in deciding how fast work should be done?					
in deciding how the work will actually be performed, the methods used, etc?	1	2	3	4	5
in selecting new workers to fill vacancies?	1	2	3	4	5
in evaluating the performance of other workers?	1	2	3	4	5
in determining the pay of other workers?	1	2	3	4	5
in deciding if other workers receive promotions?	1	2	3	4	5
in deciding if other workers are fired or terminated?	1	2	3	4	5
in determining work policies that directly affect your group?	1	2	3	4	5
over what happens on your job?	1	2	3	4	5

9. HOW MUCH OPPORTUNITY DO YOU HAVE:

for independent thought and action in your present position?	1	2	3	4	5
for participation in the setting of goals?	1	2	3	4	5
for participation in the determination of methods and procedures?	1	2	3	4	5
to do pretty much what you want to on your job?	1	2	3	4	5
to make decisions on your own?	1	2	3	4	5

10. Have you taken any educational or job related training courses (either credit or non-credit) in the past year? Yes _____ No _____
 If yes, please give the course name and indicate the date the course was completed:

COURSE NAME	MONTH/YEAR
1.	
2.	
3.	
4.	

11. Note the ladders below. Think of them as a general representation of the structure of your organization. The top of the ladder represents the highest position in your organization; the bottom of the ladder represents the lowest position in your organization. Your responses will only indicate your general impressions, and are not necessarily meant to be exact. Please mark a response for each ladder.

Circle the number on the ladder to the right indicating your present position.

- 7
- 6
- 5
- 4
- 3
- 2
- 1

Circle the number on the ladder to the right indicating the position you want to be in 5 years from now. If you don't expect to be working in 5 years, check here _____.

- 7
- 6
- 5
- 4
- 3
- 2
- 1

12. Consider your answer for question 11; does the position you wish to hold in 5 years include supervisory responsibilities? Yes _____ No _____

ax)
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APPENDIX H
 ONE YEAR POST-TEST
 QUESTIONNAIRE

NAME _____

COMPANY _____

This is the final survey in a research project collecting data about working women in Iowa. In order for us to gather data for this project, we would appreciate your filling out the following questionnaire.

1. Marital Status: (check one)
 Presently married Not presently married
2. How many children do you presently have living with you? (check one)
 None One More than one
3. Your highest level of education:
 High school diploma or below
 Vocational or technical training
 Indicate: a. number of years _____
 b. major study _____
 Some college
 Indicate: a. number of years _____
 b. major study _____
 College degree
 Indicate: a. highest degree _____
 b. major study _____
4. Age on last birthday:
 Under 25 45 to 54
 25 to 34 55 and over
 35 to 44
5. How long have you been working with your present employer? _____ Years _____ Months
6. How many promotions have you received since December 1976? _____ promotions
7. If you have received a promotion since December 1976, please describe the increased job duties and responsibilities you presently perform. _____

8. Indicate which of the following best describes your job level: (check one)
 Non-Supervisory - personnel with no supervisory responsibilities.
 First line Supervisor - those who directly supervise non-supervisory personnel.
 Middle Management - those responsible for integration and execution of policies set by top management or those who supervise other supervisors.
 Top Management - administrators responsible for making broad strategic policy decisions.
9. What is your present job title? _____
Does your present job include supervisory responsibilities? Yes _____ No _____
If yes, how many people do you directly supervise? _____
10. How many hours a week do you normally work? _____ hours

11. What is your present salary?
 (fill in one blank)

\$ _____	per year
\$ _____	per month
\$ _____	per week
\$ _____	per hour

Below is a list of job characteristics, qualities, and responsibilities. For each you should rate your job on a five point scale which looks like this:
 (minimum) 1 2 3 4 5 (maximum)

Please circle the number on the scale that represents the amount of the characteristic or responsibility being rated. Low numbers represent low or minimum amounts, and high numbers represent high or maximum amounts.

12. HOW MUCH AUTHORITY DO YOU HAVE:

	(min)				(max)
	1	2	3	4	5
in your position?					
in deciding how equipment and resources will be allocated?	1	2	3	4	5
in developing and spending a budget?	1	2	3	4	5
in setting quality standards?	1	2	3	4	5
in deciding how work tasks will be divided?	1	2	3	4	5
in deciding how much work should be done?	1	2	3	4	5
in deciding how fast work should be done?	1	2	3	4	5
in deciding how the work will actually be performed, the methods used, etc?	1	2	3	4	5
in selecting new workers to fill vacancies?	1	2	3	4	5
in evaluating the performance of other workers?	1	2	3	4	5
in determining the pay of other workers?	1	2	3	4	5
in deciding if other workers receive promotions?	1	2	3	4	5
in deciding if other workers are fired or terminated?	1	2	3	4	5
in determining work policies that directly affect your group?	1	2	3	4	5
over what happens on your job?	1	2	3	4	5

13. HOW MUCH OPPORTUNITY DO YOU HAVE:

for independent thought and action in your present position?	1	2	3	4	5
for participation in the setting of goals?	1	2	3	4	5
for participation in the determination of methods and procedures?	1	2	3	4	5
to do pretty much what you want to on your job?	1	2	3	4	5
to make decisions on your own?	1	2	3	4	5

14. Think of your PRESENT WORK. What is it like most of the time? In the blank beside each word given below, write y for "Yes" if it describes your work; n for "No" if it does NOT describe your work; or ? if you cannot decide.

- | | | |
|--------------------------------------|---------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> Fascinating | <input type="checkbox"/> Hot | <input type="checkbox"/> Frustrating |
| <input type="checkbox"/> Routine | <input type="checkbox"/> Pleasant | <input type="checkbox"/> Simple |
| <input type="checkbox"/> Satisfying | <input type="checkbox"/> Useful | <input type="checkbox"/> Endless |
| <input type="checkbox"/> Boring | <input type="checkbox"/> Tiresome | <input type="checkbox"/> Gives sense of accomplishment |
| <input type="checkbox"/> Good | <input type="checkbox"/> Healthful | |
| <input type="checkbox"/> Creative | <input type="checkbox"/> Challenging | |
| <input type="checkbox"/> Respected | <input type="checkbox"/> On your feet | |

15. Think of the OPPORTUNITIES FOR PROMOTION that you have now. How well does each of the following words describe these? In the blank beside each word below, put y for "Yes" if it describes your opportunities for promotion; n if it does NOT describe them; or ? if you cannot decide.

- | | |
|-----------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Good opportunities for promotion | <input type="checkbox"/> Unfair promotion policy |
| <input type="checkbox"/> Opportunity somewhat limited | <input type="checkbox"/> Infrequent promotions |
| <input type="checkbox"/> Promotion on ability | <input type="checkbox"/> Regular promotions |
| <input type="checkbox"/> Dead-end-job | <input type="checkbox"/> Fairly good chance for promotion |
| <input type="checkbox"/> Good chance for promotion | |

16. Think of the PAY you get now. How well does each of the following words describe your PRESENT PAY? In the blank beside each word, put y if it describes it; n if it does NOT describe it; or ? if you cannot decide.

- | | |
|--------------------------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> Income adequate for normal expenses | <input type="checkbox"/> Less than I deserve |
| <input type="checkbox"/> Satisfactory profit sharing | <input type="checkbox"/> Highly paid |
| <input type="checkbox"/> Barely live on income | <input type="checkbox"/> Underpaid |
| <input type="checkbox"/> Bad | <input type="checkbox"/> Insecure |
| <input type="checkbox"/> Income provides luxuries | |

17. Note the ladders below. Think of them as a general representation of the structure of your organization. The top of the ladder represents the highest position in your organization; the bottom of the ladder represents the lowest position in your organization. Your responses will only indicate your general impressions, and are not necessarily meant to be exact. Please mark a response for each ladder.

Circle the number on the ladder to the right indicating your present position.

7
6
5
4
3
2
1

Circle the number on the ladder to the right indicating the position you want to be in 5 years from now. If you don't expect to be working at all in 5 years, check here ____.

7
6
5
4
3
2
1

18. Consider your answer for question 17: does the position you wish to hold in 5 years include supervisory responsibilities? Yes ____ No ____

19. The following is a list of occupations by job category. In the first column indicate the job category that best describes your present job by checking the one most appropriate box. In the second column indicate the job category you would like to hold five years from now by checking the one most appropriate box.

PRESENT JOB	JOB DESIRED FIVE YRS. FROM NOW	
<input type="checkbox"/>	<input type="checkbox"/>	<u>SERVICE WORKER</u> (orderly, waitress, nurse's aide, cook, police officer, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>LABORER (UNSKILLED)</u> (car washer, gardener, ditch digger, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>OPERATIVE (SEMI-SKILLED)</u> (apprentice, truck driver, machine operator, dressmaker, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>CRAFTS (SKILLED)</u> (mechanic, electrician, brick layer, repairer, tailor, typesetter, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>OFFICE/CLERICAL</u> (typist, bookkeeper, secretary, telephone operator, cashier, bill collector, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>SALES</u> (real estate agent, broker, sales personnel, cashier-checker, grocery clerk, insurance agent, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>TECHNICIAN</u> (drafter, LPN, computer programmer/operator, medical technician, engineering aide, radio operator, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>PROFESSIONAL</u> (accountant, RN, auditor, engineer, teacher, personnel worker, lawyer, editor, physician, architect, etc.)
<input type="checkbox"/>	<input type="checkbox"/>	<u>MANAGER</u> (executive, department head, plant manager, middle management, purchasing agent and buyer, etc.)

20. Have you taken any educational or job related training courses (either credit or non-credit) in the past year? Yes _____ No _____
If yes, please give the course name and indicate the date the course was completed:

	COURSE NAME	MONTH/YEAR	WILL THIS HELP IN YOUR CAREER?
1.			
2.			
3.			
4.			

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APPENDIX I

MODEL III MEMO

QUESTIONNAIRE

This booklet is a survey on management techniques. Your company has been chosen to participate in this study. Before you start on the actual survey, we would appreciate your answering a few questions about yourself.

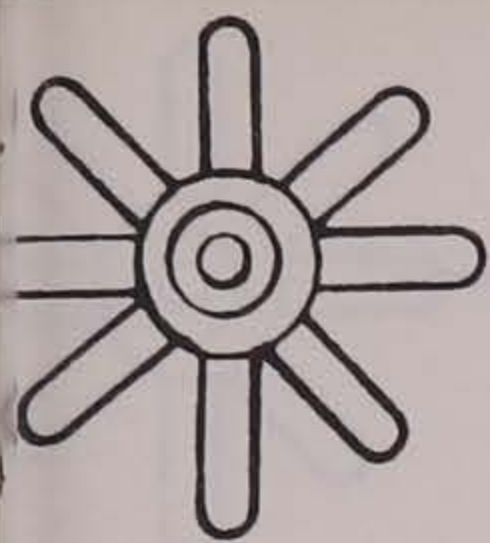
1. Marital Status: (check one)
 Presently married Not presently married
2. How many children do you presently have living with you? (check one)
 None One More than one
3. Age on last birthday:
 Under 25 45 to 54
 25 to 34 55 and over
 35 to 44
4. Sex: (check one)
 Female Male
5. Your highest level of education: (check one)
 High school diploma or below
 Vocational or technical training.
 Indicate: a. number of years _____
 b. last school attended _____
 Some college
 Indicate: a. number of years _____
 b. last school attended _____
 c. major course of study _____
 College degree
 Indicate: a. highest degree _____
 b. last school attended _____
 c. major course of study _____
6. How many years have you been with your current employer? _____ years _____ months
7. How many promotions have you received from your current employer (for example, an increase in job duties and responsibilities)? _____
8. What is your present salary?
(fill in one blank)
 \$ _____ per year
 \$ _____ per month
 \$ _____ per week
 \$ _____ per hour

**** The instructions for the actual survey begin on the back of this page. . . .

This is a follow-up questionnaire of a Harvard Business Review survey on management techniques. We would appreciate your reading each of the following eight memorandums and answering the questions after each as well as you can. This is not a test and there are no right or wrong answers. Please do not discuss this survey with your co-workers until after you have completed it.

Think of yourself as an Executive Vice President of Central Public Power Company (a hypothetical company). Central Public Power is a respected, stable company employing over 350 people with its headquarters located in a large city. The company's customers span over an area covering one-fifth of a Midwestern state. Because of the rising costs of energy, the company is not making large profits, and is having to cut back on costs. The company is not in deep financial trouble, however.

As Executive Vice President you are confronted with these eight memorandums having to do with management problems. How would you handle these situations?



CENTRAL PUBLIC POWER COMPANY

MEMORANDUM (1)

TO: EXECUTIVE VICE PRESIDENT

FROM: PERSONNEL

I have completed the follow-up to our recent discussion concerning the need for a Special Project Director to be in charge of researching the development of alternative fuel sources. We have completed this short job summary and have interviewed five candidates.

Major Responsibilities: To direct a two year research project studying alternative fuel supplies. The final report should include a cost-benefit analysis of alternative fuel supplies and recommendations for action by the company.

We anticipate the Special Projects Director will have to do quite a bit of traveling (about two weeks out of each month) around the country visiting other utilities, government agencies, mines, various conferences and universities in order to get a handle on the problem. Knowledge and experience in the utility field and a cursory knowledge of geology are a must. In addition, research and supervisory skills are important.

Will you review this resume and let me know your response?

RESUME SUMMARY:

NAME: Mr. Roger Davis*

EDUCATION: B.A. in General Engineering from Colorado School of Mines

WORK EXPERIENCE: 1 year internship with Department of Interior working on coal supplies. Ten years of intermittent experience with two Wyoming water utilities in personnel, general management, and as an assistant to a Vice President for the development of water reservoirs.

INTERVIEWER REMARKS: Good basic knowledge of utility problems, although not necessarily of the electric utilities. Seemed very willing to learn. Good recommendations and personal appearance.

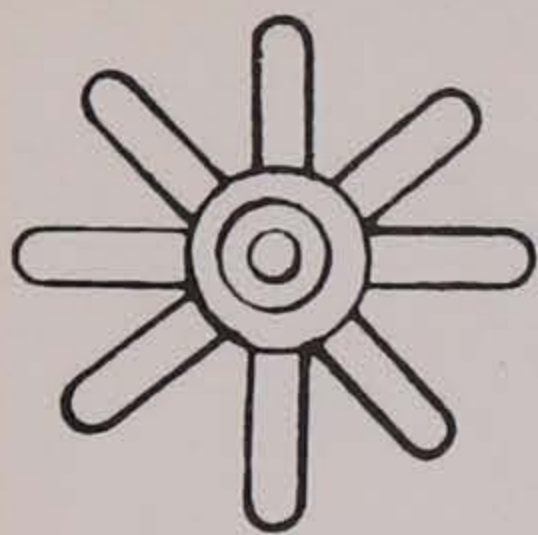
WHAT COURSE OF ACTION WOULD YOU RECOMMEND?

CHECK ONE

- 1) recommend selection and immediate hiring for position
- 2) favorable rating but interview again
- 3) favorable rating of potential, but not really suited for job
- 4) unfavorable rating, not suited for job

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Mrs. Diane Davis in Form 2.



CENTRAL PUBLIC POWER COMPANY

MEMORANDUM (2)

TO: EXECUTIVE VICE PRESIDENT

FROM: MARKETING

I have a problem in my department, and I'm not sure how to solve it. The problem concerns one of my rate analysts, Mary Bailey.* She has a habit of talking on the phone, usually over two hours a day. She is an incessant talker, but usually controls herself except while on the phone. She seems to talk to three or four friends and not about business.

I have tried everything I can think of to have her stop or control her excessive use of the telephone, including teasing, threats, discussions, written reprimands, and even demanding she hang up the phone. Still she talks on.

Her constant talking not only keeps the phone occupied but it is also bothering the morale of the rest of the office. With everyone located in one room and out in the open, constant talking is annoying and keeps the noise level high. She is teased and belittled constantly, but it doesn't seem to bother her.

Mary is otherwise a good worker with a stable family life and seems to get her work done, although sometimes she must take her work home at night. Her job does demand use of the phone. What should I do about this problem?

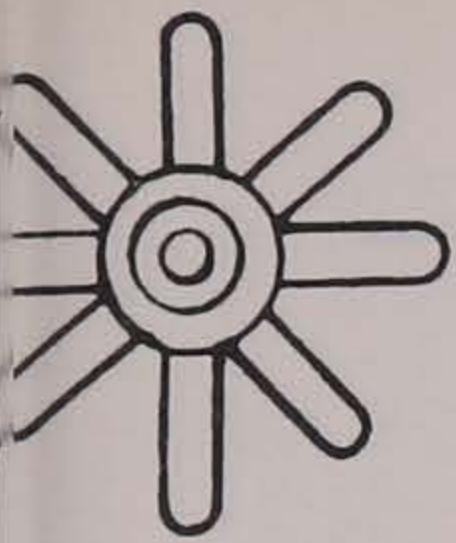
WHAT COURSE OF ACTION WOULD YOU RECOMMEND?

CHECK ONE

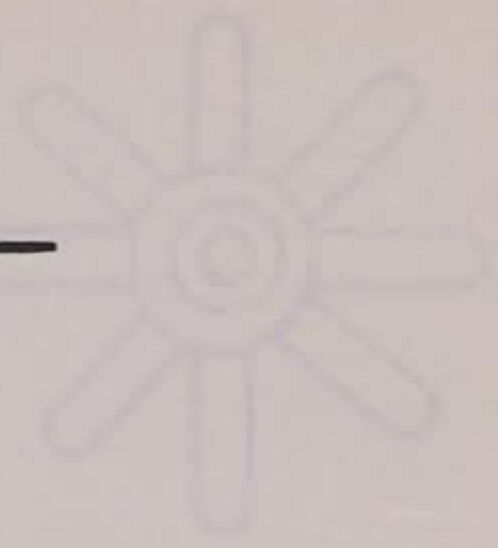
- 1) suspend for a week if excessive use of the telephone continues
- 2) threaten to fire and follow through if necessary
- 3) threaten a demotion and follow through if necessary
- 4) don't make an issue out of the excessive use of the telephone

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION?

*John Bailey in Form 2.



CENTRAL PUBLIC POWER COMPANY



MEMORANDUM (3)

TO: EXECUTIVE VICE PRESIDENT

FROM: DATA PROCESSING

As you know, the annual pay reviews came up this past week. Because of the overall budget constraints of the company, we were unable to raise salaries by more than 4 percent for any individual. Thomas Jones,* my best junior analyst, came to me today stating he would have to quit unless he received at least a 10 percent raise above and beyond the 4 percent we gave him. He told me he had received other job offers, but would like to stay with us.

Thomas is a very good employee. He has a M.B.A. degree and has been with us four years. I have no complaints whatsoever about his performance.

I would gladly offer him more money, but I feel it would have negative consequences with the other employees in my department, for most of them also deserved higher raises than they received.

What do you suggest I do?

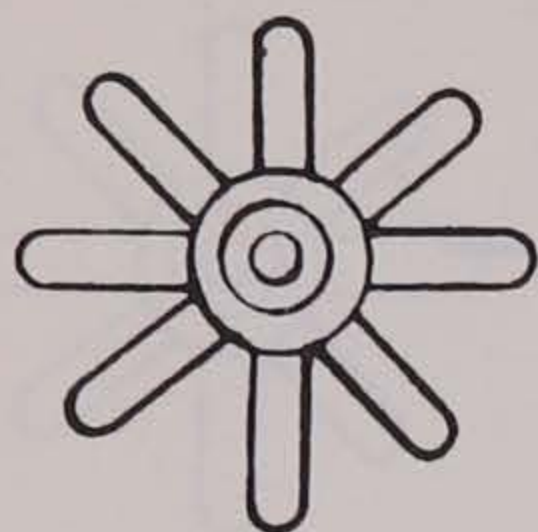
WHAT COURSE OF ACTION WOULD YOU RECOMMEND?

CHECK ONE

- 1) offer the employee a 5 percent pay increase above and beyond the 4 percent
- 2) promote the employee
- 3) promote the employee only after he has formally quit
- 4) do nothing

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Jeanne Jones in Form 2.



CENTRAL PUBLIC POWER COMPANY

MEMORANDUM (4)

TO: EXECUTIVE VICE PRESIDENT

FROM: AN EMPLOYEE

I feel I need to inform you about this problem in our department. My supervisor and your assistant, Ruth Clayton,* fails to recognize my job authority and responsibility. She always wants to do the work herself. I've talked this problem over with several others in my department and they all agree with me.

I was promoted last year to be in charge of District C's home customers. However, Miss Clayton seems to think it's her job to do my work rather than to delegate work to me. I end up with boring, routine job assignments that have no challenge or responsibility. Many days I have little to do.

I'm not a quitter, but I'm frustrated and bored. I would like to be able to be trusted to do the job I was hired to do. I'm not sure what you will want to do, but I thought you should be aware of the situation.

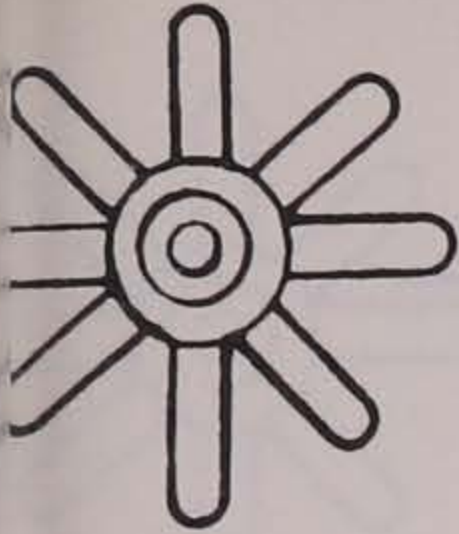
WHAT COURSE OF ACTION WOULD YOU RECOMMEND?

CHECK ONE

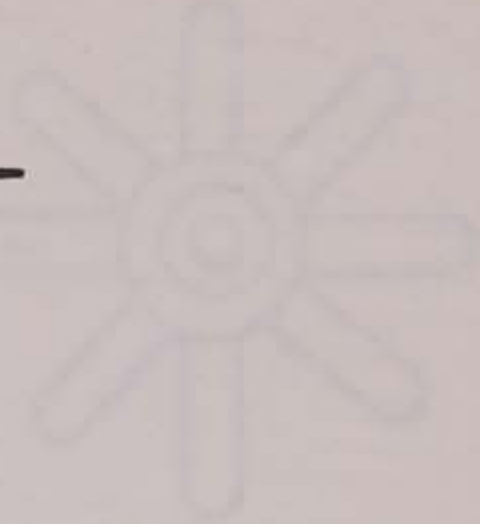
- 1) call the employee in and make it his responsibility to straighten the problem out with Miss Clayton
- 2) call Miss Clayton in, explain the problem, and proceed with a correctional interview
- 3) call a meeting with the employee and Miss Clayton to settle the issue
- 4) take no action until the problem has been researched

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Doug Clayton in Form 2.



CENTRAL PUBLIC POWER COMPANY



MEMORANDUM (5)

TO: EXECUTIVE VICE PRESIDENT

FROM: ACCOUNTING MANAGER

Paul Brown,* an accountant in the main office, has requested one month's leave beginning next week. He has already taken his vacation this year. He wants the leave in order to take care of his three young children. The day care arrangements the Browns had made for the period covered by his request suddenly fell through, and they have been unable to make other arrangements satisfying their high standards. Paul's wife is principal of the junior high school and she cannot possibly get time off during the next month.

The problem is that Paul is the only person experienced in handling the "cost section" in the accounting department. We would either have to transfer an accountant with the same experience from our division office or else train a replacement for only one month's work. I have urged Paul to reconsider this request, but he insists on going ahead with it.

I have also check with the legal department and we do not have to hold the position open for Paul if he insists on taking the whole month off.

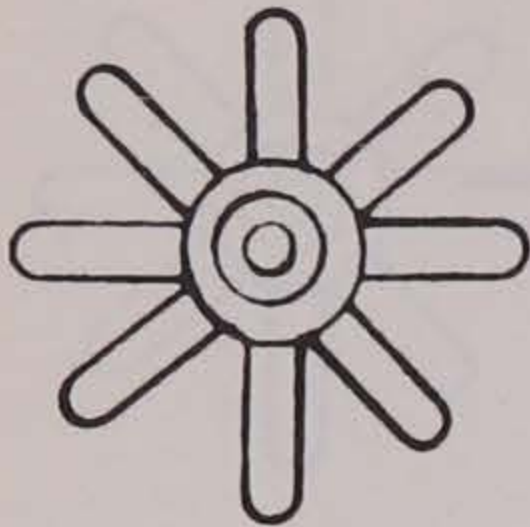
WHAT COURSE OF ACTION DO YOU RECOMMEND?

CHECK ONE

- 1) the leave is appropriate and is granted with pay
- 2) the leave is appropriate and is granted without pay
- 3) the leave is inappropriate, but is granted without pay
- 4) the leave is inappropriate and is not granted

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Ruth Brown in Form 2.



CENTRAL PUBLIC POWER COMPANY

MEMORANDUM (6)

TO: EXECUTIVE VICE PRESIDENT

FROM: PERSONNEL OFFICE

We are at the point where we must make a decision on the promotion of Suzanne Adams,* of our personnel staff. Suzanne is one of the most competent employees in the personnel office, and I am convinced that she is capable of taking the open job of the Assistant Personnel Director. However, I am not altogether certain that she is willing to subordinate time with her family to time on the job, to the extent that may be required for this job. I have had the opportunity to explore with her the general problem of family versus job, and she strongly believes in a healthy balance between them. She believes that she should very rarely stay late at the office or participate in weekend meetings.

She believes that her first duty is to her family, and that she should manage her time accordingly. This viewpoint has not affected her performance in the past, but it could be a problem in the more demanding position as the Assistant Personnel Director.

What do you think we should do?

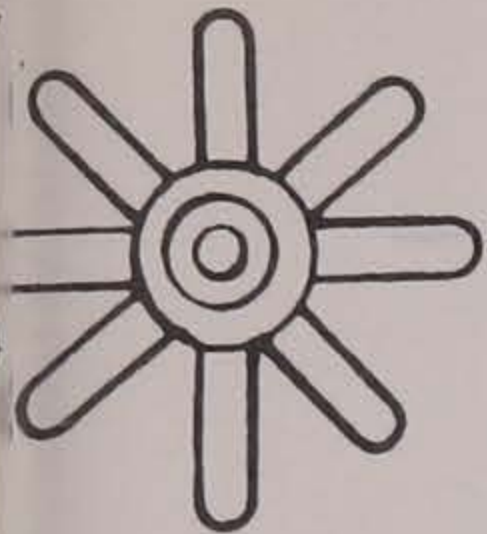
WHAT COURSE OF ACTION DO YOU RECOMMEND?

CHECK ONE

- 1) do not promote
- 2) persuade candidate to make stronger job commitment prior to promotion
- 3) base the promotion on past experience
- 4) transfer to another department where hours are regular

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Gerald Adams in Form 2.



CENTRAL PUBLIC POWER COMPANY



MEMORANDUM (7)

TO: EXECUTIVE VICE PRESIDENT

FROM: COMPUTER OPERATIONS

As you know, Ronald Cooper* is a computer operator in my section. He has played a key role in computerizing our billing system. Recently, Ronald's wife was offered a very attractive managerial position with a large retail organization on the West Coast. They are seriously considering the move. I told Ronald that he has a very bright future with our organization and it would be a shame for him to pull out just as we are expanding our computer operations. I sure would hate to lose him now. What do you think we should do about this situation?

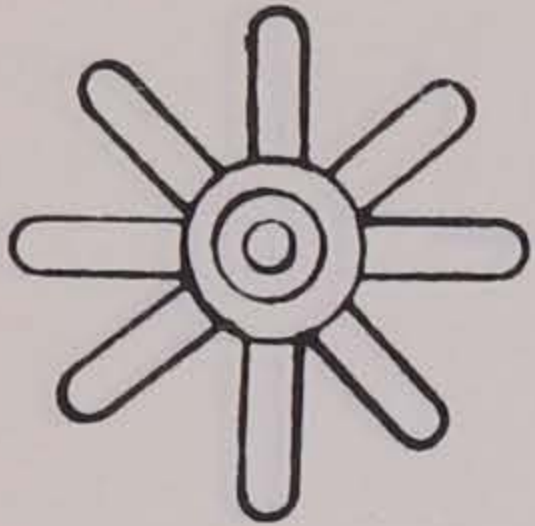
WHAT COURSE OF ACTION WOULD YOU RECOMMEND?

CHECK ONE

- 1) try to convince the computer operator that too much has been invested in his career to leave now
- 2) don't try to influence the computer operator
- 3) offer the computer operator a sizable raise as an incentive to stay
- 4) try to find an attractive position for his wife in the organization

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION? _____

*Gayle Cooper in Form 2.



CENTRAL PUBLIC POWER COMPANY

MEMORANDUM (8)

TO: EXECUTIVE VICE PRESIDENT

FROM: TRAINING & DEVELOPMENT

I want to notify you that as a company we have a chance to send one person to attend the Barker seminar on management training. As you know, the conference has achieved an excellent reputation in the Midwest as a training experience.

As part of the selection process I have carefully reviewed all possible candidates and have narrowed the field to two excellent choices. Although both could benefit from attending and meet my personal criteria, we can send only one representative. I believe that the final selection should be your choice, depending on the type of image you want the company to project at the conference. My two choices are Cheryl Mitchell and Richard Williams.**

Cheryl Mitchell* is a supervisor of customer service and has worked for us for three years. Her background includes a general business degree, and she's 25 years old, married, with no children. We currently have her in mind for the next management opening within the division.

Richard Williams** is a supervisor of accounting and has been employed here for 20 years. His background includes a high school diploma, he's 43 years old, married, with two teenage children. The record shows him to be a conscientious employee, with steady advancement from a trainee position to his present job, which may be as high as he can go judging from the information in his file and my assessment. Being chosen for this conference would mean a lot to him.

WHICH EMPLOYEE WOULD YOU CHOOSE?

CHECK ONE

1) Cheryl Mitchell

2) Richard Williams

WHAT FACTORS DID YOU CONSIDER IN YOUR DECISION?

*Richard Williams in Form 2.
**Cheryl Mitchell in Form 2.

-- THANK YOU --

APPENDIX J
SUMMARY OF MODEL I & II SEMINAR
EVALUATIONS

Percentage of Responses

	Not at All	Very Little	Some	Quite A Bit	A Great Deal
1. WAS THE SEMINAR ABLE TO MAINTAIN YOUR INTEREST?					
1 - Achievement Motivation (100%)			7%	42%	50%
2 - Assertion Training			8	17	73
3 - Task				53	46
4 - Communication			3	11	85
5 - Combination Task and Communication				7	92
2. DID YOU LIKE THE STRUCTURE OF THE SEMINAR?					
1 - Achievement Motivation			21%	53%	25%
2 - Assertion Training				65	34
3 - Task			10	60	28
4 - Communication			3	51	44
5 - Combination Task and Communication				37	62
3. DID THE SEMINAR SUCCEED IN MEETING THE GOALS AND OBJECTIVES SET FORTH FOR THE SEMINAR AS YOU UNDERSTOOD THEM?					
1 - Achievement Motivation		3%	7%	39%	50%
2 - Assertion Training			4	47	47
3 - Task			14	39	46
4 - Communication				44	56
5 - Combination Task and Communication				15	85
4. DID YOU FEEL THE SEMINAR WAS WELL ORGANIZED?					
1 - Achievement Motivation			3%	32%	64%
2 - Assertion Training				39	60
3 - Task				56	44
4 - Communication				41	59
5 - Combination Task and Communication				26	74
5. DID YOU FEEL THERE WAS ENOUGH TIME FOR DISCUSSION?					
1 - Achievement Motivation			14%	46%	39%
2 - Assertion Training		4	13	39	43
3 - Task			14	25	61
4 - Communication			11	48	41
5 - Combination Task and Communication			3	41	59
6. DID YOU FEEL DISCUSSIONS WERE INSTRUCTIVE AND RELEVANT?					
1 - Achievement Motivation			14%	25%	61%
2 - Assertion Training				39	65
3 - Task			3	45	52
4 - Communication			15	44	41
5 - Combination Task and Communication				26	74
7. DID YOU FIND THE CONTACT WITH WOMEN FROM OTHER COMPANIES HELPFUL AND INSTRUCTIVE?					
1 - Achievement Motivation			7%	21%	71%
2 - Assertion Training		4	4	30	56
3 - Task				25	75
4 - Communication			11	37	52
5 - Combination Task and Communication			7	30	63

Percentage of Responses

	Not at All	Very Little	Some	Quite A Bit	A Great Deal
8. DID YOU FEEL THERE WAS ENOUGH TIME FOR INFORMAL MEETINGS WITH THE INSTRUCTORS AND WITH OTHER PARTICIPANTS?					
1 - Achievement Motivation		11%	18%	54%	18%
2 - Assertion Training		8	65	26	
3 - Task		14	21	46	18
4 - Communication		4	42	27	27
5 - Combination Task and Communication			26	63	11
9. WAS THE LEVEL OF THE SEMINAR TOO ADVANCED?					
1 - Achievement Motivation	71%	11%	7%	7%	3%
2 - Assertion Training	91	8			
3 - Task	46	39	14		
4 - Communication	85	11	3		
5 - Combination Task and Communication	85	11	3		
10. WAS THE LEVEL OF THE SEMINAR TOO BASIC?					
1 - Achievement Motivation	64%	14%	18%	3%	
2 - Assertion Training	73	21	4		
3 - Task	46	35	11	7	
4 - Communication	56	18	22	3	
5 - Combination Task and Communication	70	11	15	3	
11. DO YOU FEEL YOU LEARNED SOMETHING IN THIS SEMINAR WHICH YOU WILL TRY OUT ON YOUR PRESENT JOB?					
1 - Achievement Motivation			14%	28%	57%
2 - Assertion Training		4	8	47	39
3 - Task			11	28	61
4 - Communication	3	0	7	18	70
5 - Combination Task and Communication				41	59
12. DO YOU ANTICIPATE USING THE MATERIAL YOU LEARNED IN FUTURE JOBS?					
1 - Achievement Motivation			14%	25%	61%
2 - Assertion Training	4	0	13	30	52
3 - Task			7	36	57
4 - Communication			3	30	67
5 - Combination Task and Communication				30	70
13. DID THIS SEMINAR ALTER YOUR CAREER PLANS IN ANY WAY?					
1 - Achievement Motivation	7%	25%	29%	14%	25%
2 - Assertion Training	34	13	21	17	13
3 - Task	7	58	19	7	7
4 - Communication	22	7	37	26	7
5 - Combination Task and Communication	7	7	48	15	22

Percentage of Responses

	Not at All	Very Little	Some	Quite A Bit	A Great Deal
14. DO YOU FEEL YOUR SUPERVISOR SUPPORTED YOU IN ATTENDING THIS SEMINAR?					
1 - Achievement Motivation	14%	7%	21%	36%	25%
2 - Assertion Training	8	17	17	17	39
3 - Task		21	7	21	50
4 - Communication	12	0	15	15	58
5 - Combination Task and Communication	3	18	26	22	30
15. DO YOU FEEL MORE CAPABLE OF HANDLING THE PROBLEMS FACING A MANAGER OR A SUPERVISOR AFTER THIS SEMINAR?					
1 - Achievement Motivation	7%	11%	29%	29%	25%
2 - Assertion Training			26	34	39
3 - Task			17	61	21
4 - Communication			7	54	38
5 - Combination Task and Communication			7	74	18
16. DID THE SEMINAR LEADERS LECTURE IN AN INTERESTING AND UNDERSTANDABLE WAY?					
1 - Achievement Motivation			17%	43%	36%
2 - Assertion Training				21	78
3 - Task				57	43
4 - Communication				15	85
5 - Combination Task and Communication				7	93
17. DID THE SEMINAR LEADERS SEEM INFORMED ABOUT THE SUBJECT MATTER?					
1 - Achievement Motivation				17%	82%
2 - Assertion Training				4	95
3 - Task				46	54
4 - Communication					100
5 - Combination Task and Communication					100
18. DID THE LEADERS SEEMS WILLING TO TEACH AND TO SHARE KNOWLEDGE WITH THE GROUPS?					
1 - Achievement Motivation				14%	85%
2 - Assertion Training				4	95
3 - Task				17	82
4 - Communication				4	96
5 - Combination Task and Communication				3	96
19. DID THE LEADERS USE THE TIME PROVIDED IN THE MOST EFFECTIVE WAY?					
1 - Achievement Motivation			3%	57%	39%
2 - Assertion Training			4	34	60
3 - Task			3	46	50
4 - Communication				27	73
5 - Combination Task and Communication				30	70

		Percentage of Responses				
		Not at All	Very Little	Some	Quite A Bit	A Great Deal
20.	DID THE LEADERS HELP FACILITATE THE GROUP IN SHARING IDEAS WITH AND LEARNING FROM EACH OTHER?					
	1 - Achievement Motivation			11%	21%	68%
	2 - Assertion Training				13	86
	3 - Task			3	18	79
	4 - Communication				19	81
	5 - Combination Task and Communication				22	78
21.	DID THE LEADERS ENCOURAGE QUESTIONS AND GROUP DISCUSSION?					
	1 - Achievement Motivation			3%	7%	90%
	2 - Assertion Training				8	91
	3 - Task				25	75
	4 - Communication			4	16	80
	5 - Combination Task and Communication				7	93

Below are random samples of responses received for the following open-ended questions

22. PLEASE DESCRIBE ONE OUTSTANDING THING (IDEA, CONCEPT, FEELING, ETC.) YOU LEARNED OR EXPERIENCED IN THIS SEMINAR WHICH YOU WILL USE OR WOULD LIKE TO USE IN THE FUTURE.

Achievement Motivation:

- The movie "Pack Your Own Chute" made a big impression on me about how we decide our own behavior and not to let others influence the way we might behave.
- The dual concept that by behaving with the characteristics of a high achiever, a person will eventually think like an achiever; and that by fantasizing like a high achiever, the person will eventually behave like one. I am using both techniques and find they do work.
- That my goals are usually too low, that if I would set one a little higher, I would be more motivated so I could say, "look at me, I can do something I didn't think I could."
- Everyone can learn to become achievement motivated and carry out moderate goals no matter what you do.

Assertion Training:

- I have gotten the feeling that I can express my feelings and opinions without worrying about what other people will think.
- Show or give one's opinions; without trying one does not know the outcome.
- I have memorized my list of rights as a person and recall them when I feel they are being infringed. More than anything, this has helped me assert myself.
- It has given me some insight into people who do not speak up for one reason or another.

Management Task:

- The idea of the Pygmalion theory and the effect it has on other individuals. It might make it easier to understand why they might behave the way they do.
- You must build goals and expectations of yourself to succeed.
- That I should take the time to really look at where I am in my job and where I want to be. Also, different ways to obtain these things.
- I learned to think about the expectations of manager and employee relationships.

PLEASE DESCRIBE ONE OUTSTANDING THING (IDEA, CONCEPT, FEELING, ETC.) YOU LEARNED OR EXPERIENCED IN THIS SEMINAR WHICH YOU WILL USE OR WOULD LIKE TO USE IN THE FUTURE. (cont.)

Management Communication Seminar:

- I deal a great amount of time with men in executive positions. Understanding body language will be most helpful.
- The idea of honestly dealing with self-concepts.
- Keeping communication open and on the subject. To me, most of the seminar was based on a managerial position; I would not like to work as a supervisor or manager, but it opened up what situations these people are in, in relation to the people under them.
- Assertive behavior training.

Management Combination Task and Communication:

- I am interested in the "to do" list. I have always wanted to sit down and ask myself, "what do I want to do with my life." I was very surprised with the results of this.
- By being in a situation as this seminar, I was forced to look at myself and where I'm at (as I see me and as others do), to decide where I'd rather be. I'm going to practice objective setting and assertiveness to get there.
- I feel much more equipped to handle my job on a professional basis and my life on a more organized, goal-oriented basis.
- Objectives - the importance of them and how to write good objectives is something I plan to use in my life and at work. I plan to ask my managers about what they see as the objectives of our department as I am having a hard time defining them.

3. WHAT DID YOU MOST ENJOY ABOUT THE SEMINAR?

Achievement Motivation:

- The discussions within our supportive groups and also among all the groups usually at the beginning of each session.
- The support group interaction and fellowship.
- Support groups - I think they are fantastic. I can't recommend it highly enough. They are great.
- Interaction with support group - goal setting and discussion and airing of common problems.

Assertion Training:

- Instructors' enthusiasm gave me a feeling of importance of being part of this group.
- I enjoyed the interaction with the group; hearing their problems and trying to solve them. The instructors did a terrific job of sharing their learning and experiences with us.
- New and precious friendships from learning about ourselves together. An enjoyable experience.

Management Task:

- Informal discussions with other members concerning the ideas presented - it opened up a lot of different aspects I may not have thought of by myself - the session has made me think more of where I'm headed and how to get there.
- Discussions with the trainers, the movies.
- The way it was put on.
- Meeting and working with other women and learning more about managerial ideas.

WHAT DID YOU MOST ENJOY ABOUT THE SEMINAR? (cont.)

Management Communication:

- The very informative way the leaders conducted themselves. They kept to the subject. I've been to classes before and I'm always asked "how do you feel as a black woman?" You asked only how I felt as a woman, for that I thank you.
- Our discussion groups - enacting situations, feedback, etc. I really enjoyed this!
- Group sessions and exercises.
- The great amount of group discussion and participation.

Combination Task and Communication:

- I feel highly motivated and good about myself. I like everything about it.
- Sharing - learned a lot from the films shown - even the lectures were interesting. Working through objectives, planning, problem solving etc. was very useful!
- I enjoyed it all.
- Meeting the people and the exercises - also especially the leaders.

24. WHAT DID YOU LEAST ENJOY ABOUT THE SEMINAR? WHAT SUGGESTIONS DO YOU HAVE TO IMPROVE IT?

Achievement Motivation:

- The T.A.T. test. I disliked them because I found them the hardest thing to do. This is where I got most of my frustration. I see the importance of this test and believe that if you do have achievement fantasies you will be a more achievement oriented person.
- There were a few lectures (such as some of the ones on Achievement Imagery, etc.) that seemed to detract rather than add to the basic idea of the course and they should be eliminated.
- I did not like using the same pictures the 2nd time for our fantasy exercise. I found I wanted to make different stories from the first which hampered the achievement theme strived for.
- I enjoyed everything about the seminar.

Assertion Training:

- The role playing I found difficult to cope with.
- The spread over a long period of time. Suggest twice a week meetings, at least.
- Would like to have spent more time and concentrated effort in this type of training. I have some belief that including men in sessions would be helpful.
- I felt the material for each day was too dragged out and didn't really go into any depth - too much like high school.

Management Task:

- The one trainer's sessions tended to be boring - due, I think, to poorer teaching style and excessive dragging out of self-evident material.
- The material and lectures on budgeting. I found it very difficult to keep my interest.
- A couple of times the seminar seemed to bog down particularly when we discussed budgeting. The various systems seemed to be glossed over when I felt that more time should have been allotted to really understanding one of the systems.
- The budgeting section.

WHAT DID YOU LEAST ENJOY ABOUT THE SEMINARS? WHAT SUGGESTIONS DO YOU HAVE TO IMPROVE IT? (cont.)

Management Communication:

- I became very uneasy with the group leadership exercise that was ineffective. I was an observer and therefore not actively involved. I felt it dragged. It was a useful exercise, but should have been more concise.
- Things weren't really tied together.
- I honestly didn't have any negative thoughts on the 3-day seminar. I would have more small group discussions (as 4 or 5 people) rather than the entire group.
- I have no suggestions; it was operated very well.

Combination Task and Communication:

- I wish we had more time - go into more detail.
- The fact that is ended. I'd like to see more of this. Maybe someone can initiate something like this where I work - It would be great!
- The cold room.
- More stress on budgeting time and emotions would help me personally.

25. DO YOU HAVE ANY COMPLAINTS CONCERNING THE PHYSICAL ASPECTS OF THE SEMINAR? (FOR EXAMPLE: THE ROOM WAS TOO HOT/COLD, THERE WAS TOO MUCH OUTSIDE NOISE, ETC.)

Achievement Motivation:

- Room too cold at times.
- The day of the week (Friday) was a limitation. Saturday I was revved up and by Monday I wasn't as motivated to apply course concepts - would suggest holding course earlier in week.

Assertion Training

- None
- It sure was cold walking for four blocks to get here, but it could have been worse and it was worth it.

Management Task:

- One room was cold, the other room was comfortable but small.
- It was chilly most of the time. The interruptions over the speaker were very unappreciated. It would have been nice to have a little bit more room and I got sick the first day because of all the smoke.
- Room was cold.
- Round tables would have been nice. The loud speaker interruption annoyed me.

Management Communication:

- An extreme amount of noise and the room was quite chilly.
- Too much outside noise.
- The room was too cold and the intercom would also interrupt.
- The loudspeaker was an irritation and the room too cool - however I appreciated the coffee pot always being full.

Combination Task and Communication:

- Room was too cold and noisy, should have designated a smoking and non-smoking section.
- Room was too cold.
- P.A. system and noises from other room were distracting.
- The lighting could have been better.

27. WOULD YOU LIKE TO RECEIVE ANY ADDITIONAL JOB-RELATED TRAINING? IF SO PLEASE INDICATE THE TYPE OF TRAINING. (FOR EXAMPLE: BUSINESS SKILLS, BUDGETING AND PROBLEM SOLVING, ORGANIZATIONAL SKILLS, ASSERTION TRAINING, CAREER PLANNING, INTERVIEWING SKILLS, ETC.)

Achievement Motivation:

- Business skills, assertion training and career planning.
- Career planning, organizational skills, assertion training. All of the above would help me immensely.
- Assertion training, interviewing skills, problem solving, positive thinking.

Assertion Training:

- Yes, budgeting and problem solving.
- Career planning and business skills. Because of my present position in programming I find it difficult to break into other areas of management outside of data processing though I feel I am certainly capable enough to do it.
- Yes - organizational skills - I also feel extra assertion training would be beneficial.

Management Task:

- Assertion training, career planning, advanced interviewing, counseling.
- Budgeting, solving problem.
- All the above would be fantastic.
- Organizational skills, management (general), how to be more effective with others.

Management Communication:

- How to be a more effective leader, communication skills.
- Organizational skills, interviewing skills.
- Problem solving, leadership development.
- All of the above.

Combination Task and Communication:

- I definitely would like more training: especially budgeting, interviewing skills, negotiation skills, salesmanship, more communication skills, more specific job skills for my job, help in career planning.
- I think additional training would be very helpful - more training in assertion, interviewing skills, communication, and career planning.
- Assertiveness training, career planning, goal-setting (on a work and a personal level), verbal communications skills, group leadership skills.
- Accounting courses, budgeting, assertion training.

APPENDIX K
SUMMARY OF MODEL III SEMINAR
EVALUATIONS

Percentage of Responses

	<u>Not at All</u>	<u>Very Little</u>	<u>Some</u>	<u>Quite A Bit</u>	<u>A Great Deal</u>
1. Was the seminar able to maintain your interest?				24%	76%
2. Did you like the structure of the seminar?			6%	35%	59%
3. Did the seminar succeed in meeting the goals and objectives set forth for the seminar as you understood them? (for this question total = 14 evaluations)			7%	50%	43%
4. Did you feel the seminar was well organized?				41%	59%
5. Did you feel there was enough time for discussion?			24%	53%	24%
6. Did you feel discussions were instructive and relevant?			6%	53%	41%
7. Did you find the contact with people from other companies helpful and instructive?			6%	19%	75%
8. Did you feel there was enough time for informal meetings with the instructors and with other participants?			18%	41%	41%
9. Was the level of the seminar too advanced?	82%	6%	12%		
10. Was the level of the seminar too basic?	82%	0%	18%		
11. Do you feel you learned something in this seminar which you will try out on your present job?			41%	18%	41%
12. Do you anticipate using the material you learned in future jobs?			18%	29%	47%
13. Did this seminar alter your career plans in any way?	35%	35%	12%	6%	12%
14. Do you feel your supervisor supported you in attending this seminar?	6%	6%	6%	47%	35%
15. Do you feel more capable of handling the problems facing a manager or a supervisor after this seminar?			35%	53%	12%
16. Did the seminar leaders lecture in an interesting and understandable way?				18%	82%
17. Did the seminar leaders seem informed about the subject matter?				6%	94%
18. Did the leaders seem willing to teach and to share knowledge with the groups?				12%	88%

Percentage of Responses

	Not at All	Very Little	Some	Quite A Bit	Gr D
19. Did the leaders use the time provided in the most effective way?			6%	29%	6
20. Did the leaders help facilitate the group in sharing ideas with and learning from each other?				35%	6
21. Did the leaders encourage questions and group discussion?				6%	9

Below are random samples of responses received for the following open-ended questions:

22. PLEASE DESCRIBE ONE OUTSTANDING THING (IDEA, CONCEPT, FEELING, ETC.) YOU LEARNED OR EXPERIENCED IN THIS SEMINAR WHICH YOU WILL USE OR WOULD LIKE TO USE IN THE FUTURE.
- The Johari Window - I can see how the "public area" has grown and hopefully it will continue to do so.
 - I leave with the feeling that I am not alone with my work related problems and can look for help outside without fear about acceptance or recrimination from my job situation.
 - Supportive measures when dealing with personnel problems and people.
 - A different aspect in dealing with both my problems and others.
 - Assertive Response - Simple statement of this response with "good fun" practice makes it easy to try or at least to want to try.
 - Males locked in by stereotypes also!
 - Assertiveness.
 - Assertive responses and effective listening - I feel those are connected.
23. WHAT DID YOU MOST ENJOY ABOUT THE SEMINAR?
- Group sessions.
 - Getting together with people from other walks of life and finding we have the same problems.
 - Role playing in small groups about people problems as they appear in my work
 - Group study.
 - The attitudes of instructors!
 - Group discussions as a whole.
 - Getting away - would not have been as meaningful at work or on campus.
 - People.
 - Meeting with other women who are facing similar problems; where we, as women, find ourselves changing faster than the world we live in.
24. WHAT DID YOU LEAST ENJOY ABOUT THE SEMINARS? WHAT SUGGESTIONS DO YOU HAVE TO IMPROVE IT?
- Long hours, but considering the value of some participants' time, it probably would not be feasible to shorten the days and add a fourth day.
 - Thought it rather long. Would have preferred coming earlier in the morning to get started.

24. WHAT DID YOU LEAST ENJOY ABOUT THE SEMINAR? WHAT SUGGESTIONS DO YOU HAVE TO IMPROVE IT? (cont.)

- Too long! I don't see how you can present it any quicker but!
- Time frame - not used to relaxed pace - found myself frustrated by it.
- Would like to see more direct discussion between individual men and women, male/female issues to broaden understanding.
- Was too short.
- Role playing - no suggestions for improvement as I simply find it difficult, if not impossible, to role play.

25. DO YOU HAVE ANY COMPLAINTS CONCERNING THE PHYSICAL ASPECTS OF THE SEMINAR? (FOR EXAMPLE: THE ROOM WAS TOO HOT/COLD, THERE WAS TOO MUCH OUTSIDE NOISE, ETC.)

- Felt the surroundings were particularly good for this type of workshop, where people need to be relaxed and comfortable.
- No - very good!
- Excellent facilities.
- Seating was poor.

27. WOULD YOU LIKE TO RECEIVE ANY ADDITIONAL JOB-RELATED TRAINING? IF SO PLEASE INDICATE THE TYPE OF TRAINING. (FOR EXAMPLE: BUSINESS SKILLS, BUDGETING AND PROBLEM SOLVING, ORGANIZATIONAL SKILLS, ASSERTION TRAINING, CAREER PLANNING, INTERVIEWING SKILLS, ETC.)

- Business and interviewing skills training.
- Interviewing skills.
- Any or all of above.
- Not really. I am near retirement and don't have that much time left to work.
- Yes - personnel management and problem solving.

Year	1950	1951	1952	1953	1954	1955
1	100.00	100.00	100.00	100.00	100.00	100.00
2	100.00	100.00	100.00	100.00	100.00	100.00
3	100.00	100.00	100.00	100.00	100.00	100.00
4	100.00	100.00	100.00	100.00	100.00	100.00
5	100.00	100.00	100.00	100.00	100.00	100.00
6	100.00	100.00	100.00	100.00	100.00	100.00
7	100.00	100.00	100.00	100.00	100.00	100.00
8	100.00	100.00	100.00	100.00	100.00	100.00
9	100.00	100.00	100.00	100.00	100.00	100.00
10	100.00	100.00	100.00	100.00	100.00	100.00

APPENDIX L

CHARTS FROM SIX MONTH ANALYSIS AND MISCELLANEOUS ONE YEAR CHARTS

Year	1950	1951	1952	1953	1954	1955
1	100.00	100.00	100.00	100.00	100.00	100.00
2	100.00	100.00	100.00	100.00	100.00	100.00
3	100.00	100.00	100.00	100.00	100.00	100.00
4	100.00	100.00	100.00	100.00	100.00	100.00
5	100.00	100.00	100.00	100.00	100.00	100.00
6	100.00	100.00	100.00	100.00	100.00	100.00
7	100.00	100.00	100.00	100.00	100.00	100.00
8	100.00	100.00	100.00	100.00	100.00	100.00
9	100.00	100.00	100.00	100.00	100.00	100.00
10	100.00	100.00	100.00	100.00	100.00	100.00

TABLE L-1

Six Month Average Increase in Wages (In Dollars) - Excluding Unemployed

COMPANY	SEMINAR					
	Achievement	Assertion	Task	Communi- cation	Combination	Control
A	280.00	550.00	1100.00	708.00	810.00	464.00
B	312.00	769.50	1074.67	1000.00	1745.33	1140.67
C	1097.00	-286.00	1084.00	665.33	168.00	3486.00
D	1618.00	720.00	860.00	240.00	1206.67	664.00
E	666.00	680.00	367.33	671.33	1051.33	532.00
F	857.00	810.00	650.00	540.00	260.00	134.67
G	611.33	1346.00	1328.00	786.67	710.00	918.00
H	1026.00	1198.00	517.00	224.00	1709.33	1144.00
I	700.00	532.67	920.00	404.00	366.67	960.00
J	912.50	345.33	2188.00	342.00	-414.00	-79.33
Average Increase	767.19	698.92	1044.04	537.19	829.46	751.46
n	26	25	28	27	26	26

Over-all average increase 773.80

Over-all n = 158

ANOVA Table - Six Month Average Increase in Wages
(Excluding Unemployed) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	9013923.85	14	643851.70	.872	.591
Seminars	3708410.87	5	741682.17	1.004	.420
Companies	5222682.78	9	580298.09	.786	.630
2-Way Interactions	32194536.73	45	715434.15	.968	.537
Explained	41208460.58	59	698448.48	.946	.587
Residual	72393174.33	98	738705.86		
Total	113601634.92	157	723577.29		

TABLE L-2

Six Month Average Percent Increase In Wages - Excluding Unemployed

COMPANY	SEMINAR					
	Achievement	Assertion	Task	Communi- cation	Combination	Control
A	2.79	5.57	14.97	7.40	7.71	4.59
B	4.96	6.51	13.74	7.14	15.87	30.57
C	7.97	-4.00	6.90	8.97	2.15	48.42
D	20.30	8.47	9.31	2.90	14.78	8.60
E	8.61	6.37	3.41	9.77	10.51	5.54
F	12.12	10.02	8.35	10.11	3.52	2.53
G	10.57	17.91	21.41	12.90	9.63	15.63
H	13.02	20.59	8.08	3.05	54.42	13.22
I	8.71	6.96	12.12	4.59	4.55	10.93
J	7.24	3.65	24.34	3.59	-5.26	-0.25
Average Increase	9.41	8.67	12.56	7.19	13.05	11.47
n	26	25	28	27	26	26

Over-all average increase 10.41

Over-all n = 158

ANOVA Table - Six Month Average Percent Increase in Wages
(Excluding Unemployed) By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	3672.79	14	262.34	1.09	.376
Seminars	751.59	5	150.32	.625	.681
Companies	2950.72	9	327.86	1.363	.216
2-Way Interactions	9976.36	45	221.70	.921	.613
Explained	13649.14	59	231.34	.962	.559
Residual	23578.81	98	240.60		
Total	37227.95	157	237.12		

TABLE L-3

Six Month Increase in Task Authority By Seminar and Company

COMPANY	SEMINAR					
	Achievement	Assertion	Task	Communi- cation	Combination	Control
A	6.00	3.75	6.33	-0.33	-3.00	1.00
B	3.00	-0.67	2.00	0.00	1.67	-1.33
C	-3.67	-1.00	5.00	-7.00	-2.00	1.00
D	0.00	0.00	1.67	5.00	0.00	0.33
E	12.50	-0.33	0.33	-1.00	5.33	-2.00
F	1.67	1.50	0.67	1.00	4.67	2.33
G	4.50	4.00	-9.33	5.33	-3.33	0.00
H	0.33	6.33	4.33	-3.00	9.00	8.00
I	9.00	-1.00	0.33	5.00	3.00	0.00
J	4.33	-3.33	-3.33	0.00	6.67	3.67
Average Increase	3.43	1.00	0.80	0.76	2.35	1.31
n	28	27	30	29	29	29

Over-all average Increase 1.60

Over-all n = 172

ANOVA TABLE - Six Month Average Increase in Task
Authority by Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	400.062	14	28.576	0.651	0.816
Seminar	178.736	5	35.747	0.815	.542
Companies	227.466	9	25.274	0.576	.814
2-Way Interactions	2155.664	45	47.904	1.092	.349
Explained	2555.727	59	43.317	0.987	.513
Residuals	4870.250	111	43.876		
Total	7425.977	170	43.682		

TABLE L-4

Six Month Increase in Personnel Authority By Seminar and Company

COMPANY	SEMINAR					
	Achievement	Assertion	Task	Communi- cation	Combination	Control
A	4.33	3.25	1.33	3.00	-3.00	0.33
B	1.67	-1.00	6.00	3.00	2.00	0.00
C	-2.00	-0.50	4.33	0.00	0.00	-2.50
D	-0.33	-0.50	-0.67	5.00	1.67	-1.00
E	7.00	0.67	0.67	0.33	4.00	-0.33
F	3.33	-5.33	0.33	0.33	3.00	-0.67
G	0.33	11.50	-0.33	6.00	-2.67	-1.00
H	-0.67	2.33	-6.67	0.00	6.67	1.00
I	2.33	1.00	2.67	0.67	0.33	6.67
J	3.00	0.33	0.67	0.33	-0.67	4.33
Average Increase	1.72	1.00	0.83	1.72	1.17	0.79
n	29	28	30	29	29	29

Over-all average Increase 1.21

Over-all n = 174

ANOVA TABLE - Six Month Average Increase in Personnel

Authority by Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	125.084	14	8.935	.353	.985
Seminar	31.521	5	6.304	.249	.939
Companies	97.568	9	10.841	.428	.917
2-Way Interactions	1332.586	45	29.613	1.170	.251
Explained	1457.670	59	24.706	.976	.532
Residuals	2859.417	113	25.305		
Total	4317.087	172	25.099		

TABLE L-5

Six Month Average Increase in Autonomy on the Job By Seminar and Company

COMPANY	SEMINAR					
	Achievement	Assertion	Task	Communication	Combination	Control
A	4.33	2.25	5.67	1.00	-3.67	-1.00
B	7.33	0.00	-0.67	0.00	-0.33	1.00
C	-3.67	-4.00	3.33	-5.00	2.00	3.50
D	2.67	4.50	5.00	3.33	1.00	1.67
E	14.00	2.00	-1.33	-0.33	10.33	1.00
F	7.00	-4.00	0.00	1.33	5.67	3.33
G	4.67	-2.00	1.67	-1.33	-8.00	-2.33
H	2.33	11.00	-4.33	-3.00	5.33	5.33
I	4.67	0.00	5.00	3.00	3.33	-2.67
J	-2.67	3.33	-3.00	1.00	0.67	0.67
Average Increase	3.72	1.54	1.13	0.14	1.62	0.96
n	29	28	30	28	29	29

Over-all average Increase 1.53

Over-all n = 173

ANOVA TABLE - Six Month Average Increase in Autonomy on
the Job By Seminar and Company

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F Ratio	Significance of F Ratio
Main Effects	622.970	14	44.498	.998	.461
Seminars	228.083	5	45.617	1.023	.408
Companies	414.799	9	46.089	1.033	.418
2-Way Interactions	2028.135	45	45.070	1.010	.469
Explained	2651.105	59	44.934	1.007	.478
Residual	4995.750	112	44.605		
Total	7646.855	171	44.718		

TABLE L-6

Cross tabs - When Was Last Promotion By Seminar

Last Promotion	Achievement	Assertion	Task	Communication	Combination	Control
No Promotions	9	7	9	11	7	13
Promotion within 6 months	11	10	12	9	10	9
Promotion only before Jan 1, 1977	10	12	9	9	12	8

Chi-square Significance = .894

n = 177

TABLE L-7

Differences In Present Job Category 1976 and 1977

Job Category	Achievement		Assertion		Task		Communication		Combination		Control		Total	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
Service Worker													0	0
Laborer(unskilled)			1						2		1	1	4	1
Operative (Semi-skilled)					1	1							1	1
Crafts(skilled)			1						1				2	0
Office/Clerical	12	12	14	10	7	5	11	7	10	9	13	11	67	54
Sales	2	4			1	2	1	1			1		5	7
Technician	6	3	3	2	4	3	3	3	4	5	1	3	21	19
Professional	6	8	2	6	5	4	8	7	5	5	7	5	33	35
Manager	2	1	4	7	5	6	2	6	4	6	2	4	19	30
Total	28	28	25	25	23	21	25	24	26	25	25	24	152	147

TABLE L-8

Differences In Placement On Job Ladder Indicating Level
of Job Desired In Five Years 1976 and 1977

Ladder Rung	Achievement		Assertion		Task		Communication		Combination		Control		Total	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
1				1									0	1
2	1												1	0
3	1	2	1	4		3	1		2	3	1	1	6	13
4	3	2	4	1	10	6	5	5	8	6	4	3	34	23
5	14	10	10	8	9	9	7	10	10	8	16	13	66	58
6	5	7	6	6	2	3	9	4	4	6	3	4	29	30
7	4	3	2	1	1		2	3			3	1	12	8
8		2		3				2		2		2	0	11
Totals	28	26	23	24	22	21	24	24	24	25	27	24	148	144

TABLE L-9

Differences In Placement On Job Ladder 1976 and 1977

Ladder Rung	Achievement		Assertion		Task		Communication		Combination		Control		Total	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
1	4	3	2	2	2	3	3	1	1	3	2	2	14	14
2	6	3	7	3	6	3	3	4	11	6	8	3	41	22
3	12	13	8	9	9	7	10	9	10	9	9	10	58	57
4	6	4	8	6	5	5	8	8	4	6	6	6	37	35
5		1	1	4	1	3	1	2		1	1	3	4	14
6				1							1		1	1
Totals	28	24	26	25	23	21	25	24	26	25	27	24	155	143

TABLE L-10

Differences In Future Job Category Desired 1976 and 1977

Job Category	Seminar													
	ACHIEVEMENT		ASSERTION		TASK		COMMUNICATION		COMBINATION		CONTROL		TOTAL	
	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977	1976	1977
Service Worker														
Laborer (Unskilled)														
Operative (Semi-Skilled)														
Crafts (Skilled)														
Office/Clerical		1	3	1	1	1			2	2	1	1	7	6
Sales		2		1				1	1	1			1	5
Technician	1	1		1	1	2		1	3	2		2	5	9
Professional	7	8	7	7	6	3	7	8	5	7	6	6	38	39
Manager	19	15	13	15	14	14	17	14	14	12	20	15	97	85
Total	27	27	23	25	22	20	24	24	25	24	27	24	148	144

