MONTANA STATE UNIVERSITY

Personal, professional, and job related characteristics : comparison of men and women business education faculty NABTE institutions, Western Region/NBEA; 1976-1977

by Jeannette Jean Bieber

A dissertation submitted in partial fulfillment of the requirement for the degree of DOCTOR OF EDUCATION in Adult and Higher Education
Montana State University
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Abstract:
The purpose of this study was to compare personal, professional, and job-related characteristics of women and men Business Education faculty. The study included NABTE institutions of the Western Region/NBEA; faculty employed full time who taught at least one business education course; and academic year, 1976-1977.

The Hewitt study of 1975, which included only 38 faculty from the Western Region, was the only source found which compared the status of men and women for the profession. Other national studies showed a pattern of declining progress for women in the areas of rank, salary, tenure, and advancement in higher education in general.

Data were obtained via a mailed questionnaire sent to 172 Business Education faculty. Out of an 88.4 percent return, usable responses included 87 men and 53 women, or 81.4 percent. Forty-three null hypotheses were established, and the Chi Square (X2) Test of Significance was used to determine retention or rejection of each null. No hypotheses were stated for 14 additional, related items for which statistical comparisons provided added insight.

Rejection of the nulls occurred for 14, or 32.6 percent of the characteristics tested, compared with retention for 29, or 67.4 percent. The 14 extra items showed 6 differences and 8 non-differences.

The null hypotheses were rejected for the areas of: marital status, highest degree earned, tenure, academic rank, academic-year salaries, business work experience, major officeholder, publication of articles and books, out-of-class speeches, part-time administrators, class preparations, teaching contact hours, and student enrollees.

The null hypotheses were retained for the areas of: sex (compared with 55% men and 45% women); mean ages: years in rank; teaching experience; job locations; memberships; minor officeholder; travel; sabbaticals; appointments and elections to committees; credit hours taught; contact hours for graduate, undergraduate, and freshmen-senior classes; advisement of students and organizations; extension and additional on-campus classes taught; and student assistance.

Several recommendations were based upon the finding that 87.4% of the men, compared with 41.5% of the women, had the doctorate. Providing women with assistance for improving self-confidence as well as further study was proposed. Focus upon updating the learning and working environments of Business Education by administrators, faculty, and students was suggested; and supporting recommendations were outlined.

PERSONAL, PROFESSIONAL, AND JOB-RELATED CHARACTERISTICS: COMPARISON OF MEN AND WOMEN BUSINESS EDUCATION FACULTY NABTE INSTITUTIONS, WESTERN REGION/NBEA; 1976-1977

by

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A dissertation submitted in partial fulfillment
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of

DOCTOR OF EDUCATION

in

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August, 1978

ACKNOWLEDGMENTS

It's been a tremendously rich and rewarding experience to have worked with the able members of my committee, each of whom so generously contributed individual knowledges and skills: Dr. Earl Ringo, who so ably chaired the committee and provided his wisdom, guidance, and understanding; Dr. Robert Thibeault, who promoted the perfection required of the project; Dr. Harvey Larson, who provided insight into the dimension of Business Education; Dr. Dan Hertz, who suggested details relevant to Business Education; Mr. Burl Winchester, who furnished the humanistic element for the project; and Dr. Harry Townes, who presented a viewpoint outside the discipline for complete balance.

The Heywoods, McCleaves, and Rodneys, were instrumental in their encouragement and continued support. Jo Self, EMC librarian, suggested many helpful sources. Dr. Maury Evans and Dr. LeRoy Amunrud wrote the computer program and provided statistical expertise. My mother; brother, Jim; and sisters allowed the free time necessary to pursue the degree. The faculty who provided the data deserve recognition. I will always feel a deep sense of gratitude toward those who were so generous with their time and gave so much of themselves so that I might reach my goal.

Special Acknowledgments

My father, John Bieber, and my friend, Dr. Harold McCleave, neither of whom lived to share the joy of the completion of the degree, through their love of knowledge and travel provided the spiritual guidance. Both contributed to the inner strength needed to complete the degree. In memory of their joy of life, I dedicate these thoughts:

For my friend: (Died, 6-20-76)	"Forever, you were the best; Forever, 'Tak for Cist. . .' "
For my father: (Died, 11-4-77)	"And, when I pass from life to death, My hand will reach for yours. . ."

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ABSTRACT

The purpose of this study was to compare personal, professional, and job-related characteristics of women and men Business Education faculty. The study included NABTE institutions of the Western Region/NBEA; faculty employed full time who taught at least one business education course; and academic year, 1976-1977.

The Hewitt study of 1975, which included only 38 faculty from the Western Region, was the only source found which compared the status of men and women for the profession. Other national studies showed a pattern of declining progress for women in the areas of rank, salary, tenure, and advancement in higher education in general.

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Rejection of the nulls occurred for 14, or 32.6 percent of the characteristics tested, compared with retention for 29, or 67.4 percent. The 14 extra items showed 6 differences and 8 non-differences.

The null hypotheses were rejected for the areas of: marital status, highest degree earned, tenure, academic rank, academic-year salaries, business work experience, major officeholder, publication of articles and books, out-of-class speeches, part-time administrators, class preparations, teaching contact hours, and student enrollees.

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Several recommendations were based upon the finding that 87.4% of the men, compared with 41.5% of the women, had the doctorate. Providing women with assistance for improving self-confidence as well as further study was proposed. Focus upon updating the learning and working environments of Business Education by administrators, faculty, and students was suggested; and supporting recommendations were outlined.

Chapter 1

INTRODUCTION

During the late 1960's and the mid-1970's, numerous research studies compared a variety of characteristics for women and men. Much of the research was a result of two factors: (1) the Higher Education Guidelines, Executive Order 11246, of 1972, which focused upon treatment of men and women equally in higher education; and (2) the changing societal roles of women and men. The studies concentrated upon defining the status of men and women and made comparisons between women and men for a number of personal as well as job-related factors. Salary, academic rank, and tenure were often cited as those major areas where women differed from men.

In the early 1970's, the Carnegie Commission on Higher Education produced Opportunities for Women in Higher Education (1973:3), which provided an in-depth examination of the "equality of opportunity" of women in higher education. The Carnegie study concluded that the status of women faculty had not improved within the last 40 years:

> Historically, women in higher education have been and still often are disadvantaged as individuals compared to the level of their potential abilities. . . . This situation for women on college and university faculties had deteriorated over recent decades, beginning with the 1930's.

Other research studies supported the findings of the Carnegie Commission. Dr. Bernice Sandler's publication, On Campus with Women

(April, 1976:4), and The Chronicle of Higher Education (Magarrell, June 28, 1976:5) reported very little progress for women in specified areas of salaries, academic rank, hiring, time spent in teaching, research support, and where and what women taught.

Few studies referred to the discipline of Business Education, and readers of the research had to determine whether Business Education was included with education, business, social science, other business-related categories; or excluded from the data entirely. Research studies, which compared women and men specifically for the profession of Business Education, appeared to be nonexistent until the early 1970's. In 1971, the Harrington study defined the status of 144 women faculty of Business Education (Business Education Forum, 1972:40). However, only women with doctor's degrees were included in the Harrington survey.

It was not until 1975 that a study was found which compared women with men in the discipline of Business Education. The Hewitt study, "The Status of Men and Women Business Education Faculty in Departments of Business Education of NABTE Institutions" (1975:xviii-xxi), concluded that there were significant differences for men and women Business Education faculty. Academic rank, salaries, academic degrees, marital status, number of articles and books published, and National Business Education Association region were some of the areas where differences occurred.

Need for the Study

The need for the study resulted from the lack of published material related to the status of women and men in Business Education, in general, and specifically, for the Western Region/NBEA. Suggestions made by Hewitt supported the need for a study for the Western Region: ". . . A comparison study might be undertaken with regard to the status of women with regard to the various regions in the United States in higher education" (1975:135). Specific recommendations by Hewitt included reviewing women's status with regard to committee assignments, sabbatical leaves, and travel reimbursements to meetings. Teaching loads, advising loads, clerical duties, and secretarial assistance were areas also mentioned by Hewitt as needing further study.

Of the 220 men and 180 women included in the Hewitt study, only 38 of these faculty, 23 men and 15 women, were from the Western Region. Since the Hewitt study was a national survey and no specific comparisons were made for the Western Region, it appeared that there was a need to undertake a comparison study of the status of men and women of the Western Region. Furthermore, because of the lack of published material defining the status of women and men in the profession, it seemed appropriate that Business Education, itself, would have to gather the data, examine the data, and analyze the data rather than rely upon researchers outside the discipline to conduct studies.

PURPOSES OF THE STUDY

In addition to the personal curiosity of the author as to whether characteristics mentioned in national studies were comparable for the men and women in Departments of Business Education, there were two main purposes for undertaking this study.

Establishment of an Information Base for Business Education

The first set of purposes related to the necessity of obtaining a base of data surrounding the people who taught business education, in order to properly provide information so that comparisons could be made for women and men now as well as in the future. Other professions had established a base of information, and it seemed appropriate for Business Education to do the same.

Establishment of an Information Base for Administrators, Faculty, and Students

The second set of purposes related to the provision of a base of information to be used by administrators, faculty, and students of Business Education. Tremendous amounts of time and energy had been expended upon discussions of the status of women compared with men faculty, which affected the attention paid to the improvement of the profession. Therefore, an in-depth understanding of where status

differences occurred for women and men appeared to be needed in order to redirect the energy and attention from discussion to addressing those areas which were affecting the work environment and advancement of the profession.

STATEMENT OF THE PROBLEM

In order to establish some specifics of the problem and determine the parameters around which the study would be conducted, the statement of the problem was formed:

The problem of this study was to make a comparison of selected personal characteristics, professional characteristics, and job-related characteristics between men and women employed full time who taught at least one business education course in Departments of Business Education of the National Association of Business Teacher Education (NABTE), member institutions of the Western Region of the National Business Education Association (NBEA) during academic year, 1976-1977. For certain items, longer or shorter time periods were used in order to obtain data which could be compared, such as "publication of books," which used a time period of "1970 to 1977."

The problem focused upon 43 characteristics for which comparisons were made between men and women. After much consideration, the selected characteristics were organized into three categories: personal, professional, and job-related. There were 13 items classified as

personal, 15 as professional, and 15 as job-related. Although several of the items could have been interchanged among the three categories, it was decided that those items regarded as more personal in nature be classified as "personal"; those items regarded as more professional in nature be classified as "professional"; and those items more closely related to the job environment be classified as "job-related." A description of each of the categories as well as the characteristics included for each category was provided in this study.

Personal Characteristics

The 13 items selected for inclusion as personal characteristics were those most closely related to the person, or considered most personal in nature. Characteristics, such as (1) sex (proportion of men and women), (2) marital status, and (3) age were considered the most personal in nature. Other items classified as personal included: (4) highest degree earned, (5) tenure, (6) academic rank, (7) years in present rank, (8) academic-year salary, (9) post high school teaching experience, (10) elementary and secondary school teaching experience, (11) business work experience, (12) full-time teaching job locations, and (13) full-time nonteaching job locations.

Professional Characteristics

The 15 items selected for inclusion as professional characteristics were those items considered most professional in nature or most

closely related to the professional growth of the person. The professional characteristics included: (1) memberships in professional organizations, (2-3) major and minor officeholders in professional organizations, (4-7) professional instate and out-of-state travel completed and planned, (8) reimbursement for professional travel, (9-10) publication of articles and books, (11) professional speeches, (12) months of paid sabbaticals, (13) grant and salary reimbursement for sabbaticals, and (14-15) committee assignments by appointment or election.

Job-Related Characteristics

The 15 items selected for inclusion as job-related characteristics were those items which were most related to the job or work environment. The job-related characteristics included: (1) identification as part-time administrator; (2) stipends received for administrative duties; (3) class preparations; (4) credit hours of class taught; (5) teaching contact hours; (6-9) teaching contact hours for graduate, undergraduate, junior/senior-level, and freshmen/sophomore-level classes; (10) advisement of students for independent study; (11) student enrollees; (12) teaching of extension or off-campus courses; (13) teaching of additional on-campus courses for additional compensation; (14) advisement of student organizations; and (15) student assistance received.

SPECIFIC QUESTIONS TO BE ANSWERED

This study was designed to answer 43 specific questions relating to a comparison of men and women faculty employed in Departments of Business Education. These questions were categorized as personal, professional, or job-related as follows:

Personal

1. Sex. Was there a statistically significant difference in the proportion of men and women, compared with 55% men and 45% women?

2. Mean ages. Was there a statistically significant difference in the mean ages of men and women?

3. Marital status. Was there a statistically significant difference in the marital status (single, married, divorced, or widowed) of men and women?

4. Highest degree earned. Was there a statistically significant difference in the highest degree earned of men and women?

5. Tenure status. Was there a statistically significant difference in the tenure status of men and women?

6. Academic rank. Was there a statistically significant difference in the academic ranks of men and women?

7. Years in present rank. Was there a statistically significant difference in the number of years in present rank of men and women?

8. Academic-year salaries. Was there a statistically significant difference in the mean academic-year salaries of men and women?

9. Post high school teaching experience. Was there a statistically significant difference in the number of academic years of post high school teaching experience of men and women?

10. Elementary and secondary teaching experience. Was there a statistically significant difference in the number of academic years of elementary and secondary teaching experience of men and women?

11. Business work experience. Was there a statistically significant difference in the number of calendar years of full-time work experience of men and women?

12. Full-time teaching job locations. Was there a statistically significant difference in the number of full-time teaching job locations of men and women?

13. Full-time nonteaching job locations. Was there a statistically significant difference in the number of full-time nonteaching job locations of men and women?

Professional

14. Professional memberships. Was there a statistically significant difference in the number of memberships in professional organizations by men and women?

15. Major officeholder. Was there a statistically significant difference in the number of professional organizations for which one had served as a major officeholder (president, president-elect, or vice-president) of men and women?

16. Minor officeholder. Was there a statistically significant difference in the number of professional organizations for which one had served as a minor officeholder (secretary, treasurer, historian, or editor) of men and women?

17. Professional instate travel. Was there a statistically significant difference in the number of professional trips completed instate by men and women from September, 1976, through April 15, 1977?

18. Planned professional instate travel. Was there a statistically significant difference in the number of professional trips planned instate by men and women from April 16, 1977, through May/June, 1977?

19. Professional out-of-state travel. Was there a statistically significant difference in the number of professional trips completed out-of-state by men and women from September, 1976, through April 15, 1977?

20. Planned professional out-of-state travel. Was there a statistically significant difference in the number of professional trips planned out-of-state by men and women from April 16, 1977, through May/June, 1977?

21. Reimbursement for travel. Was there a statistically significant difference in the mean institution reimbursement received for instate and out-of-state professional travel of men and women?

22. Publication of professional articles. Was there a statistically significant difference in the number of professional articles published by men and women from Fall, 1970, through Spring, 1977?

23. Publication of professional books. Was there a statistically significant difference in the number of professional books edited, authored, or co-authored by men and women from Fall, 1970, through Spring, 1977?

24. Professional out-of-class speeches. Was there a statistically significant difference in the number of professional out-of-class speeches given by men and women?

25. Months of paid sabbaticals. Was there a statistically significant difference in the number of months of paid sabbaticals of men and women from Fall, 1970, through Spring, 1977?

26. Grant and salary reimbursement for sabbaticals. Was there a statistically significant difference in the mean grant and salary reimbursement for sabbaticals of men and women from Fall, 1970, through Spring, 1977?

27. Committee assignments by appointment. Was there a statistically significant difference in the number of committee assignments by appointment of men and women?

28. Committee assignments by election. Was there a statistically significant difference in the number of committee assignments by election of men and women?

Job-Related

29. Part-time administrators. Was there a statistically significant difference in the number of men and women identified as part-time administrators?

30. Stipends received for administrative duties. Was there a statistically significant difference in whether stipends were received for administrative duties of men and women?

31. Class preparations. Was there a statistically significant difference in the number of class preparations of men and women?

32. Credit hours of class taught. Was there a statistically significant difference in the credit hours of class taught by men and women?

33. Teaching contact hours. Was there a statistically significant difference in the teaching contact hours per week of men and women?

34. Teaching contact hours for graduate classes. Was there a statistically significant difference in the number of teaching contact hours per week for graduate classes of men and women?

35. Teaching contact hours for undergraduate classes. Was there a statistically significant difference in the number of teaching contact hours per week for undergraduate classes taught by men and women?

36. Teaching contact hours for junior/senior-level classes. Was there a statistically significant difference in the number of teaching contact hours per week for junior/senior-level classes taught by men and women?

37. Teaching contact hours for freshmen/sophomore-level classes. Was there a statistically significant difference in the number of teaching contact hours per week for freshmen/sophomore-level classes taught by men and women?

38. Advisement of students for independent study. Was there a statistically significant difference in the number of students advised for independent study by men and women?

39. Student enrollees. Was there a statistically significant difference in the number of students enrolled in classes taught by men and women?

40. Teaching of extension or off-campus courses. Was there a statistically significant difference in the teaching of extension or off-campus courses by men and women?

41. Teaching of on-campus courses for additional salary. Was there a statistically significant difference in the teaching of on-campus courses for additional salary by men and women?

42. Advisement of student organizations. Was there a statistically significant difference in the number of student organizations advised by men and women?

43. Student assistance received. Was there a statistically significant difference in the hours received per week of work study, secretarial, or assistance in the form of student assistance by men and women for Spring Quarter/Semester, 1977?

ADDITIONAL, RELATED CHARACTERISTICS

To enhance the findings of the 43 characteristics under study, 14 additional, related items were included. No specific questions were formulated for these 14 items; nor were hypotheses established. These 14 additional, related items were to provide additional insight for several of the items of the three established categories.

Five additional, related items selected to add insight for the personal category included: (1) salaries with the doctorate, (2) salaries without the doctorate, (3) married with not married, (4) doctorate with non-doctorate, and (5) salaries (academic-year and fiscal-year, inclusive).

Three additional, related items selected to add insight for the professional category included: (1) minor with non-minor officeholder, (2) major with non-major officeholder, and (3) reimbursement with non-reimbursement for travel.

Finally, six additional, related items selected to add insight for the job-related category included: (1-4) teaching with nonteaching of graduate, undergraduate, junior/senior-level, and freshmen/sophomore-level classes, and (5-6) student enrollees, semester and quarter.

GENERAL PROCEDURES

In order to obtain information for the 43 items included in the statement of the problem as well as for the 14 additional, related items, a survey instrument in the form of a questionnaire was designed. To improve the questions and design, the questionnaire was pilot tested and then mailed to the names which were provided by NABTE representatives in the Western Region/NBEA (see "Appendix C").

The collected data were organized and analyzed through the use of the Chi Square (X^2) Test of Significance to determine areas where statistically significant differences did or did not exist for the 43 established hypotheses. The Yates's correction factor was used for those items for which there was only one degree of freedom. Statisticians were consulted to determine the most

appropriate statistical tools, and the computer was utilized to assure the highest degree of accuracy in the computations. The findings were presented in tabular form with the highlights for each item. Specifics related to the methods and procedures have been presented in Chapters 3 and 4.

DELIMITATIONS AND LIMITATIONS OF THE STUDY

Delimitations

The statement of the problem established several delimitations which made the study more manageable. The main delimitations of this study included: (1) the Western Region/NBEA; (2) the academic discipline of Business Education; (3) the faculty employed full time who taught at least one business education course; (4) NABTE member institutions; (5) a time period of one academic year, 1976-1977, except where adjustments would be more appropriate in computing and analyzing the findings; and (6) forty-three selected characterisitcs which included personal, professional, and job-related items for comparisons between women and men.

This study did not attempt to make any judgments relative to discrimination or non-discrimination for any of the characteristics for which comparisons were made between women and men. Neither did the study attempt to determine why differences occurred or did not occur for the items under consideration.

Limitations

There were several limitations of this study which needed to be reflected upon when interpretation of the data occurred. These limitations focused around five assumptions:

1. that all appropriate names had been obtained from the NABTE representatives;

2. that the responses by the respondents to the questionnaire were accurate and that the responses were representative of the entire population;

3. that the researcher interpreted the responses to the questionnaire accurately;

4. that the most pertinent literature related to this study had been reviewed; and

5. that the women and the men were considered comparable in abilities.

DEFINITION OF THE TERMS

Various terms used throughout this study were subject to a diversity of interpretations. In order to provide a common base upon which to interpret the results of this study, several terms were defined. The main source consulted for the definitions was Good's

Dictionary of Education (1973). Business Education sources were used to expand upon Good's definitions.

Academic Year

As defined by Good (1973:4), academic year was, ". . . the period covering the annual session (excluding the summer session . . . usually divided into two semesters or three quarters . . . the total period is usually about nine months." This study included 8-, 9-, and 10-month time periods for the academic year.

Administrator, Part-Time

An administrator, as defined by Good (1973:15), stated, ". . . referring to the person responsible for the total administration of an educational system." For the purpose of this study, part-time administrators were defined as those persons assuming part-time administrative responsibilities in the Business Education Department, but who taught at least one business education course.

Business Education Department

Good's (1973:75) definition of Business Education Department consisted of, ". . . an area of study dealing with the principles and practices of teaching business subjects." This study further defined the purpose of Business Education Departments as training business teachers, secretaries, and office personnel; as well as a

department which provided courses and training for other business-related areas.

Extension Class

Good's (1973:101) definition stated, ". . . a part-time day or evening class offered to adults for the purpose of extending the resources of the sponsoring institution; usually held off the main campus . . ."

Class Preparations

Class preparations were defined by Good (1973:304) as, ". . . the act or process of teaching a class of pupils or students." This study did not count the same class more than once during the time period of one academic year.

Contact Hours

"The time assigned to a class for a particular division or work, whether recitation or preparation" was Good's definition (1973:415). Contact hours in this study included all in-class hours involved in teaching a course.

Credit Hours, Quarter

Good (1973:153) defined credit hours as, ". . . a unit used in measuring . . . work completed by a student in an institution of higher education. . ." Quarter credit hours were defined by Good as,

". . . are converted into the . . . (semester) by multiplying them by 2/3." In this study, semester hours were converted to quarter hours by the formula, 3/2.

Degree, Highest Earned

Academic degree was defined as, ". . . a degree conferred by an institution of higher education, regardless of the field of study" (Good, 1973:169). Highest degree earned included bachelor's master's, doctor's, as well as specialized degrees, such as the C.P.A., and other degrees mentioned by the respondents of this study.

Enrollees, Student

Total enrollment was defined by Good (1973:213) as, "The entire number of pupils who have been on the roll at any time during the period for which total enrollment is being reported."

NABTE

NABTE stood for the initital for the National Association for Business Teacher Education. NABTE was considered a division of the National Business Education Association (NBEA). Four-year university and college Business Education Departments were included.

Rank, Academic

". . . the status of a faculty member in a college or university in relation to other staff members of the same educational

institutions as, for example, professor, assistant professor, and instructor" was the definition of academic rank (Good, 1973:468). This study also included the rank of "associate professor" as a major rank.

Salaries, Academic-Year

Academic-year salaries included the contract salaries for the time period of the Fall Quarter/Semester through the Spring Quarter/Semester. The time period included 8-, 9-, and 10-month salaries.

Tenure, Permanent

Good defined permanent tenure as synonymous with "indefinite tenure" (1973:594). His definition was:

> . . . a system of school employment in which the teacher or . . . having served a probationary period of a certain number of years, retains his (sic) position indefinitely and is protected in his (sic) position either by statute or by rule of the school board; dismissal of employees having such protection must follow certain specified procedures.

Western Region/NBEA

The Western Region of the National Business Education Association included the following states: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, and Washington. In addition to the ten states, the Western Region/NBEA consisted of Canada and Guam. The Western Region was one of five NBEA regions.

CONTRIBUTIONS FOR BUSINESS EDUCATION

This study projected several major contributions for those persons most closely associated with the profession of Business Education. Administrators, faculty, and students formulated the main focus of the contributions.

1. Administrators, through an in-depth understanding of where differences did or did not occur for women and men faculty, would be able to more effectively guide their faculty toward opportunities for advancement. Not only would this enhance the faculty situation, but it would improve the work environment of Business Education.

2. Faculty, through an in-depth understanding of themselves and how their personal, professional, and job-related characteristics compared with those of their colleagues, would be able to make adjustments which would improve opportunities for advancement. This would lead to the improvement of teaching as well as the learning environment of the profession.

3. Students, through an understanding of the status of the women and men faculty, would better be able to appropriately prepare themselves for their future roles in Business Education. In addition, students should be able to establish more realistic educational and career goals.

SUMMARY OF CHAPTER 1

Chapter 1 introduced the study by pointing out that before the early 1970's little research comparing the status of women and men faculty had been undertaken in the specific area of Business Education. The Hewitt study of 1975 was the first study which compared the status of men and women faculty in the profession. The need for a comparison study of the men and women of the Western Region focused upon the lack of compiled data available for the profession and, especially, for the Western Region.

The purpose of this study centered upon the acquirement of a data base upon which to make comparisons of the status of women and men now as well as in the future. Supplying administrators, faculty, and students with information would provide a better understanding of areas which needed attention. The knowledge obtained from this study would allow the transfer from discussion of the status to actions for addressing differences which limited advancement within the profession.

The statement of the problem was introduced with a description of the three major categories: personal, professional, and job-related characteristics. Forty-three specific questions were formulated related to the categories. Although no specific questions

were posed for 14 additional, related items, additional insight was gained by their inclusion in this study.

The general procedures were outlined, including statistical tools used in determining retention or rejection of the established 43 null hypotheses. Delimitations and limitations were presented. In order to establish a common base upon which to interpret the results of the study, definitions were provided for several terms.

The contributions for the profession of Business Education centered upon the administrators, faculty, and students. The major contributions were to obtain knowledge which would be used to improve the teaching and learning environments of Business Education.

Chapter 2

REVIEW OF RELATED LITERATURE

It quickly became apparent that very little research had been conducted which studied the status of women and men for the profession of Business Education. Only one study was found which examined the status of men and women Business Education faculty (Hewitt, 1975). The Harrington study of 1971 (Business Education Forum, October, 1972: 40) provided information based only upon women with doctor's degrees who were teaching in the discipline of Business Education.

It appeared that other professions had been more responsive in researching the status of men and women; law, medicine, engineering, and mathematics were often cited in the literature showing comparison statistics for women and men. For example, the Modern Language Association of America had done an in-depth study of 4,500 faculty in foreign languages and English (MPLA, January, 1976:135).

Although Business Education was not identified as one of the professions for which specific data had been gathered and analyzed, several categories throughout the literature showed a relationship to the discipline of Business Education. Education, social science, business administration, business, data processing, and other business-related categories appeared in the literature. For the most part, one had to guess where the discipline of Business Education fit.

Because the profession of Business Education was not included as a separate category in the majority of surveys reported in the literature, the review of the literature centered upon information which was all-inclusive for faculty women and men in higher education. Where provided, data were reported for business-related categories.

In order to provide as unbiased a review of the literature as possible, for a topic which often included discrimination-type and opinion-type statements, it was decided to focus primarily upon the facts reported in the literature. The topic of discrimination was only referred to as it related to the discussion under examination.

Chapter 2 was organized by: (1) presenting a general view of the status of women in higher education, (2) citing the studies related to the profession of Business Education's status of women and men, (3-5) supplying research related to the comparisons of personal, professional, and job-related characteristics of men and women in higher education, (6) reviewing factors affecting the future status of women in higher education, and (7) summarizing Chapter 2.

THE STATUS OF WOMEN IN HIGHER EDUCATION

As one reviewed the literature for which comparisons were made for women and men in higher education, a pattern began to emerge. It appeared that there would have been substantial progress

with the issuance of Executive Order 11246 (1972:1), which emphasized that colleges and universities would not discriminate against faculty based on sex. However, the controversy over this Order limited the progress it had hoped to promote:

> Executive Order 11246, as amended, is perhaps the most widely recognized and most controversial federal regulation in the area of faculty employment. . . . These laws and orders grant the responsible federal agencies the power to examine and challenge the standards by which colleges and universities evaluate and employ their faculty, from initial hiring through promotion, to tenure (Shulman, 1975:7, 39).

Although women's advancement did not improve, and in many cases worsened, the Order drew attention to the status of men and women and appeared to have generated much of the research defining the status of men and women in higher education. The Carnegie Commission on Higher Education's report, Opportunities for Women in Higher Education, summed up the findings reported in much of the literature:

> The situation for women on college and university faculties has deteriorated over recent decades, beginning with the 1930's. . . . The most rapidly expanding fields in the 1940's and 1950's were the men's fields of science, engineering, and business administration. . . . The birthrate rose after World War II, interfering with the participation in higher education for many women. . . . The academic profession came to be better paid and attracted more men (1973:3).

Several sources voiced the same opinion as the Carnegie Commission. Sandler (October, 1976:3) referred to the comments of the American Association of University Professors (AAUP) that, ". . . Little sign of progress can be found regarding the equalization

of the status of men and women faculty members. . . ." Data from the report showed the general loss of ground for women.

The decreasing status of women faculty in the public colleges in Illinois were frequently cited in the literature (Furniss and Graham, eds., 1974:159; Cross, 1974:123). A report in The Chronicle of Higher Education stated, ". . . under-utilization of . . . and women in better-paying jobs and over-utilization of . . . women in lower-paying jobs has 'actually worsened' in the past eight years" (October 11, 1976:12).

The Women's Equity Action League (WEAL) concluded that women were more likely than men graduates in the job market to be "unemployed or underemployed, and underpaid" (July, 1977:6). And, Sandler referred to the unpromising future, ". . . the status of women in the labor force has deteriorated during the last twenty years, and prospects for improvement remain bleak" (March, 1978:2-3).

Indirectly, a few reports were encouraging. The Stanford Graduate School of Business reported a 1974 entering female class of 20 percent (Sandler, May, 1975:10). The Department of HEW's report, The Vocational Preparation of Women, Report and Recommendations of the Secretary's Advisory Committee on the Rights and Responsibilities of Women, estimated a job increase during 1974 to 1985, with the greatest growth for technical and professional areas (1975:22).

CHARACTERISTICS OF FACULTY IN BUSINESS EDUCATION

Hewitt's Study

Hewitt's was the only study found which compared women and men Business Education faculty. A total of 220 men and 180 women were included in the Hewitt study of 1975. Of the 400 respondents to the national survey, only 23 men and 15 women were from the Western Region/NBEA. Factual and opinion-attitude data were included (1975:79).

The factual portion of the Hewitt study (1975:122) for which significant differences were found for women and men included: rank; salaries; academic degrees; marital status; number of articles published; number of books edited, authored, or co-authored; and National Business Education Region. The factual section of the Hewitt study (1975:121-122) for which there were no significant differences found for women and men included: years in rank, tenure, age, structure of the institution, size of the institution, years of teaching experience, and professional membership in organizations. Women received lower salaries and held lower ranks than men, while men had higher degrees and wrote more books and articles was the conclusion reached in the Hewitt study (1975:129-130).

Hewitt also compared the attitudes of men and women (1975: 124-127). Women felt that men had an advantage in receiving

sabbaticals, committee appointments with prestige, permission to travel to professional meetings, rank at the time of appointment, promotions, salary, and student secretarial help. Men felt that women had an advantage in receiving salary appropriate to rank and commensurate with qualifications (Hewitt, 1975:130).

The opinion-attitude survey revealed that women felt ". . . they were given heavier teaching loads, heavier advising loads, and heavier clerical duties" (Hewitt, 1975:130). However, both men and women felt that women were "often more geographically immobile and more often had career and marriage conflicts" (Hewitt, 1975:131).

The items referred to in the Hewitt study, which were given as reasons for not hiring people, included such characteristics as, ". . . not qualified academically, . . . geographically immobile, . . . nonprofessional, not qualified intellectually, . . . job instability, . . . lack of work experience, . . . and marriage conflicts" (Hewitt and Houghton, 1977:24).

Hewitt recommended that her study be conducted for separate regions of NBEA (1975:131-132). This recommendation of Hewitt's lent support to conducting a status comparison of women and men in the Western Region/NBEA as well as inclusion of several areas where attitudes suggested that factual comparisons needed to be conducted.

Harrington's Study

The Harrington survey of 1971, while not comparing men and women of NABTE institutions, focused upon 144 women with doctor's degrees in the profession of Business Education. Although Harrington's study did not compare men and women, the survey provided some additional insight into the status of Business Education faculty. The percentages Harrington formulated regarding the status of women with the doctorate included:

-- 90 percent were full professors or associate professors, had tenure, had taught in their present positions for less than ten years, and belonged to one or more professional organizations;

-- 80 percent had published professional articles, and experienced high school, college and university teaching;

-- 70 percent had held office jobs in business or industry;

-- 50 percent were single, had held offices in local, state, regional, or national professional organizations;

-- 11 percent (16 out of 144) were department chairpersons;

-- and most taught summer school and extension classes when they wanted to do so, were 46-55 years of age, and mentioned a salary between $12,001 and $14,000 (Business Education Forum, October, 1972:40).

In both the Hewitt and Harrington studies, data were obtained on a national level. Neither study made a comparison of the status of women and men of the Western Region/NBEA. It appeared that a study was necessary to define the status of the men and women of the Western Region/NBEA as well as expand upon the Hewitt study.

COMPARISON OF PERSONAL CHARACTERISTICS OF WOMEN AND MEN IN HIGHER EDUCATION

Proportion of men and women, ages, marital status, degrees, tenure, rank, salary, experience, and mobility were the general areas covered for the category identified as "personal characteristics." A review of personal characteristics showed salary comparisons for men and women acquired the majority of space; while degrees, tenure, rank, and proportion of women and men were also frequently referred to in the literature. Experience, age, marital status, and mobility were not awarded the space as salary and other items. Little attention was provided specifically for the profession of Business Education even though there were many reviews of national surveys. Ten areas related to personal characteristics were reviewed.

Sex (Proportion of Men and Women)

It was observed from the materials that women had not made any gains in higher education since the late 1800's. Forty percent

appeared to be the highest percentage quoted for women in higher education in 1879, dropping to 30 percent in 1930, and further declining to 22 percent in 1964 (Hawkins, 1975:30). In a presentation by Sassower (1970:2) before a conference of professional and academic women, the percentage of 18 percent was quoted for 1965-66.

A variety of formulas may have caused some of the slight variation in the percentages. For 1971 the percentage of 27 was quoted (Opportunities for Women in Higher Education, 1973:27; and Schlossberg, 1974:258). The Carnegie Commission obtained their statistics from the National Education Association which did not include teaching assistants as part of the 27 percent.

An AAUP survey referred to by Magarrell (June 28, 1976:5) reported that women represented 22.5 percent for 1974-75, compared with 21.7 percent for 1976-77. Slightly higher percentages were reported by WEAL (July, 1977:8), with 23.8 percent women of full-time faculty for all ranks for 1974-75, compared with 24.3 percent for 1975-76.

Both Sandler (1970:568) and Cross (1974:123) cited the decreasing proportion of women from one-third in the early 1870's to approximately one-fourth in the mid-1970's. The National Center for Education Statistics of HEW (January 27, 1976:1) and Sandler (April, 1976:6) reported a percentage of 24 percent women for 9/10-month contracts.

Although the 1970 statistics suggested that approximately one-fourth of the faculties were women, several sources cited figures instead of percentages. The ratio of 197,000 men and 57,000 women was mentioned by Kilberg (August 9, 1974:17).

Reasons suggested in the literature for the differences in the ratios included the changing status and prestige of the university, the supply and demand of Ph.D.s, and the changing role of women.

Age

The comparison of age for men and women varied depending upon the comparison with another variable such as salary. Hewitt (1975:65) found no significant difference in the age groups of men and women in Business Education.

Several studies concluded that women tended to be older than men. Bernard (1964:48) found that academic women tended to be older than academic men. The reason provided by Bernard was, ". . . relatively smaller influx of young women into the academic professions . . ." Bernard described women and men aged 51 or older, with women comprising 28 percent, compared with 22 percent of the men (Sexton, 1976:13).

One study was found which related salary to age. For women Ph.D.'s in science and engineering, it was reported that the salary gap increased with age (WEAL, July, 1977:7).

Two studies referred to the ages of women and men upon completion of their doctoral degrees. Sandler (March, 1978:3) reported men to be older; while WEAL (July, 1977:6) presented the median age of men as 31.3, compared with women as 32.6 at the completion of the doctorate. However, the Carnegie Commission (Opportunities for Women in Higher Education, 1973:83) quoted the median age of both men and women graduate students from 26 to 27 years.

Because of the conflicting opinions found, it appeared appropriate for Business Education in the Western Region/NBEA to include age as one of the items for comparison between women and men.

Marital Status

The literature tended to support the premise that married women were less likely than married men to be represented on faculties of higher education. However, attitudinal changes appeared to have reversed the status, with "single" gaining favor over "married" for both men and women in some business-related cases in the late 1970's.

The Hewitt study found, "There are 34.27 percent of the women who are single compared to 10.91 percent of the men who are single" (1975:67). This agreed with most of the articles which suggested that women were more likely to be single.

O'Brien (August 1, 1977:79) reported that the marital status of women in higher education followed a pattern that carried upward to the presidents, "Unlike their male counterparts . . . most women presidents are not married. . . . Most of the women are single, . . ." Graham (1975:422) stated that 90 percent of the men who were leaders in higher education were married with children, compared with a contrasting picture for women.

One study related advancement to marital status suggesting that being married was a disadvantage for women:

> . . .Virtually every study of promotion indicates that as women move through the ranks, the career profiles of unmarried women more nearly approach those of the men. Consequently, whether a woman is married seems to affect her progress, but a man's marital status does not affect his one way or another, since better than 80 percent of all academic men are married (Peters: 1974:32).

Marital status was also related to salary, ". . . the higher a woman's income, . . . the less likelihood for her to be married. . . ." (Peters, 1974:29).

Much of the literature reported attitudes and opinions related to marital status. In Women in Higher Education, a book edited by Furniss and Graham (1974:22), sample responses to surveys and interviews were, ". . . Many of the women were married to relatively successful men, and the assumption was that they did not need the extra money that accompanied higher rank. . . . Or it was assumed that

single women had fewer expenses than married men and, therefore, needed less money."

Since marital status seemed to reflect upon advancement and other opportunities in higher education, it seemed necessary to compare the marital status of women and men in Business Education. And, especially, since the attitude enhancing the prestige of the "single" status appeared to be increasing, it was important to determine the marital status in order for relationships to be made with national data.

Degrees

Little data were found which compared men and women with and without doctor's degrees on higher education faculties. Most of the reported data focused upon the enrollments of women and men in graduate schools by degree and discipline.

Significant differences were found between men's and women's degrees in the Hewitt study (1975:122). However, only 38 Business Education faculty were included from the Western Region/NBEA as a part of the 400 respondents. Men had earned higher degrees than women in the Hewitt survey.

A table presented by Furniss and Graham (1974:91) showed that 46.1 percent of the men, compared with 21.7 percent of the women had the doctorate degree for all institutions for 1969. A more recent

report by the American Council on Education referred to newly hired faculty for 1977-78, "Despite the plentiful supply of persons with freshly minted doctoral degrees, only about four in ten of the new faculty members hired last year had Ph.D.'s. . . ." (Magarrell, May 30, 1978:6). The 40 percent quoted was even lower because the 449 colleges and universities surveyed included those faculty who expected to obtain the doctorate within two years.

In general, the data showed that the percentage of women earning the doctorate from the 1900's to 1976 increased from 9 percent to 23.3 percent. However, there were highs and lows depending upon discipline and economic conditions. The sources surveyed did not agree that there had been steady progress:

> Fewer women than men have access to degrees in the United States: women are awarded only 30 percent of our BA's and MA's, only 11 percent of the Ph.D's--the latter figure marks a sharp and tragic decline from four decades ago when women won as much as a third of American doctorates (Millett, 1970:2).

Feldman (1974:32) reported one pattern which showed the percentage of doctorates awarded to women was 9 percent in 1900, 11 percent in 1910, 18 percent in 1920, 11 percent in 1957, and 13 percent in 1969. It was in the 1970's that the percentages for women began to show improvement. From 1970 to 1975, the percentages almost doubled from 13.3 percent to 22 percent (Trivett, 1977:25). WEAL (July, 1977:5) reported that 23.3 percent of women were awarded the

doctorate in 1976. However, WEAL reported a previous high percentage of 20.5 for 1945 which was lower than the one-third reported by other sources.

It was not clear in many of the studies whether Business Education had been included with the category of education, business, business administration, social science, or other business-related categories. However, there were several studies which did break down the information for specific areas related to business. The National Research Council (March, 1973:11) presented the percentage of degrees awarded to women and men in business administration from 1930 to the early 1970's. The percentages were low and remained low with 1940-49 showing one percent and 1970-71, two and three tenths percent (2.3).

Other sources reflected the low percentages quoted for women earning degrees in business. From 1960-69, only 2.8 percent of the doctorates were awarded to women in business and commerce (Loring and Wells, 1972:28; and WEAL, June, 1971:unpaged). However, low percentages were also reported for the men. The Carnegie Commission (April, 1973:219-220) presented statistics which concluded that a very small percentage of both men and women received doctorates in business and commerce in 1970, with 2.8 percent of the men, compared with 0.3 percent of the women.

Computer and information sciences represented 6.6 percent of all doctorates for 1974-75. Degrees in business and management represented 4.1 percent in 1975-76 (Moore, ed., December 27, 1976:169-170). The Department of HEW reported that for the area of business, there were 938 doctorates of which 26 or 3 percent were women (Higher Education Degrees Conferred, 1970-1971:741-742).

A Chronicle of Higher Education "Fact-File" presented some comparison figures for business-related and education disciplines. For 1976 the earned degrees conferred for business and management for all institutions were 904 for men, compared with only 52 for women. In computer and information science, the figures were 221 for men and 23 for women (October 11, 1977:10).

Much of the data suggested that the doctorate for women tended to cluster in education, humanities, English and journalism, home economics, foreign languages and literature, and psychology (Sandler, June, 1977:2; Taylor, October, 1973:125; and Sugnet, 1975: 66). It was reported that about one-half of the new doctorates entered college teaching (Radner, Miller, Adkins, and Balderston, 1975:316). However, Sandler (June, 1977:1) reported that the professions were not hiring women even though they'd earned the doctorate.

A book review of Reform in Graduate and Professional Education stressed the importance of the doctorate in higher education,

"The research Ph.D. remains unchallenged as the criterion of success in higher education" (Benezet, reviewer, 1975:519). There were several reasons formulated for the low numbers of women in graduate degree programs. ". . . women are less likely than men to be admitted to graduate school, and, once admitted, they are less likely to complete the degree requirements," was stated by Feldman (1974:31). Sexton (1976:126) suggested that it was difficult for women to ". . . penetrate the departments and faculties that admit Ph.D. candidates and award them doctorates."

The economic condition of supply and demand of doctorates was not encouraging to women entering the higher education faculties. A report by Trivett (1977:11) stated that the National Board on Graduate Education of 1975, stressed that there was a steady reduction in the demand for new Ph.D.'s, with an increase in the number of women seeking entrance into graduate education.

College Graduates and Jobs, sponsored by the Carnegie Commission, projected a decline in the market for Ph.D.'s in the 1970's:

> Whereas the market for Ph.D.'s was exceptionally favorable during the greater part of the 1950's and 1960's--until 1968 or 1969--there is substantial agreement that it is likely to be increasingly unfavorable during the 1970's. . . . there is likely to be a large and growing surplus of Ph.D.'s in the 1970's, a surplus that will reach sizable proportions by 1980 (1973:143).

One source referred to supply and demand for a business-related area. Most of the hiring in higher education was completed

during 1958 to 1966. Ornstein (December, 1975:244) mentioned the absurdity of attempting to make up the differences at this time for women when fewer than 50 female doctorates had been produced from which to hire in business administration.

It appeared that the doctorate was necessary for advancement as well as for salary improvements. Therefore, it was important for the Western Region/NBEA to determine the status of men and women in Business Education with reference to the doctoral degree.

Tenure

The research agreed that tenure was more common for men in higher education. However, the Hewitt study (1975:6) found no significant difference in the tenure status of men and women in Business Education.

A low of 8 percent with a high of 40 percent for tenured women was quoted in the literature (Peters, 1974:33). Eight of the schools classified as Ivy League graduate schools showed 151 women of 4,470 tenured professors and associate professors (Furniss and Graham, eds., 1974:125). An AAUP Bulletin report (August, 1975:123) commented that tenure was almost universal at the full professor level, with few tenured faculty at the lower ranks. A percentage of 60 was quoted as representative of full-time faculty who were tenured.

However, HEW's National Center for Education Statistics (January 27, 1976:1) quoted 60 percent of men tenured, compared with 42 percent of the women. This percentage was similar with The Chronicle of Higher Education's "Fact-File," which showed percentages of 63.3 percent for men, compared with 44.4 percent for women who were tenured at all institutions for 1976-1977 (May 9, 1977:8).

The tenure status of men and women held a standard ratio of 60 percent for men and 45 percent for women over several years. Federal government statistics reported that for 1977, 58.5 percent of the men, compared with 44.4 percent of the women, were tenured. The 1978 percentages were 60.6 percent for men and 45.8 percent for women (Magarrell, April 24, 1978:9).

The determination of tenure came under attack because of the number of faculty reaching retirement age in higher education. The situation created a lack of openings for new faculty. Several cases were tried before the courts by women who were denied tenure. The courts tended to rule that tenure should be left to the discretion of the college and university academia (Fields, September 26, 1977:1, 14; and Chronicle of Higher Education, August 8, 1977:8).

From an examination of the literature related to tenure, it became apparent that additional study was needed to determine whether there was a difference in the tenure status as reported in the

literature, or whether there was no difference for tenure status of men and women as reported by Hewitt.

Rank

The percentages of women tended to be higher at the lower ranks of instructor and assistant professor and lower at the higher ranks of associate professor and professor. The reverse was true of men faculty in higher education. Hewitt's study of men and women in Business Education agreed with the national data; at the professor rank, men represented 33.18 percent, compared with women who represented only 12.36 percent (1975:58-59).

The Harrington study (Business Education Forum, October, 1972: 40), which examined the status of women Business Education faculty holding the doctorate, found that promotion in rank was one of the few complaints mentioned by the women.

Bernard (1964:180) believed that academic rank of women was inferior to that of men in all kinds of institutions as well as in various disciplines with the exception of home economics. Most of the data demonstrated little or decreasing progress for women in the higher ranks.

Women with similar qualifications as men did not seem to obtain the same rank advantage as men:

> . . . that women with the same qualifications are placed in ranks inferior to that of men with comparable qualifications in all types of academic institutions; that men hold 78 percent of academic positions . . . And yet some decades ago women held 30 and even 40 percent of these positions (Millett, 1970:1).

A study by Ladd and Lipset showed that 21 percent of the men, compared with 8 percent of the women under the age of 35 had reached the rank of associate or full professor (Sandler, April, 1976:4). The Carnegie Commission on Higher Education charted women as a percentage of faculty members in four-year colleges and universities for 1959-1972 (Opportunities for Women in Higher Education, 1973:111). Women were clustered in the lower ranks, with around 19 percent remaining as a stable percentage from 1959 through 1972. In addition, the Carnegie Commission mentioned the longer time period required for women to be promoted through the ranks in comparison with a shorter time period for men.

Some of the statements reported in the literature were blunt and to the point. Sandler (1970:574), at a presentation before the New York City Commission on Human Rights, stated, ". . . there is no question whatsoever that there is a massive, consistent and vicious pattern of sex discrimination in our universities and colleges. . . . women are almost always restricted to the lower academic ranks, and in some instances they are not hired at all."

The low percentage of women employed at the prestigious universities was mentioned by Loring and Wells (1972:28). Sandler (April, 1976:4), too, mentioned the large percentage of women employed in the junior ranks of low-paying institutions.

Decreases in the higher ranks for women were reported from 1975-76 and 1976-77. According to AAUP (Academe, September, 1977:4), Committee "Z" cited that for 1975-76, one-third of the women were in the upper two ranks; and by 1976-77, that percentage had decreased to 28 percent. Men decreased their percentages from 63 to 62 during that same time period.

For 1976, the statistics reported by Sexton (1976:12) were nationally representative with women at 32 percent, instructor; 19 percent, assistant professor; 15 percent, associate professor; and only 8 percent at full professor. An AAUW survey report in The Chronicle of Higher Education also listed women at 8 percent at the full professor rank (April 17, 1978:14).

Reasons cited for this difference included differences in the Ph.D. (PMLA, 1976:127). However, Furniss and Graham attributed the difference to rank at which men and women were hired. They stated that most men with the Ph.D. were hired at the assistant professor rank, compared with only 47 percent of the women Ph.D.'s (1974:128).

Going through the courts had not proved beneficial in obtaining advancement in rank. The courts ruled that tenure decisions and promotion decisions should be left to the persons in academe (Fields, September 26, 1977:1, 14).

Years in Rank

Only one study was found which provided some data related to years in present rank. No differences were found between women and men of the Hewitt survey (1975:121). It seemed necessary to obtain data for years in rank to determine whether there were differences for Business Education women and men of the Western Region/NBEA.

Salaries

The topic of salary status of women and men generated more discussion than any other item of higher education. The pattern that emerged showed differences in salary of men and women with the percentage and dollar differences increasing. No matter how the statistics were presented, the salary status comparison between women and men was becoming worse instead of improving. Reasons for the differences were based upon facts as well as upon feelings and attitudes.

Significant differences were found in the salaries of men and women Business Education faculty of the Hewitt study (1975:63).

The Hewitt findings showed that 26.82 percent of the men earned salaries over $20,000, compared with only 3.93 percent of the women. Salaries under $10,000 represented 4.09 percent of the men, compared with 24.16 percent of the women.

The Harrington survey (Business Education Forum, 1972:40) showed that women Business Education faculty with the doctor's degree most frequently mentioned a salary level of between $12,001 to $14,000. Most of the women thought that their salaries were about equal to the salaries of men at the departmental level, but lower than men's salaries at the college or all-university levels.

Whether comparisons were made by rank or as a whole seemed to make little difference in the conclusions. Women received less in compensation than men and were losing ground. From 1974 to 1975, women went from 4.5 percent lower compensation than men to 5.2 percent (Magarrell, June 28, 1976:5), which was the lowest percentage difference reported. The largest percentages were reported from a University of Arizona study which showed men instructors earning 20 percent more than women instructors; while a University of Minnesota study showed a difference of 50 percent for some departments (Sandler, 1970:572). The most frequent percentage difference quoted was 17.5 (AAUP Bulletin, August, 1975:118; Magarrell, April 24, 1978:9; and Sandler, 1976:4).

Equal opportunity laws had not corrected the differences in salary status of women and men. Krupsak (April, 1977:27-28) described the pattern gap of faculty salaries of men and women, ". . . just 20 years ago, in 1956, the gap was 36.7 percent; in 1966, it was 42 percent; and now it has grown to nearly 44 percent--this, at a time when the national policy and law of the U.S. is equal pay for equal work!" An AAUP survey of 74 percent of the nation's 2,220 accredited campuses described the differentials as being higher for the universities and higher for the professors than for the instructors (August, 1975:123).

No matter how the data were presented, percentage-wise or dollar-wise, the statistics showed that salary status differences existed between women and men faculty in higher education. "The mean salaries of men continue to exceed the mean salaries of women at every academic rank and at every institutional level, both in publicly and privately controlled institutions" (HEW's National Center for Education Statistics, January 27, 1976:1).

Some salary comparison figures were published for different regions of the United States by the National Education Association. A chart showed the region as well as the ranks for each region. In every category, some of which included universities and four-year

colleges, public institutions, Rocky Mountain, and Far West, salary percentages were less for women (NEA Advocate, March, 1977:6).

Whether the calculations were simple or whether the calculations involved the use of complex statistics seemed to make little difference in the pattern of salary status differences for women and men. The Carnegie Commission probably compiled the most comprehensive set of data information available for the status of women in higher education in their publication, Opportunities for Women in Higher Education. Based upon an equation, the male faculty members' salaries exceeded the average that would have been predicted based upon the equation; and the predicted salaries of the females based upon the equation would have been higher (1973:116).

Sandler summed up the salary status of women for institutions of higher education by describing an Educational Testing survey:

> . . . women with doctorates had incomes averaging $16,400 from salary and other sources. For men, the figure was $18,700. The size of this disparity increases over time: after 22 or 23 years of experience, the women's average income was $21,800, $5,300 less than the male average of $27,100 (May, 1975:3).

In order to establish some basis for understanding why differences occurred for salary status of women and men throughout the literature, it seemed appropriate to list some of the reasons set forth in the reviews. Low beginning salaries, low ranks in which women clustered, slow or non-promotion, type of institution, degree,

publications, mobility, education, length of service, differences in job responsibilities, part-time employment, and discrimination were only a partial listing of reasons suggested from the sources. A sample of the comments recorded in the literature included:

-- "Academic women are promoted far more slowly. . . ." (Sandler, 1970:568);

-- ". . . women apply for and accept lower paying jobs, . . . that women tend to prefer jobs with less responsibility" (remarks of respondents from The Endicott Report, 1972:2);

-- "Women earn less because they are at lower faculty ranks and because they are paid less . . ." (Sexton, 1976:126);

-- ". . . men, in addition to earning more than women, advance faster" (Taylor, 1973:125); and

-- "Many of the women were married to relatively successful men, and the assumption was that they did not need the extra money that accompanied higher rank. Or it was assumed that single women had fewer expenses than married men and, therefore, needed less money" (Furniss and Graham, eds., 1974:22).

Only brief reference to additional compensation received for publications and consulting appeared in the literature. If the same compensation situation existed for publishing and consulting as for salaries, the compensation status was compounded and an even

wider gap existed. Overwhelming evidence suggested that comparisons of salary status needed to be conducted for women and men for all disciplines, including Business Education. With only one study which showed salary status comparisons for the profession of Business Education, it was apparent that additional data needed to be gathered and analyzed for the Western Region/NBEA.

Experience

Very little data were found comparing the experience of men and women faculty in higher education. Hewitt's (1975:72) study showed no significant difference in the years of teaching experience of women and men Business Education faculty. No differentiation was made for elementary, high school, or college/university teaching experience in the Hewitt study.

If experience was referred to at all, it was in a general context. Taylor (October, 1973:125) referred to the experience and training influencing teacher salary schedules. Kilberg (August 9, 1974:17) concluded that where teaching experience and degrees were the same for men and women, differences in salary were not attributed to those two factors.

An AAUP bulletin (August, 1975:118) indirectly referred to the lack of data, ". . . survey does not gather information about the factors that affect individual compensation, . . . experience. . . ."

Because there was little reference made to experience of men and women in the literature, it was evident that data needed to be obtained and analyzed for elementary and secondary, and post secondary teaching experience as well as business work experience. There was a need for Business Education faculty of the Western Region/NBEA to have these comparison studies conducted.

Job Locations

The majority of the factual information reported in the sources which related to mobility, appeared to refute the intense opinions recorded in the surveys. The general attidude prevailed that women were less able to relocate than men.

For Business Education women and men faculty, Hewitt conducted an attitude-opinion survey (Hewitt and Houghton, 1977:24) which illustrated the feelings reported throughout the literature. In the Hewitt survey, both men and women believed that women were ". . . often geographically immobile." The reasons given included conflicts with marriage and career.

Several other sources referred to an attitude of immobility surrounding women. Endicott (1972:2) surveyed 127 companies, of which six referred to the unwillingness of women to relocate or travel.

A letter to the editor of The Chronicle of Higher Education (November 8, 1976:18) in a comment on salary inequities of women suggested that "lack of mobility" needed reviewing, "To what extent, if any, do more women than men set . . . restrictions on location . . ., which may limit their job market? . . ."

Some of the statistics supported these attitudes; however, there were also statistics which pointed out that attitudes such as those needed updating. One survey indicated that especially women referred to family ties in making a decision to relocate. A larger percentage of the women referred to the job of the spouse, 35 percent of the women, compared with only 4 percent of the men (Magarrell, February 6, 1978:9). One had to be cautious in interpreting the literature. Factual data had to be separated from attitudinal data in order to properly evaluate the mobility status of men and women. The Magarrell report did not mean that women would not relocate. Magarrell concluded that, "Mobility is limited for 1 percent of the men and 3 percent of the women by educational plans of their spouses."

Another fact reported by Magarrell in The Chronicle of Higher Education article was the close percentage of both men and women who preferred to move after the children had completed school; 16 percent of the men, compared with 12 percent of the women. In this same

article, only 2 percent of the men and 5 percent of the women mentioned parents causing limited mobility.

Mobility was tied to salary inequities between men and women. One of the reasons listed in an Educational Testing Service survey as the cause of differences in salaries between women and men with doctoral degrees was the higher freedom of men to move from campus to campus, compared with lower freedom of women to move (Sandler, May, 1975:3).

In another study of 2,000 faculty who had changed jobs since 1970, both potential salary increases and family responsibilities were reported as not being highly important in movement of faculty members. Comparisons of men and women showed that 2.4 percent of the women were willing to move anywhere for an attractive salary, compared with 8.7 percent of the men (Magarrell, February 6, 1978:1, 9). Several disciplines were referred to in the survey. Business Education was not one of them; neither were business-related areas.

It appeared that the attitudes needed to be verified or refuted with factual analysis of appropriate data. The Western Region/NBEA needed to conduct research which would determine whether the attitudes portrayed in the Hewitt study were in fact true.

COMPARISON OF PROFESSIONAL CHARACTERISTICS OF MEN AND WOMEN IN HIGHER EDUCATION

Professional memberships, officeholder of professional organizations, professional travel, publications, speeches, and committee assignments were the general areas included for the category identified as "professional characteristics." Discussions surrounding professional items did not demand the attention as did the personal items discussed earlier.

The area of publications of women and men secured the most attention of all the professional items. Many of the authors related publications to salary and referred to the impact of publications upon promotions.

There was little reference made regarding committee assignments, except general statements which referred to a more active involvement of women on committees. No references were found discussing compensation for sabbaticals and comparisons of sabbaticals for women and men.

The only study which related to the profession of Business Education was the Hewitt study which compared women and men faculty. Five areas related to professional characteristics were reviewed.

Professional Memberships

Hewitt (1975:120-121), in her study of NABTE faculty, found that there was no significant difference in the number of professional organizations to which women and men belonged. Other than the Hewitt study, little information was found related to professional membership. Other studies referred to the more visible participation of women in professional organizations.

One survey pointed out the trend of including women in visible national organizations (Peters, 1974:33). Peters also focused upon the more active participation of unmarried women in professional organizations.

Professional membership was related to higher education careers by one researcher. Feldman (1974:87-88) suggested that participation in professional activities ". . . increases one's likelihood of entering college or university teaching or research."

Only recently was there any attention paid to university-paid memberships in professional organizations, usually for administrators. Many of the organizations for which memberships had been paid excluded women. Cases were pending in the courts awaiting decisions to determine whether these payments were in violation of the equal opportunity laws.

Publications

In higher education, women had a pattern of publishing less than men. There were a variety of attitudes recorded in the sources surrounding this difference.

For men and women in the profession of Business Education, Hewitt (1975:74-75) concluded that men published more articles and books than women. Harrington (Business Education Forum, 1972:40) showed that 80 percent of the women with doctor's degrees in Business Education had published professional articles.

Both numbers of publications and percentages of publications were higher for men in the cited sources. In a comparison study of men and women who had received their doctorates within the last 23 years, Centra (1974:155) concluded that men were higher both in numbers and medians of journal articles published. The average number of journals published was 15 for men and 9 for women, while the median number of articles published was 5.7 for men and 3.5 for women.

Ladd-Lipset prepared charts which showed the publications of books and articles in The Chronicle of Higher Education (November 21, 1977:12; and November 28, 1977:2). The articles were categorized by professions, the books by age groups. No comparisons were made between men and women who had published. The Ladd-Lipset statistics

showed that 32 percent of social science faculty members, 29 percent of education faculty, and 31 percent of business faculty members published no articles. For the category of business, 49 percent had published five or more articles, compared with 30 percent of the education faculty who fell within the group of five or more articles. For publication of books, the Ladd-Lipset survey illustrated that 59 percent of all faculty members did not publish any books or monographs. The profession of Business Education was not listed as a separate category, but was assumed to be included with business or education faculty.

In research related specifically to business, it was concluded that men were more apt to show more research involvement. Almost one-half of the men, 41 percent, showed "0" or no research involvement, compared with 80 percent of the women (Feldman, 1974:62). While, in a Minnesota study by Eckert, it was found that the publications of academic men was close to double that of academic women (Peters, 1974: 25-26). Eckert's statistics were not related to specific disciplines.

Some of the researchers believed that the various disciplines accounted for the differences of publications of women and men. Peters (1974:27-28) felt that higher numbers of publications occurred in those disciplines in which women were not clustered, compared with lower numbers of publications in those areas in which women clustered.

Research by Astin indicated that the field of study also appeared to be the determining factor related to number of publications, rather than sex. A comparison of publications by women showed that, ". . . 25 percent of the women receiving doctorates in the natural sciences were highly productive (eleven articles or more), compared with 7 percent of those in education" (Sandler, March, 1978:5).

In addition to the field of study determining publication or non-publication, other researchers postulated other theories. In a study of the psychology profession, several reasons were cited for the differences women faculty Ph.D.s published less than men. More authorships were offered to the men than the women; 41 percent for the men, compared with 19 percent for the women. The women tended to be employed in two-year and liberal arts colleges where there was less emphasis upon research. And, there was a lower percentage of women who presented papers at the conventions (Sandler, March, 1978:5).

Advancement Related to Publications/Research

Several other professions, except Business Education, provided statements in the research relating publications to promotions, salary advancement, and advancement in general.

Cheit (1975:104) was one of the few authors to refer to a business-related area with respect to publications, "Research in

business administration has come to play a more important part in faculty promotions. . . ."

One was able to acquire some insight regarding the importance of publications for a person obtaining a faculty position in higher education. The University of Chicago Record (September 28, 1974:174) discussed a woman candidate who was interviewed for an accounting position, ". . . An intensive search in accounting yielded one woman candidate who was invited . . . for an interview in spite of the fact that her paper record was weak." It was assumed that "paper record" referred to publications.

The "publish or perish" doctrine seemed to persist. One of the commissioners at a conference of the New York City Commission on Human Rights referred to the well-known doctrine. The commissioner emphasized that women lecturers would see little progress without publications (Sandler, 1970:58).

The Carnegie Commission on Higher Education discussed the relationship of research upon advancement, "We now select and train a student to do research; then employ him (sic) to teach; and then promote him (sic) on the basis of his (sic) research" (January, 1971:17). It was suggested that research was not only highly influential in a person obtaining a faculty position, but in receiving promotions.

At the university, the impact of the influence of research was even more pronounced according to the Carnegie Commission.

Mood (1973:24), in another Carnegie Commission publication, discussed several outcomes of a good research record, all favorable, ". . . determines one's academic status, one's offers from prestigious universities, one's rate of promotion up the academic ranks, one's salary, one's bargaining power for research grants, and one's attractiveness to graduate students. . . ." It appeared from the testimony of Mood that research touched every aspect of successful academic advancement.

Publications and research were mentioned as being the most important of several criteria for reward and merit ratings of faculty in academe (Sexton, 1976:131). The Modern Language Association survey agreed with Sexton:

> . .. It appears from the data presented that publication . . . figures greatly in the reward system of the modern language profession. . . .A man's achievement depends more on publication, both of articles and books. Publication of articles is also important for women's salaries, not for their rank or tenure (PMLA, January, 1976:135).

Two court cases defined legally the value of research in the determination of promotion. In one decision, the courts cited publication of no scholarly works in art history as a reason for non-promotion. In the Cussler case, in which the courts ruled in favor of the university, heavy reliance was made by the courts on the claim

of the university that "scholarly publishing activity was a key factor in assessing whether a faculty member merited promotion to full professor, particularly in a department that was trying to update itself" (Fields, April 25, 1977:13). These court rulings refuted the findings of the PMLA which showed non-relationship of publications to rank and tenure for women.

Salary, which was closely related to advancement, was also connected with publishing. (WEAL (July, 1977:1) stated that the women who had the degrees and published were the "victims of the greatest salary inequity." An Educational Testing Service survey reported by Sandler (May, 1975:3) suggested that salary differences of women and men were attributed to, ". . . men more likely to supplement their salaries with consulting, writing, . . ." And, it was implied by Feldman (1974:55-56) that the well-paying fields were likely to promote more emphasis upon research than teaching.

Scott who developed the "Higher Education Salary Evaluation Kit" sponsored by the Exxon Corporation (Undated, received a copy in 1977:3), specifically referred to the impact upon publishing, ". . . If further predictors, such as number of papers published and number of books published, are readily available, they can also be inserted into the prediction equations and will improve the estimates, . . . though only slightly."

From a review of the data, the importance publications played in advancement in higher education became apparent. The literature did not dwell upon the "recognition factor" which was one result of publishing. The indirect results and rewards of publishing could not be verified from the review, but it appeared to be impressive. Because of the impact of publications for advancement and prestige in higher education, it became clear that Business Education faculty of the Western Region/NBEA needed to have publications compared for the men and women faculty.

Travel

Professional travel comparisons between women and men faculty were not often mentioned in the literature. Hewitt (Hewitt and Houghton, 1977:22) surveyed attitudes of women and men Business Education faculty and found, ". . . women indicated they felt men had the advantage in receiving permission to travel to professional meetings, . . ."

Sandler (March, 1978:5) reported that the American Psychology Association study indicated that men were more likely to be invited to accompany faculty on professional trips.

Only one other item was found which indirectly related to professional travel of faculty. In the Cussler case, the judge ruled

against Ms. Cussler on several grounds, one of which was "provision of travel funds" (Fields, April 25, 1977:13).

There were not enough data presented to make any judgments as to whether men and women were treated differently for professional travel. Therefore, more data needed to be compiled and analyzed in order to study the characteristic of travel more realistically. The Western Region/NBEA women and men faculty of Business Education needed to have a comparison study of travel conducted.

Committee Assignments

Only one study was found which studied the attitudes of men and women concerning committee assignments. In the opinion-attitude section of the Hewitt study (Hewitt and Houghton, 1977:22), it was felt by the women that men had an advantage in receiving committee appointments that held prestige.

No other studies were found making comparisons of men and women who were appointed or elected to committees. Only general statements were found which showed that women were likely to be represented on committees. Research needed to be conducted for Business Education faculty of the Western Region/NBEA to determine whether there was a difference in the appointments or elections of women and men to committees.

COMPARISON OF JOB-RELATED CHARACTERISTICS OF WOMEN AND MEN IN HIGHER EDUCATION

Administrative positions, class preparations, credit hours taught, student enrollees, teaching of freshmen through graduate classes, extension teaching, and student secretarial/work study assistance were the general areas included for the category identified as "job-related characteristics." Job-related items did not demand the attention as the items identified as personal, which were discussed earlier. The one exception was the discussion of administrators presented in the literature. Many of the sources contacted had information pertaining to comparison of number and percentage of women and men administrators.

Limited data were found which related to the profession of Business Education. Two areas were established to present a review of the job-related characteristics.

Administrators

Most of the literature reported that there existed a disproportionate ratio of women compared with men who were identified as administrators in higher education. No study was found which provided information for part-time administrators.

The 1971 Harrington study (Business Education Forum, 1972:40) provided documentation which showed that 16 of the 144 women faculty with doctorates who responded to her study held the position of department chairperson. This represented 11 percent. Only one other study specifically related women to department heads. Sandler (1970: 573), in a talk before the New York City Commission on Human Rights, remarked that it was rare for women to head departments and made reference to the "conspicuous" absence of women in administrative positions.

General research data for administrators in higher education generally presented numbers and percentages that showed women "thinly" represented in top administrative positions with practically "non-existence" occurring in the top echelons (Schlossberg, 1974:258).

Percentages of administrative representation of women ranged from one percent to less than twenty percent. One source cited a Massachusetts Commission study on the Status of Women which reported a decline of women administrators in many schools and estimated fewer than one percent (Cronin, October, 1973:138).

A study of 18,035 full-time administrators, which showed 70 percent white men representation compared with 14 percent white women, was reported by several sources (Van Alstyne, Withers, and Elliott, August, 1977:40; WEAL, July, 1977:9; Chronicle of Higher

Education, June 27, 1977:8; and Sandler, October, 1977:2). A report by WEAL showed women administrators ranged from 8 percent at research universities to 19 percent at liberal arts colleges (Sandler, March, 1978:2).

It appeared that advancement to administrative positions by women had not been forthcoming. An AAUW survey of 600 four-year colleges and universities was reported in The Chronicle of Higher Education (April 17, 1978:14) which stated in part, ". . . no gains have been made since 1973 in the percentage of women holding top-level administrative or tenured faculty positions in either private or public higher education institutions."

Public school analysis showed the disproportion of public school teachers compared with public school administrators. With women holding 67 percent of public school teaching positions, only 16 percent were representative of administrative positions (Lyon and Saario, October, 1973:12). A survey of jobs listed in state education directories for 1950, 1963, and 1972, concluded that percentage-wise, women in policy-making positions decreased from 14.5 percent in 1950 to only 6.8 percent in 1972 (Marr, October, 1973:142-143).

One source provided some insight into career patterns leading to administrative positions. "The primary officers of universities and colleges have customarily come from the school's own faculty or

the faculty of a comparably prestigious institution . . . after many years of teaching and research" (Furniss and Graham, eds., 1974:124). Another source concluded that it was infrequent for women to reach top administrative positions, even though women had entered positions with titles as, "assistant to," and other mid- and low-management positions (Schlossberg, 1974:260).

Only one study was found which referred to compensation of men and women administrators, "Women . . . received about 80 percent in pay as men with the same job title when employed by the same type of institution" (Sandler, March, 1978:2).

With the literature suggesting little improvement in the percentages and numbers of women in administrative positions and with declining enrollments in higher education, it did not seem likely that the situation would improve in the near future. The Western Region/NBEA women and men faculty needed to have some data compiled illustrating the ratio of administrators in the Business Education Departments.

Work Loads

Very few specifics were reported which related to work loads. However, there were general feelings and attitudes reported throughout the literature. The one Business Education study which compared men and women faculty concluded, "Women felt that they were given

heavier teaching loads, heavier advising loads and heavier clerical duties than were men" (Hewitt and Houghton, 1977:24). In this study by Hewitt, women felt that men received advantages in secretarial assistance.

In presentations before the New York City Commission on Human Rights in 1970, Harris (1970:586) and Sandler (1970:582) both reported that women were more likely to be teaching undergraduate students. Reference was also made to the higher teaching loads of women in academe (Sandler, 1970:582). From various studies, Peters (1974:22) concluded that at the assistant rank women taught more undergraduates; while Abramson (1974:1) referred to the teaching of undergraduates by women at the instructor level.

Several professions (Business Education was not included) reported specifics related to their disciplines. Science had some statements related to work load which revealed that women did, indeed, receive heavier teaching loads. The result of the heavier teaching loads in science allowed less time for laboratory tasks. Also, mention was made regarding the overload of assignments on departmental committees for women (Fields, October 31, 1977:7).

The Modern Library Association suggested that women received "more than their share" of teaching in that profession. The PMLA related heavy teaching loads of women to the fact that women tended

to teach at institutions where teaching loads tended to be heavier (PMLA, 1976:135). Abramson (1975:84) lent support to the PMLA findings, "Small colleges generally assign heavier teaching schedules than do major universities, and major universities often assign heavier teaching loads at the lower ranks."

Teaching assistants were referred to in the reviews. Peters (1974:22) concluded that women faculty had fewer student assistants; while Abramson (1975:85) pointed out that graduate students, in addition to counting for teaching, advanced the research of the professor whom they were assisting.

It was evident that data needed to be analyzed for the Business Education faculty of the Western Region/NBEA to determine whether there were differences in work loads of women and men. The limited facts presented in the reviews suggested factual data were required in order to make some determinations.

IMPLICATIONS FOR THE FUTURE STATUS OF WOMEN IN HIGHER EDUCATION

The forthcoming economic conditions of the nation which affected the implications surrounding women in higher education were not encouraging. The scarcity of job openings in higher education was evident. Statements indicated that schools were being required to

economize and cut back, which fostered low hiring levels (Kilberg, August 9, 1974:17). In economic cutbacks, those last hired, which often included women, were the first to be released. The Carnegie Commission provided much data related to supply and demand. ". . . it has been evident for some time to professors of education that they were training far more teachers than would ever find jobs teaching school . . ." (Mood, 1973:21). The responsibility of graduate schools to explore alternatives to teaching was mentioned by Mood in his discussion of declining enrollments and the changing attitudes toward higher education.

Howe (1975:164) suggested that women improve their status in the professions in which they clustered. Concentration on advancement in women-dominated disciplines, such as education and home economics was one solution proposed by Howe. Since there were more men than women clustered in the discipline of Business Education, it was difficult to relate the approach suggested by Howe.

Other sources focused upon the need for women to acquire an updated attitude toward themselves as well as their women colleagues. The Hewitt study (Hewitt and Houghton, 1977:22) revealed the low attitudes expressed by women toward women in the profession of Business Education. Women regarded other women as academically unqualified and not qualified intellectually. In the opinion-attitude

section, Hewitt concluded, "Women faculty marked women as being emotionally unstable, lacking physical stamina, and low in physical appearance. Men, however, did not perceive women as being academically unqualified."

Rossi (Spring, 1964:610, 638) emphasized the need for women to be allowed to participate, as well as the need for women to want to participate, in order for equality to exist. The attitudes of women and men seemed to be an integral part of the discussion related to the comparison status of women and men in higher education and, specifically, Business Education.

SUMMARY OF CHAPTER 2

The review of the related literature focused upon an examination of the data relative to the characteristics under study. The review attempted to support and relate to the problem of this study. A general overview of the status of women in higher education showed a decreasing representation on faculties from a high in the 1930's. Other areas where women had not made progress were salaries and rank.

Two studies were found and reviewed which related specifically to the profession of Business Education, the Hewitt and Harrington studies. The Hewitt study compared the status of women and men, while the Harrington study surveyed women faculty with doctor's degrees.

Sources related to personal, professional, and job-related characteristics were reviewed and presented. Areas for which there was adequate discussion in the literature included: proportion of women and men on higher education faculties, degrees awarded, rank, publications, and ratio of men and women administrators. Information was limited for the review of: age, marital status, tenure, degrees of men and women employed on higher education faculties, years in rank, experience, job locations, professional memberships, travel, committee assignments, part-time administrators, and work loads. The main concentration was on factual information; however, attitudes were provided where factual data were lacking and where insight was enhanced.

Because of the limited data available for the profession of Business Education, the review focused upon data related to other disciplines as well as general faculty statistics. The review supported the need to gather data and analyze data to define the status of women and men of the profession of Business Education in the Western Region/NBEA.

Chapter 3

METHODS AND PROCEDURES

This study was designed to compare personal, professional, and job-related characteristics of women and men employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977. Adjusted time periods were allowed for certain characteristics in order to obtain a better data base upon which to make comparisons.

Chapter 3 was organized to provide an in-depth understanding of the presentation of the exact methods and procedures utilized in obtaining the results of this study. Included in Chapter 3 were definitions and descriptions of the methods and procedures related to: (1) the population, (2) the sampling process, (3) the methods used for collecting the data, (4) the perfection of the questionnaire, (5) the mailings and returns, (6) the categories to be investigated, (7) the stated statistical hypotheses, (8) the methods for testing the hypotheses, (9) the organization of the collected data, and (10) the organization and presentation of the findings.

DEFINITION OF THE POPULATION

The population utilized in this study was specifically defined to include only those men and women employed full time who taught at

least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977. The list of institutions used for this study was obtained from the Business Education Forum (December, 1976:31-34) which presented the directory of NABTE schools and the NABTE representative of each institution. Eight of the ten states of the Western Region of NBEA had NABTE colleges and universities listed. The eight states included in this study were: Arizona, California, Hawaii, Idaho, Montana, Oregon, Utah, and Washington.

Alaska and Nevada were two states which did not hold membership in NABTE in December, 1976; therefore, no institutions from Alaska and Nevada were contacted in this study. The Western Region also included Guam and Canada which were not NABTE members. Neither was used for this study.

The number of NABTE institutions listed in the December, 1976, issue included thirty-five schools: three from Arizona, eleven from California, one from Hawaii, three from Idaho, four from Montana, four from Oregon, three from Utah, and six from Washington.

SAMPLING PROCEDURES

The 35 NABTE representatives of the Business Education Departments whose names were stated for each of the 35 institutions listed

in the December, 1976, issue of the Business Education Forum were sent a memorandum and response form (Appendix A) requesting a current listing of Business Education faculty employed full time who taught at least one business education course in their departments. The NABTE representatives to whom the memorandum with the form was sent included: one from Hawaii; three from Arizona, Idaho, and Utah, totaling nine; four from Montana and Oregon, totaling eight; six from Washington; and eleven from California. In order to encourage a high response from the 35 NABTE representatives, a stamped, self-addressed envelope was included. On April 31, 1977, a follow-up letter was sent to each of the four NABTE representatives who had not responded. Replies were received from three, making a response from NABTE representatives of 34 out of 35, or 97.1 percent. The 34 participating institutions were presented in "Appendix B."

All Business Education faculty whose names were received from the NABTE representatives were included in the sample. The sample totaled 62 women and 110 men, or 172 faculty.

METHODS FOR COLLECTING THE DATA

The mailed questionnaire was selected as the best method by which to collect the data for two reasons: (1) the number of faculty to be contacted was 172, and (2) the widespread locations of the

faculty for contact included eight states. Because it would have been expensive and time-consuming to contact each of the 172 faculty personally, the mailed questionnaire appeared to be the most logical method for the collection of the data and was accepted as the vehicle by which to obtain the information needed for this study.

Pilot Test

In order to perfect the questions and design of the questionnaire, a letter and sample questionnaire were mailed to five faculty from Montana and two faculty from California. Four of the faculty had doctoral degrees; three did not. Five of the faculty were men; two were women.

All of the questionnaires were returned with comments. Suggestions for the improvement of the wording of the letter and the questions were incorporated into the questionnaire. The final form was then sent to 172 Business Education faculty named by the NABTE representatives. A memorandum was included as part of the questionnaire. In order to assure as high a response as possible, a stamped, self-addressed envelope was enclosed with each questionnaire.

A sample of the questionnaire was placed in "Appendix C." To gain attention and a high response, the questionnaire was printed on bright green paper.

MAILINGS AND RETURNS

Mailings and Returns

On April 16, 1977, a memorandum with the questionnaire (Appendix C) was mailed to 62 women and 110 men Business Education faculty whose names had been received from the NABTE representatives. On May 3, 1977, the first follow-up letter was sent (Appendix D) to 57 faculty who had not responded by May 1. On May 14, 1977, the final follow-up mailing was sent (Appendix E) to 28 faculty who had not responded.

On June 24, 1977, the final response was received, making a total of 152 returned questionnaires. This represented an 88.4 percent return from the 172 faculty.

Usable Returns

Of the 110 questionnaires mailed to the men, 14 were not returned; 5 were returned, but not completed; and 4 were not included. The usable return for the men was 87.

Of the 62 questionnaires mailed to the women, 6 were not returned; 2 were not completed; and 1 was not included. The usable return for the women was 53.

There were 140 usable, returned questionnaires. This represented an 81.4 percent usable response.

The five men and two women who returned but did not complete the questionnaire included: one man and one woman on leave and sabbatical, respectively; one woman who stated that she was too busy; and one man who commented that he preferred not to be included. Two of the men stated that they were in Distributive Education and Business Administration. One man returned the questionnaire without giving a reason for noncompletion.

Additional scrutiny showed that five of the respondents did not appear to meet the criteria of the delimitations of "Business Education faculty employed full time who taught at least one business education course." The four men and one woman who were not included circled their discipline on the questionnaire as "Business Administration" and listed business administration courses under the section requesting a list of courses taught. For these reasons, all five were not included in this study.

Representativeness of Sample

An examination of the non-respondents, which represented 11.6 percent of the mailed questionnaires compared with an 88.4 percent return, was undertaken. Although there was always the chance that the usable respondents were not representative of the sample, several characacteristics of the non-respondents lent support to the representativeness of the sample:

1. The proportion of the non-respondents was similar for both the men and women. Of 110 questionnaires mailed to the men, 14, or 12.7 percent were not returned. Of 62 questionnaires mailed to the women, 6, or 9.7 percent were not returned.

2. The institutions of the non-respondents varied for both the women and men. The 14 men non-respondents came from 10 institutions; the 6 women non-respondents came from 6 institutions.

3. The states of the non-respondents shared commonalities for both the men and women. The 14 men non-respondents came from 5 states; the 6 women non-respondents came from 3 states. The largest number of men (5) and women (3) were from the same state.

The Chi Square (X^2) Test of Significance using the Yates's correction factor was performed comparing the proportion of usable respondents (87 men and 53 women) with the non-respondents (14 men and 6 women). The calculated Chi Square (X^2) was .19. When compared with the table Chi Square (X^2) of 3.84, there was no statistically significant difference in the proportions of both groups.

TREATMENT OF THE DATA AND PRECAUTIONS FOR ACCURACY

Preparation of the Data

After the usable respondents were determined (87 men and 53 women), the responses related to each of the 43 null hypotheses and

the 14 additional, related items were tallied by hand. From the tallied material, tables were prepared using figures.

Precautions for Accuracy

To assure the highest degree of accuracy for the tables, the hand-tallied data were checked twice. The calculator was used to perform the vertical and horizontal computations.

For the calculations of the Chi Squares (X^2s), computer programs were written by statisticians (see "Appendixes F and G"). Statisticians' suggestions of using the Yates's correction factor for tables with one degree of freedom were followed.

The computer was used to perform the computations for the calculated Chi Squares (X^2s). The computer printout was checked with the table figures. In addition, the calculations were run through the computer a second time to assure an accurate calculated Chi Square.

CATEGORIES OF INVESTIGATION

Forty-three items were selected for use in making comparisons between men and women faculty employed full time who taught at least one business education course. In order to more effectively handle and analyze the results of the data, the 43 characteristics were divided into three categories: personal characteristics, professional characteristics, and job-related characteristics.

Personal Characteristics

Thirteen items were included within the category of personal characteristics. Items of a more personal nature were included within this category, although many of the items could have been interchangeable with the other two categories. An attempt was made to select those items which were the most personal in nature for inclusion under personal. The thirteen personal items were: (1) sex, proportion of men and women; (2) mean ages; (3) marital status; (4) highest degree earned; (5) tenure; (6) academic rank; (7) years in present rank; (8) academic-year salary; (9) post high school teaching experience; (10) elementary and secondary teaching experience; (11) business work experience; (12) full-time teaching job locations; and (13) full-time nonteaching job locations.

Professional Characteristics

Fifteen items were included within the category of professional characteristics. The items most related to the faculty which were most professional in nature were selected for this category. The fifteen professional items were: (1) professional memberships, (2) major officeholder, (3) minor officeholder, (4) professional instate travel, (5) planned professional travel, (6) professional out-of-state

travel, (7) planned professional out-of-state travel, (8) reimbursement for travel, (9) publication of professional articles, (10) publication of professional books, (11) out-of-class speeches, (12) month's of paid sabbaticals, (13) grant and salary reimbursement for sabbaticals, (14) appointments to committees, and (15) election to committees.

Job-Related Characteristics

Fifteen items were included within the category of job-related characteristics. Characteristics which most related to the job and job environment were selected for this category. The fifteen job-related items were: (1) identification as part-time administrator; (2) stipends received for administrative duties; (3) class preparations; (4) credit hours taught; (5) teaching contact hours per week; (6) contact hours for graduate classes per week; (7) contact hours for undergraduate classes per week; (8) contact hours for junior/senior-level classes per week; (9) contact hours for freshmen/sophomore-level classes per week; (10) advisement of students for independent study; (11) student enrollees; (12) teaching of extension or off-campus courses; (13) teaching on-campus courses for additional salary; (14) advising of student organizations; and (15) work study, secretarial assistance, or assistance by student assistants per week.

ADDITIONAL, RELATED CHARACTERISTICS

In order to provide added insight for several of the items for which null hypotheses were formulated, 14 additional and related characteristics were included for additional information. Although no hypotheses were stated for the 14 additional, related items, the same statistical comparisons were performed as for the 43 stated hypotheses. Thereby, additional data were obtained which provided a more complete analysis of several of the hypotheses.

The 14 additional, related items for which comparisons were made and the null hypotheses' characteristics to which they related were: (1) married v. not married/marital status; (2) doctorate v. non-doctorate/highest degree earned; (3-5) academic- and fiscal-year salaries, salaries of those with doctorates, and salaries of those without doctorates/academic-year salaries; (6) major v. non-major officeholder/major officeholder; (7) minor v. non-minor officeholder/minor officeholder; (8) reimbursement v. non-reimbursement for travel/reimbursement for travel; (9-12) teaching v. nonteaching of graduate, undergraduate, junior/senior, and freshmen/sophomore classes//contact hours per week of graduate, undergraduate, junior/senior, and freshmen/sophomore classes; and (13-14) student enrollees, quarter and semester/student enrollees, all.

STATISTICAL HYPOTHESES

In order to determine whether statistically significant differences occurred for each of the 43 characteristics between women and men, null hypotheses were established for each of the 43 items selected for the study. The 43 hypotheses included 13 for personal, 15 for professional, and 15 for job-related.

Each null hypothesis referred to women and men employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA. The time period was for academic year, 1976-1977, unless otherwise indicated.

Personal Characteristics' Hypotheses

1. Sex. There is no statistically significant difference in the proportion of men and women when compared with the Hewitt study's national proportion of 55 percent men and 45 percent women.

2. Mean ages. There is no statistically significant difference in the mean ages of men and women.

3. Marital status. There is no statistically significant difference in the marital status (single, married, divorced, or widowed) of men and women.

4. Highest degree earned. There is no statistically significant difference in highest degree earned of men and women.

5. Tenure status. There is no statistically significant difference in the tenure status of men and women.

6. Academic rank. There is no statistically significant difference in the academic ranks of men and women.

7. Years in present rank. There is no statistically significant difference in the number of years in the present rank of men and women.

8. Academic-year salaries. There is no statistically significant difference in the mean academic-year salaries of men and women.

9. Post high school teaching experience. There is no statistically significant difference in the academic years of post high school teaching experience of men and women.

10. Elementary and secondary school teaching experience. There is no statistically significant difference in academic years of elementary and secondary school teaching experience of men and women.

11. Work experience. There is no statistically significant difference in the calendar years of full-time business work experience of men and women.

12. Full-time teaching job locations. There is no statistically significant difference in the number of full-time teaching job locations of men and women.

13. Full-time nonteaching job locations. There is no statistically significant difference in the number of full-time nonteaching job locations of men and women.

Professional Characteristics' Hypotheses

14. Professional memberships. There is no statistically significant difference in the number of memberships in professional organizations of men and women.

15. Major officeholder. There is no statistically significant difference in the number of professional organizations for which one had served as a major officeholder (president, president-elect, or vice-president) of men and women.

16. Minor officeholder. There is no statistically significant difference in the number of professional organizations for which one had served as a minor officeholder (secretary, treasurer, historian, or editor) of men and women.

17. Professional instate travel. There is no statistically significant difference in the number of professional trips completed instate from September, 1976, through April 15, 1977, by men and women.

18. Planned professional instate travel. There is no statistically significant difference in the number of professional trips

planned instate from April 16, 1977, through May/June, 1977, by men and women.

19. Professional out-of-state travel. There is no statistically significant difference in the number of professional trips planned out-of-state from September, 1976, through April 15, 1977, by men and women.

20. Planned professional out-of-state travel. There is no statistically significant difference in the number of professional trips planned out-of-state from April 16, 1977, through May/June, 1977, by men and women.

21. Reimbursement for travel. There is no statistically significant difference in the mean institution reimbursement received for instate and out-of-state professional travel of men and women.

22. Publication of professional articles. There is no statistically significant difference in the number of professional articles published from Fall, 1970, through Spring, 1977, by men and women.

23. Publication of books. There is no statistically significant difference in the number of professional books edited, authored, or co-authored from Fall, 1970, through Spring, 1977, by men and women.

24. Professional out-of-class speeches. There is no statistically significant difference in the number of professional out-of-class speeches by men and women.

25. Months of paid sabbaticals. There is no statistically significant difference in the number of months of paid sabbaticals from Fall, 1970, through Spring, 1977, of men and women.

26. Grant and salary reimbursement for sabbaticals. There is no statistically significant difference in the mean grant and salary reimbursement for sabbaticals from Fall, 1970, through Spring, 1977, of men and women.

27. Committee assignments by appointment. There is no statistically significant difference in the number of committee assignments by appointment of men and women.

28. Committee assignments by election. There is no statistically significant difference in the number of committee assignments by election of men and women.

Job-Related Characteristics' Hypotheses

29. Part-time administrators. There is no statistically significant difference in the number of men and women identified as part-time administrators.

30. Stipends received for administrative duties. There is no statistically significant difference in whether stipends were received for administrative duties of men and women.

31. Class preparations. There is no statistically significant difference in the number of class preparations of men and women.

32. Credit hours of class taught. There is no statistically significant difference in the credit hours of class taught by men and women.

33. Teaching contact hours. There is no statistically significant difference in the teaching contact hours per week of men and women.

34. Teaching contact hours for graduate classes. There is no statistically significant difference in the teaching contact hours per week for graduate classes of men and women.

35. Teaching contact hours for undergraduate classes. There is no statistically significant difference in the teaching contact hours per week for undergraduate classes of men and women.

36. Teaching contact hours for junior/senior-level classes. There is no statistically significant difference in the teaching contact hours per week for junior/senior-level classes of men and women.

37. Teaching contact hours for freshmen/sophomore-level classes. There is no statistically significant difference in the teaching contact hours per week for freshmen/sophomore-level classes of men and women.

38. Advisement of students for independent study. There is no statistically significant difference in the number of students advised for independent study of men and women.

39. Student enrollees. There is no statistically significant difference in the number of students enrolled in classes taught by men and women.

40. Teaching of extension or off-campus courses. There is no statistically significant difference in the teaching of extension or off-campus courses by men and women.

41. Teaching of on-campus courses for additional salary. There is no statistically significant difference in the teaching of on-campus courses for additional salary of men and women.

42. Advisement of student organizations. There is no statistically significant difference in the number of student organizations advised by men and women.

43. Student assistance received. There is no statistically significant difference in the hours per week work study, secretarial, or student assistance was received by men and women.

TESTING OF THE NULL HYPOTHESES

Each of the 43 null hypotheses was statistically tested to determine whether statistically significant differences occurred or

did not occur between men and women who taught at least one business education subject in NABTE schools of the Western Region/NBEA. Statistical tools and formulas were selected which assured the highest degree of accuracy in the determination of whether each null hypothesis was retained or rejected. This section focused upon: (1) Chi Square (X^2) Test of Significance, (2) degrees of freedom, (3) level of statistical significance, (4) formula for Chi Square (X^2) Test of Significance, (5) Yates's correction factor, (6) determination of rejection or retention of the null hypotheses, and (7) precautions to assure accuracy.

Chi Square (X^2) Test of Significance

To determine whether statistically significant differences existed for the items, the statistical tool Chi Square (X^2) Test of Significance was used at the .05 level of significance for the 43 hypotheses under consideration. Kerlinger (1973:168) defined the Chi Square (X^2) Test of Significance as:

> . . . a measure of the departure of obtained frequencies from the frequencies expected by chance. . . . The larger the Chi Square (X^2) is, the greater the obtained frequencies deviate from the expected chance frequencies. The value of X^2 ranges from 0, which indicates no departure of obtained from expected. . .

Emory (1976:383) stated, ". . .X^2 is particularly useful in tests involving nominal data. . ." Nominal data referred to data

classified, such as male, female; yes, no, etc. Because this study was involved with the comparison of men and women, the Chi Square (X^2) Test of Significance seemed to be an appropriate statistical tool to use for determining retention or rejection of the 43 null hypotheses.

Degrees of Freedom (df)

Degrees of freedom (df) referred to the, ". . . latitude of variation a statistical problem has" (Kerlinger, 1973:168). The formula used for the degrees of freedom (df) was:

$$df = (R-1)(C-1)$$

Kerlinger (1973:184) defined "R" in the formula as "Rows," and "C" in the formula as "Columns." This formula for degrees of freedom (df) appeared to suit this study well because the information was organized in rows and columns. By knowing the df, one was able to determine whether the information was divided into many or few intervals.

Level of Statistical Significance (.05)

Kerlinger (1973:169-170) discussed the level of statistical significance and its meaning:

> The .05 level means that an obtained result that is significant at the .05 level could occur by chance only five times in one hundred trials. . . . The .05 and .01 levels correspond fairly well to two and three standard deviations from the mean of a normal probability distribution. . . . The .05 level was

> originally chosen--and has persisted with researchers--because it is considered a reasonably good gamble. It is neither too high nor too low for most social scientific research.

The .05 level of significance appeared to be a good choice for use with the testing of the null hypotheses. Even though .05 seemed to be a reasonable level of significance, the possibility of an event occurring five times out of one hundred by chance was always reported throughout the study and remained a major consideration when analyzing retention or rejection of the null hypotheses.

Formula for Chi Square (X^2) Test of Significance

The Chi Square (X^2) Test of Significance was used at the .05 level of significance when comparisons were made between the table and calculated Chi Square (X^2). The forty-three null hypotheses were tested using the formula for the Chi Square (X^2) Test of Significance:

$$\text{Chi Square } (X^2) = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

The formula for Chi Square (X^2) showed that one would, "Subtract each expected frequency, f_e, from the comparable obtained frequency, f_o; square this difference; divide the difference squared by

the expected frequency, f_e; and then add up these quotients" (Kerlinger, 1973:168). The expected frequencies were based upon a percentage distribution of the usable responses of the 87 men and 53 women. Appendix F showed the computer program used for calculating the Chi Square (X^2).

Yates's Correction Factor

Many of the comparisons for this study involved degrees of freedom (df) of only one (1 df). In order to decrease the value of Chi Square (X^2) which would make it more difficult to reject the null hypothesis, the Yates's correction factor was utilized with all those items having only one degree of freedom (1 df). Ferguson (1971:188) explained the adjustment when using Yates's correction factor:

> To apply this correction we reduce by .5 the obtained frequencies that are greater than expectation and increase by .5 the obtained frequencies that are less than expectation. This brings the observed and expected values closer together and decreases the value of X^2.

Ferguson (1971:188) showed the formula for the Yates's correction factor for a two by two table, or a table with one degree of freedom (1 df), as used in this study:

$$X^2_C = \frac{N\left(\left|AD - BC\right| - N/2\right)^2}{(A + B)(C + D)(A + C)(B + D)}$$

A computer program was written which utilized the formula for the Yates's correction factor for all tables with only one degree of freedom (1 df). The level of significance was observed at the .05 level when testing the null hypotheses. Appendix G presented the computer program which incorporated the Yates's correction factor into the Chi Square (X^2) Test of Significance.

Retention or Rejection of the Null Hypotheses

After the Chi Square (X^2) was calculated for each of the 43 null hypotheses, a comparison was made between the Fisher and Yates's table Chi Square (X^2) from Emory (1976:460) at the .05 level of significance and the calculated Chi Square (X^2). Appropriate degrees of freedom (df's) were used when obtaining the table Chi Square (X^2).

When the obtained Chi Square (X^2) was as great or greater than the corresponding table Chi Square (X^2), it was determined that a statistically significant difference had occurred. In that case, the null hypothesis was rejected at the .05 level of significance.

However, if the obtained Chi Square (X^2) was less than the corresponding table Chi Square (X^2), it was determined that a statistically significant difference had not occurred. In that case, the null hypothesis was retained at the .05 level of significance.

PRESENTATION OF THE COLLECTED DATA AND STATISTICAL FINDINGS

Preparation of tables appeared to be the best means by which to present the collected data and statistical findings. Because the 140 usable returns included 26 part-time administrators, one column of each table was reserved for those faculty identified as part-time administrators. Another column showed the faculty, excluding part-time administrators; and the final column showed the total faculty, including part-time administrators.

For additional insight, percentages were calculated for the total women and men for each interval item. Usable returns were reported in the tables as well as total unusable responses. The Chi Square (X^2) Test of Significance was calculated only for the usable returns for all 87 men and 53 women.

Items were listed using single-digit or interval-digit groups, depending upon the data and construction of the tables. All percentages and other calculations were rounded to the next highest point.

Included in the tables were the degrees of freedom, the Fisher and Yates's table Chi Square (X^2) from Emory (1976:460) at the .05 level of significance, and the calculated Chi Square (X^2) for the usable totals of the total Business Education faculty, including the part-time administrators.

The findings included the null hypothesis stated in full for each characteristic, a presentation of the highlights for each item from the corresponding table and research, the table Chi Square (X^2) compared with the calculated Chi Square (X^2), and a statement retaining or rejecting each null hypothesis.

SUMMARY OF CHAPTER 3

Chapter 3 defined the population as including men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977. The sampling procedures involved mailing requests to representatives of 35 NABTE institutions to obtain names of Business Education faculty. From the names submitted by the NABTE representatives, a mailed questionnaire was sent to 110 men and 62 women. A total of 152, or 88.4 percent were returned. After examination, 87 men and 53 women were included in the usable returns for a total of 140, or an 81.4 percent usable response.

Forty-three items were identified for comparison between women and men. The items were divided into three categories: personal, professional, and job-related. Statistical hypotheses were formulated for the 43 characteristics.

Fourteen additional, related items were identified for inclusion in the study. No hypotheses were stated, but comparisons were made for added insight for several of the stated hypotheses.

The Chi Square (X^2) Test of Significance and related statistical tools were discussed in detail. How the data were to be illustrated in tabular form was explained. A complete explanation was provided in Chapter 3 of the testing of the null hypotheses and determining retention or rejection of the null hypotheses.

Chapter 4

FINDINGS

The results of the responses to the mailed questionnaire were tabulated, organized into tables, and the data were analyzed to determine whether statistically significant differences existed between women and men employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA for academic year, 1976-1977. Time period adjustments were made for those items that demanded a shorter or longer time period for meaningful analysis. Responses from faculty of 34 NABTE schools were used for the analyses.

There were 140 usable questionnaires which included 87 men and 53 women for whom comparisons were made for 43 characteristics. The 43 chosen characteristics were divided into three major categories which included 13 personal items, 15 professional items, and 15 job-related items. Null hypotheses were established for each of the 43 items, and each null hypothesis was statistically tested to determine retention or rejection.

Forty-three tables were prepared to present the findings. Twelve additional tables were prepared to supplement and augment data analyzed for ten of the characteristics.

In order to provide a separate examination of the frequencies of the men and women identified as part-time administrators, three columns were organized for each table: (1) a column which showed the Business Education faculty, excluding part-time administrators; (2) a column which showed the Business Education faculty identified as part-time administrators; and (3) a column which showed the total Business Education faculty, including the part-time administrators. The Chi Square (X^2) Test of Significance was performed for the total Business Education faculty, including part-time administrators. Only usable responses were used for the Chi Square (X^2) computations. Unusable responses were included as a separate item in each table.

In addition to the presentation of frequencies for women and men Business Education faculty, percentages based upon the 87 men and 53 women were calculated for each interval item. All percentages were rounded to the next highest point.

Null hypotheses were established for the 43 items. The Fisher and Yates Chi Square (X^2) Test of Significance was obtained from a table from Business Research Methods (Emory, 1976:460-461). The level of significance used from the table was .05. The calculated Chi Square (X^2) was based upon the usable Business Education faculty.

Ferguson (1971:188) suggested incorporation of the Yates's correction factor for all Chi Square's (X^2's). Others suggested the use of the correction factor only for small frequencies. For

those tables with only one degree of freedom (df), the Yates's correction factor which decreased the value of Chi Square (X^2) was incorporated into the Chi Square (X^2) formula. The computer programs for the Chi Square (X^2) without and with the Yates's correction factor were presented in "Appendixes F and G."

The table and calculated Chi Squares (X^2s) were compared. Each null hypothesis was retained or rejected based upon the comparison, as was discussed in Chapter 3. This chapter presented the null hypotheses, the tables, statements highlighting data from the tables, and statements showing retention or rejection of the null hypotheses. The findings were presented in three sections: personal, professional, and job-related characteristics.

PERSONAL CHARACTERISTICS

Sex (Proportion of Men and Women)

The null hypothesis stated that there would be no statistically significant difference in the proportion of women and men compared with the 45 percent women and 55 percent men proportion of the Hewitt national NBEA survey response. The 87 men and 53 women of this study taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Several alternatives were considered when selecting the proportion of men and women with whom to compare the 87 men and 53 women of this study:

(1) a proportion of 60.5 percent men and 39.5 percent women as related to the responses of the 38 faculty from the Western Region from the Hewitt study,

(2) an equal proportion of 50 percent men and women, and

(3) a proportion of 55 percent men and 45 percent women as related to the responses of the 400 faculty from the national study by Hewitt.

The small number, 23 men and 15 women, from the Hewitt survey which represented the responses of faculty from the Western Region, appeared to be too limited a base upon which to make a comparison. An equal proportion did not seem realistic based upon the Carnegie Commission findings (Opportunities for Women in Higher Education, 1973, Appendix A:171) which reported women representation of only 28.6 percent of college and university teachers in 1970.

The national proportion of the responses of the Hewitt study of 55 percent men and 45 percent women appeared to be the most appropriate base upon which to make the comparison and was selected. Both the Hewitt study and this study obtained their responses via a mailed questionnaire and from only NABTE schools.

Table 1

Chi Square (X^2), Comparison of the Proportion of Men and Women in the Western Region/NBEA with National NBEA Proportion for Academic Year, 1976-1977

NABTE Area	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Western Regn. (This study)	61	47	26	6	87	28.3	53	22.7
National Regn. (Hewitt study)	--	--	--	---	220	71.7	180	77.3
Usable	--	--	--	---	307	100.0	233	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 1.88

Table 1 presents the proportion of the 140 usable responses of this study and the 400 responses of the Hewitt study. This study had representation of 62.1 percent men and 37.9 percent women, compared with the Hewitt ratio of 55 percent men and 45 percent women.

The Table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 1.88. Therefore, there was no statistically significant difference in the proportion of men and women for the two studies.

Table 2

Chi Square (X^2), Comparison of the Mean Ages of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Ages	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under 25	0	1	0	0	0	0	1	1.9
26 - 30	4	6	0	0	4	4.6	6	11.3
31 - 35	10	5	1	0	11	12.6	5	9.4
36 - 40	13	7	7	0	20	23.0	7	13.2
41 - 45	11	8	2	1	13	14.9	9	17.0
46 - 50	8	2	7	1	15	17.2	3	5.7
51 - 55	7	6	4	4	11	12.6	10	18.9
56 - 60	3	7	5	0	8	9.2	7	13.2
61 - 65	5	5	0	0	5	5.7	5	9.4
Usable	61	47	26	6	87	99.8*	53	100.0

*Due to rounding

df = 8

Fisher & Yates, X^2 at .05 = 15.51

X^2 for Usable Total B.E. Faculty = 11.15

Mean Ages (Table 2)

The null hypothesis stated that there would be no statistically significant difference in the mean ages of men and women employed full time who taught at least one business education course in

Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The largest percentage of men's ages fell in the age range of 36-40, or 23 percent, as Table 2 illustrates. The highest percentage of women's ages clustered in the age range of 51-55, or 18.9 percent; and ages 41-45, or 17 percent.

The table Chi Square (X^2) was 15.51; the calculated Chi Square (X^2) was 11.15. Therefore, there was no statistically significant difference in the mean ages of women and men; and the null hypothesis was retained at the .05 level of significance.

Marital Status (Table 3 and Table 3-A)

The null hypothesis stated that there would be no statistically significant difference in the marital status (single, married, divorced, or widowed) of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The largest percentage category for both men and women was "married" which included 80.5 percent of the men and 50.9 percent of the women as presented in Table 3. There were no widowed men, and the women constituted 7.5 percent in the "widowed" category.

Table 3

Chi Square (X^2), Comparison of the Marital Status of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Marital Status	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Single	10	16	3	1	13	14.9	17	32.1
Married	48	22	22	5	70	80.5	27	50.9
Divorced	1	5	1	0	2	2.3	5	9.4
Widowed	0	4	0	0	0	----	4	7.5
Usable	59	47	26	6	85	97.7*	53	99.9*
Unusable	2	0	0	0	2	2.3	0	----
Totals	61	47	26	6	87	100.0	53	99.9*

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 18.45

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 18.45. Therefore, there was a statistically significant difference in the marital status of women and men; and the null hypothesis was rejected at the .05 level of significance.

Table 3-A shows the comparison between the married and not married women and men. The women listed an almost even number of

Table 3-A

Chi Square (X^2), Comparison of the Married v. Not Married Status of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Marital Status	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Married	48	22	22	5	70	80.5	27	50.9
Not Married	11	25	4	1	15	17.2	26	49.1
Usable	59	47	26	6	85	97.7	53	100.0
Unusable	2	0	0	0	2	2.3	0	---
Totals	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 13.95

married and not married with 50.9 percent and 49.1 percent, respectively; while the men responded with 80.5 percent married and 17.2 percent not married. Although there was no stated hypothesis comparing married with not married, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 13.95. This showed that there was a statistically significant difference between the married and not married women and men which supported the statistical difference found in the marital status of men and women.

Table 4

Chi Square (X^2), Comparison of the Highest Degree Earned of Men and Women of NABTE Business Education Faculty in the Western Region of NBEA for Academic Year, 1976-1977

Degree	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Ed.D.	37	14	17	2	54	62.1	16	30.2
Ph.D.	14	4	8	2	22	25.3	6	11.3
M. S.	5	17	0	1	5	5.7	18	34.0
Other	5	12	1	1	6	6.9	13	24.5
Usable	61	47	26	6	87	100.0	53	100.0

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 33.41

Highest Degree Earned (Table 4 and Table 4-A)

The null hypothesis stated that there would be no statistically significant difference in the highest degree earned of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The men reported 62.1 percent with the Ed.D., while the women reported 30.2 percent with the Ed.D. as reported in Table 4.

Approximately one-third, or 34 percent of the women held the M.S., while only 5.7 percent of the men held the M.S. degree. The "Other" category included two men and five women who held the M.A. degree.

Frequencies and degrees listed for the "Other" category also included three men who listed their highest degree as the M.B.A., one woman who listed the M.B.A., and five women and no men who listed the M.Ed. The B.S. degree was mentioned by one woman, the D.B.A. by one man, and the N.C.S. by one woman.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 33.41. Therefore, there was a statistically significant difference in the highest degree earned by men and women; and the null hypothesis was rejected at the .05 level of significance.

Table 4-A reports the comparison of women and men with and without the doctor's degree. Of 87 men who responded to the questionnaire, 87.4 percent held the doctorate. Of 53 women who responded to the questionnaire, less than one-half, or 41.5 percent, held the doctorate. Only 12.6 percent of the men did not have the doctor's degree, compared with over one-half, or 58.5 percent of the women.

Faculty identified as part-time administrators showed that 25 out of 26, or 96 percent of the men, compared with 4 out of 6, or 67 percent of the women, held the doctorate.

Table 4-A

Chi Square (X^2), Comparison of the Doctorate v. Non-doctorate Degree Status of Men and Women NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Degree	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Doctorate	51	18	25	4	76	87.4	22	41.5
Non-doctorate	10	29	1	2	11	12.6	31	58.5
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 30.82

Although there was no stated hypothesis comparing men and women with and without doctor's degrees, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 30.82. This supported the statistically significant difference found for highest degree earned.

Tenure Status (Table 5)

The null hypothesis stated that there would be no statistically significant difference in the tenure status of men and women employed full time who taught at least one business education course

Table 5

Chi Square (X^2), Comparison of the Tenure Status of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Tenure Status	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	40	23	22	5	62	71.3	28	52.8
No	21	24	4	1	25	28.7	25	47.2
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 4.10

in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Those who responded affirmatively to holding tenure included 71.3 percent of the men and 52.8 percent of the women. Table 5 shows 28.7 percent of the men and 47.2 percent of the women as non-tenured.

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 4.10. Therefore, there was a statistically significant difference in the tenure status of women and men; and the null hypothesis was rejected at the .05 level of significance.

Table 6

Chi Square (X^2), Comparison of the Academic Ranks of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Rank	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Professor	25	8	15	3	40	46.0	11	20.8
Assoc. Prof.	16	16	9	1	25	28.7	17	32.1
Assist. Prof.	15	12	2	2	17	19.5	14	26.4
Instructor	5	8	0	0	5	5.7	8	15.1
Usable	61	44	26	6	87	99.9*	50	94.4*
Unusable	0	3	0	0	0	----	3	5.7
Totals	61	47	26	6	87	99.9*	53	100.1*

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 9.71

Academic Rank (Table 6)

The null hypothesis stated that there would be no statistically significant difference in the academic ranks of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Table 6 reports that almost one-half of the men, or 46 percent, were at the rank of professor; while only one-fifth of the women, or 20.8 percent, were at the rank of professor. At the rank of associate professor, it was 28.7 percent of the men, compared with 32.1 percent of the women. One lecturer and one visiting professor were counted as unusable.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 9.71. Therefore, there was a statistically significant difference in academic ranks of women and men; and the null hypothesis was rejected at the .05 level of significance.

Years in Present Rank
(Table 7)

The null hypothesis stated that there would be no statistically significant difference in the number of years in the present rank of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Table 7 shows that close to one-fourth of both the men and women were in their first year in rank, with 24.1 percent of the men and 22.6 percent of the women. Only 3.4 percent of the men listed 5 years in rank, compared with 13.2 percent of the women.

Table 7

Chi Square (X^2), Comparison of the Years in Present Rank of Men and Women NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Years in Rank	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
1	20	12	1	0	21	24.1	12	22.6
2	7	7	3	0	10	11.5	7	13.2
3	7	4	2	1	9	10.3	5	9.4
4	3	4	3	1	6	6.9	5	9.4
5	1	4	2	3	3	3.4	7	13.2
6 - 10	14	7	7	1	21	24.1	8	15.1
Over 10	9	7	8	0	17	19.5	7	13.2
Usable	61	45	26	6	87	99.8*	51	96.1*
Unusable	0	2	0	0	0	----	2	3.8
Totals	61	47	26	6	87	99.8*	53	99.9*

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 6.89

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 6.89. Therefore, there was no statistically significant difference in the years in present rank of women and men; and the null hypothesis was retained at the .05 level of significance.

Academic-Year Salaries (Table 8 and Tables 8-A, 8-B, and 8-C)

The null hypothesis stated that there would be no statistically significant difference in the mean academic-year salaries of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

An analysis of salaries without any qualifying data provided a very limited review of the problem. This study made no attempt to relate numerous variables to salaries. However, in addition to a comparison of academic-year salaries, comparisons were made for women and men for: (1) fiscal-year salaries, which included 11- and 12-month salaries; (2) the salaries of all the respondents, including academic- and fiscal-year salaries; (3) the salaries of all the respondents who had doctorates; and (4) the salaries of all the respondents who did not have doctorates.

Because the responses to the questionnaire included salary categories for which respondents checked ranges, no salaries were converted to academic- or fiscal-year salaries. For this reason, only 72 men and 45 women were included in the academic-year salary analysis.

Table 8 presents the distrbution of the 8-, 9-, and 10-month salaries, or academic-year salaries, for the 72 men and 45 women.

Table 8

Chi Square (X^2), Comparison of the 8-, 9-, and 10-month Academic-year Salaries of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

(8, 9, 10-mo.) Academic-year Salaries	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under $12,999	5	10	0	0	5	6.7	10	22.2
$13,000 to $14,999	5	7	0	1	5	6.7	8	17.8
$15,000 to $16,999	9	4	1	0	10	13.3	4	8.9
$17,000 to $18,999	12	12	5	0	17	22.7	12	26.7
$19,000 to $20,999	6	4	3	1	9	12.0	5	11.1
$21,000 to $22,999	2	1	3	1	5	6.7	2	4.4
$23,000 to $24,999	5	1	2	0	7	9.3	1	2.2
Over $24,999	8	2	6	1	14	18.7	3	6.7
Usable	52	41	20	4	72	96.1*	45	100.0
Unusable	3	0	0	0	3	4.0	0	---
Totals	55	41	20	4	75	100.1*	45	100.0

*Due to rounding

df = 7

Fisher & Yates, X^2 at .05 = 14.07

X^2 for Usable Total B.E. Faculty = 14.37

In the "over $24,999" category, 18.7 percent of the men checked their response, compared with only 6.7 percent of the women who checked the highest salary category on the questionnaire. In the lowest category of "under $12,999," the reverse occurred. Only 6.7 percent of the men responded to the lowest category, compared with 22.2 percent of the women.

The table Chi Square (X^2) was 14.07; the calculated Chi Square (X^2) was 14.37. Therefore, there was a statistically significant difference in the academic-year salaries of men and women; and the null hypothesis was rejected at the .05 level of significance.

There were not enough respondents (12 men and 8 women) to perform the Chi Square (X^2) test for the 11- and 12-month salaries. However, a quick examination of fiscal-year salaries showed the men and women reversed themselves when salaries were divided into categories of "under $16,999" and "over $16,999." "Under $16,999" represented 16.7 percent of the men, compared with 87.5 percent of the women; while "over $16,999" represented 83.3 percent of the men, compared with 12.5 percent of the women.

Table 8-A presents the salaries of all the respondents, including eight- through twelve-month salaries. Almost one-fourth, or 24.5 percent of the women responded with the salary category of $17,000 to $18,999"; while close to one-fourth, or 23 percent

Table 8-A

Chi Square (X^2), Comparison of the AY & FY-year Salaries of Men and Women NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Fiscal-year and Academic-year Salaries	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under $12,999	7	12	0	0	7	8.0	12	22.6
$13,000 to $14,999	5	10	0	2	5	5.7	12	22.6
$15,000 to $16,999	10	4	1	1	11	12.6	5	9.4
$17,000 to $18,999	12	13	5	0	17	19.5	13	24.5
$19,000 to $20,999	7	4	3	1	10	11.5	5	9.4
$21,000 to $22,999	3	1	3	1	6	6.9	2	3.8
$23,000 to $24,999	6	1	3	0	9	10.3	1	1.9
Over $24,999	9	2	11	1	20	23.0	3	5.7
Usable	59	47	26	6	85	97.5*	53	99.9*
Unusable	2	0	0	0	2	2.3	0	----
Totals	61	47	26	6	87	99.8*	53	99.9*

*Due to rounding

df = 7

Fisher & Yates, X^2 at .05 = 14.07

X^2 for Usable Total B.E. Faculty = 23.45

of the men responded by checking the salary category, "over $24,999." In the salary category, "under $12,999," 12 women and 7 men responded. Of the 12 women, one listed a salary "under $9,000"; and 3 women checked the category of $9,000 to $10,999." Of the 7 men, none checked a salary "under $10,999"; all 7 of the men checked salaries in the "$11,000 to $12,999" category on the questionnaire.

Although there was no stated hypothesis, the table Chi Square (X^2) was 14.07; the calculated Chi Square (X^2) was 23.45. Therefore, there was a statistically significant difference in the combined academic- and fiscal-year salaries of women and men.

Table 8-B presents the responses for the salaries of 74 men and 22 women with doctor's degrees. Of the women, 40.9 percent checked the salary range of "$17,000 to $18,999"; while of the men, 19.7 percent checked that category. Of the category, "over $24,999," the men responded with over one-fourth, or 26.3 percent, compared with the women's response of 9.1 percent for the highest salary category.

Although there was no stated hypothesis for salaries of men and women with doctor's degrees, the table Chi Square (X^2) was 12.59; and the calculated Chi Square (X^2) was 8.84. Therefore, there was no statistically significant difference for the salaries of men and women with doctor's degrees at the .05 level of significance.

Table 8-B

Chi Square (X^2), Comparison of the AY & FY-year Salaries of Men and and Women with Doctor's Degrees of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

(Doctorates) Salaries	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under $14,999	5	3	0	0	5	6.6	3	13.6
$15,000 to $16,999	9	0	1	1	10	13.2	1	4.5
$17,000 to $18,999	11	9	4	0	15	19.7	9	40.9
$19,000 to $20,999	6	3	3	1	9	11.8	4	18.2
$21,000 to $22,999	3	1	3	1	6	7.9	2	9.1
$23,000 to $24,999	6	1	3	0	9	11.8	1	4.5
Over $24,999	9	1	11	1	20	26.3	2	9.1
Usable	49	18	25	4	74	97.3*	22	99.9*
Unusable	2	0	0	0	2	2.6	0	----
Totals	51	18	25	4	76	99.9*	22	99.9*

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 8.84

Table 8-C

Chi Square (X^2), Comparison of the AY & FY-year Salaries of Men and Women without Doctor's Degrees of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Non-doctorate Salaries	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under $12,999	5	12	0	0	5	45.5	12	38.7
$13,000 to $14,999	2	7	0	2	2	18.2	9	29.0
$15,000 to $16,999	1	4	0	0	1	9.1	4	12.9
Over $16,999	2	6	1	0	3	27.3	6	19.4
Usable	10	29	1	2	11	100.1*	31	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = .79

Table 8-C illustrates the salary responses of 11 men and 31 women without doctor's degrees. The largest percentages of both men and women fell within the range of "under $12,999," with 45.5 percent of the men and 38.7 percent of the women.

Although there was no stated hypothesis for the comparison of women's and men's salaries without the doctor's degrees, the table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was .79.

Therefore, there was no statistically significant difference in the salaries of men and women who did not have the doctor's degree at the .05 level of significance.

No specific conclusions were reached with the limited analysis presented. However, the data collected and analyzed in a variety of ways illustrated that salary comparisons between men and women were very complex. Whether a difference did or did not exist seemed to depend upon the component isolated for the analysis.

Post High School Teaching Experience (Table 9)

The null hypothesis stated that there would be no statistically significant difference in the number of academic years of post high school teaching experience of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The category of "0 to 5" years of post high school teaching experience represented 16.1 percent of the men respondents and 26.4 percent of the women respondents as shown in Table 9.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 9.67. Therefore, there was no statistically significant difference in the number of years of post high school

Table 9

Chi Square (X^2), Comparison of the Post High School Teaching Experience of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Years of Post H. S. Teaching Experience	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 5	13	13	1	1	14	16.1	14	26.4
6 - 10	16	12	5	2	21	24.1	14	26.4
11 - 15	15	8	8	0	23	26.4	8	15.1
16 - 20	5	5	2	2	7	8.0	7	13.2
21 - 25	6	2	7	0	13	14.9	2	3.8
26 - 30	5	3	1	0	6	6.9	3	5.7
Over 30	1	4	2	0	3	3.4	4	7.5
Usable	61	47	26	5	87	99.8*	52	98.1*
Unusable	0	0	0	1	0	---	1	1.9
Totals	61	47	26	6	87	99.8*	53	100.0

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 9.67

teaching experience of men and women; and the null hypothesis was retained at the .05 level of significance.

Table 10

Chi Square (X^2), Comparison of the Elementary and Secondary Teaching Experience of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Elem. & Sec. Teaching Experience	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 5	43	27	16	3	59	67.8	30	56.6
6 - 10	14	15	7	1	21	24.1	16	30.2
Over 10	4	5	3	2	7	8.0	7	13.2
Usable	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 2

Fisher & Yates, X^2 at .05 = 5.99

X^2 for Usable Total B.E. Faculty = 1.99

Elementary and Secondary Teaching Experience (Table 10)

The null hypothesis stated that there would be no statistically significant difference in the number of academic years of elementary and secondary school teaching experience of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The majority of both the men and women responded with the range of "0 to 5" years of elementary and secondary teaching experience. As illustrated in Table 10, this category represented 67.8 percent of the men and 56.6 percent of the women.

The table Chi Square (X^2) was 5.99; the calculated Chi Square (X^2) was 1.99. Therefore, there was no statistically significant difference in the number of years of elementary and secondary teaching experience of women and men; and the null hypothesis was retained at the .05 level of significance.

Work Experience (Table 11)

The null hypothesis stated that there would be no statistically significant difference in the calendar years of full-time business work experience of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Most of the women and men respondents indicated that they had acquired some business work experience. Table 11 reports that a larger percentage of the men, 40.2 percent, listed three or four years of work experience, compared with 17.0 percent of the women.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 15.33. Therefore, there was a statistically significant

Table 11

Chi Square (X^2), Comparison of the Business Work Experience of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Calendar Yrs. Work Experience	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	3	3	5	1	8	9.2	4	7.5
1	1	7	1	0	2	2.3	7	13.2
2	14	13	7	0	21	24.1	13	24.5
3	15	5	5	2	20	23.0	7	13.2
4	11	2	4	0	15	17.2	2	3.8
5	7	8	1	1	8	9.2	9	17.0
Over 5	9	9	3	2	12	13.8	11	20.8
Usable	60	47	26	6	86	98.8*	53	100.0
Unusable	1	0	0	0	1	1.1	0	---
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 15.33

difference in the calendar years of business work experience of women and men; and the null hypothesis was rejected at the .05 level of significance.

Table 12

Chi Square (X^2), Comparison of the Full-time Teaching Job Locations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA through Academic Year, 1976-1977

Number of Teaching Job Locations	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
1	4	2	0	0	4	4.6	2	3.8
2	12	12	2	1	14	16.1	13	24.5
3	16	14	8	2	24	27.6	16	30.2
4	12	8	7	1	19	21.8	9	17.0
5	11	6	6	1	17	19.5	7	13.2
Over 5	6	5	3	1	9	10.3	6	11.3
Usable	61	47	26	6	87	99.9*	53	100.0

df = 5

Fisher & Yates, X^2 at .05 = 11.07

X^2 for Usable Total B.E. Faculty = 2.53

Full-Time Teaching Job Locations (Table 12)

The null hypothesis stated that there would be no statistically significant difference in the number of full-time teaching job locations of men and women employed full time who taught at least one business education course in Departments of Business Education of

NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The number of schools in which the respondents had taught was the data base, including their present location. Table 12 shows that 27.6 percent of the men and 30.2 percent of the women listed three.

The table Chi Square (X^2) was 11.07; the calculated Chi Square (X^2) was 2.53. Therefore, there was no statistically significant difference in the number of full-time teaching job locations of women and men; and the null hypothesis was retained at the .05 level of significance.

Full-Time Nonteaching Job Locations (Table 13)

The null hypothesis stated that there would be no statistically significant difference in the number of full-time nonteaching job locations of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Included were the number of businesses for which the respondents had worked full time. Table 13 shows that less than 10 percent of the respondents indicated no nonteaching job locations.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 4.78. Therefore, there was no statistically significant

Table 13

Chi Square (X^2), Comparison of the Full-time Nonteaching Job Locations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA through Academic Year, 1976-1977

Number of Nonteaching Job Locations	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	6	3	2	1	8	9.2	4	7.5
1	8	10	4	0	12	13.8	10	18.9
2	15	12	11	2	26	29.9	14	26.4
3	18	9	5	0	23	26.4	9	17.0
4	5	7	2	1	7	8.0	8	15.1
5	5	1	1	2	6	6.9	3	5.7
Over 5	2	4	1	0	3	3.4	4	7.5
Usable	59	46	26	6	85	97.6*	52	98.1*
Unusable	2	1	0	0	2	2.3	1	1.9
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 4.78

difference in the number of nonteaching job locations of women and men; and the null hypothesis was retained at the .05 level of significance.

PROFESSIONAL CHARACTERISTICS

Professional Memberships (Table 14)

The null hypothesis stated that there would be no statistically significant difference in the number of memberships in professional organizations of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Since WBEA membership was automatic with NBEA membership, those repondents who did not identify WBEA membership with their NBEA membership were counted as belonging to WBEA. The men and women respondents appeared to be professionally active with over one-half of the women, or 56.6 percent, indicating membership in "4 to 6" organizations; while 41.4 percent of the men responded with "4 to 6" professional memberships. Another 42.5 percent of the men responded with "7 to 9" organizations, as reported in Table 14. "Appendix H" gave the various professional organizations mentioned by the respondents with corresponding membership frequencies and percentages.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 7.07. Therefore, there was no statistically significant difference in the number of memberships in professional

Table 14

Chi Square (X^2), Comparison of the Professional Memberships of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

No. of Prof. Organization Memberships	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 3	8	6	1	2	9	10.3	8	15.1
4 - 6	25	29	11	1	36	41.4	30	56.6
7 - 9	24	12	13	3	37	42.5	15	28.3
Over 9	4	0	1	0	5	5.7	0	----
Usable	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 7.07

organizations of women and men; and the null hypothesis was retained at the .05 level of significance.

Major Officeholder (Table 15)

The null hypothesis stated that there would be no statistically significant difference in the number of professional organizations for which one had served as a major officeholder (president, president-elect, or vice-president) of men and women employed full

Table 15

Chi Square (X^2), Comparison of the Major Officeholders of Professional Organizations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Org. for which Magr. Offhldr.	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	24	29	5	4	29	33.3	33	62.3
1	19	8	9	1	28	32.2	9	17.0
2	12	9	6	1	18	20.7	10	18.9
Over 2	6	1	6	0	12	13.8	1	1.9
Usable	61	47	26	6	87	100.0	53	100.1*

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 14.19

time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA through academic year, 1976-1977.

Table 15 shows that one-third, 33.3 percent of the men, and close to two-thirds, 62.3 percent of the women, had not served in a major office.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 14.19. Therefore, there was a statistically significant

Table 15-A

Chi Square (X^2), Comparison of the Major Officeholders v. Non-major Officeholders of Professional Organizations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA through Academic Year, 1976-1977

	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
Major Officeholder	f M	f F	f M	f F	f M	% M	f F	% F
Yes	37	18	21	2	58	66.7	20	37.7
No	24	29	5	4	29	33.3	33	62.3
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 10.03

difference in the number of professional organizations for which women and men had served as a major officeholder; and the null hypothesis was rejected at the .05 level of significance.

Table 15-A illustrates the comparison between women and men who had held a major office with those who had not held an office. The percentages reported for the affirmative and negative responses in Table 15-A were almost reversed with two-thirds of the men, 66.7 percent, responding affirmatively; and one-third, 33.3 percent of

the men responding negatively. This compared with slightly over one-third, or 37.7 percent of the women who responded affirmatively; and almost two-thirds, or 62.3 percent of the women who responded negatively.

Although there was no stated hypothesis comparing women and men who had held a major office with those who had not, the table Chi Square (X^2) was 3.84; and the calculated Chi Square (X^2) was 10.03. This additional analysis supported the significant difference found in Table 15 for number of organizations for which one had held a major office.

Minor Officeholder (Table 16 and Table 16-A)

The null hypothesis stated that there would be no statistically significant difference in the number of professional organizations for which one had served as a minor officeholder (secretary, treasurer, historian, or editor) of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA through academic year, 1976-1977.

Table 16 presents that over one-third of the men, or 35.6 percent, responded with never having held a minor office; compared with close to one-half of the women, or 50.9 percent.

Table 16

Chi Square (X^2), Comparison of the Minor Officeholders of Professional Organizations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Org. for which Minr. Offhldr.	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	24	23	7	4	31	35.6	27	50.9
1	22	14	9	0	31	35.6	14	26.4
2	7	6	7	0	14	16.1	6	11.3
Over 2	8	4	3	2	11	12.6	6	11.3
Usable	61	47	26	6	87	99.9*	53	99.9*

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 3.31

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 3.31. Therefore, there was no statistically significant difference in the number of professional organizations for which women and men served as a minor officeholder; and the null hypothesis was retained at the .05 level of significance.

Table 16-A shows the comparison of women and men who had held a minor office with those who had not held a minor office. The

Table 16-A

Chi Square (X^2), Comparison of the Minor Officeholders v. Non-minor Officeholders of Professional Organizations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA through Academic Year, 1976-1977

Minor Officeholder	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	37	24	19	2	56	64.4	26	49.1
No	24	23	7	4	31	35.6	27	50.9
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 2.58

percentage responses of the women were almost evenly divided with 49.1 percent responding "yes," and 50.9 percent responding "no." A larger percentage of the men, 64.4 percent, responded with "yes"; and 35.6 percent of the men stated that they had not held a minor office in a professional organization.

Although there was no stated hypothesis comparing women and men who had held minor offices with those who had not held minor

offices in professional organizations, the table Chi Square (X^2) was 3.84; and the calculated Chi Square (X^2) was 2.58. Therefore, there was no statistically significant difference which supported the no significant difference findings for number of organizations for which women and men had held minor offices as reported in Table 16.

Professional Instate Travel
(Table 17)

The null hypothesis stated that there would be no statistically significant difference in the number of professional trips completed instate by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from September, 1976, through April 15, 1977.

Close to one-fourth of the men and women, 27.6 percent and 24.5 percent, respectively, responded with two trips completed. The category of "over 5" trips represented 21.8 percent of the men and 13.2 percent of the women as illustrated in Table 17.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 9.39. Therefore, there was no statistically significant difference in the number of trips completed instate by women and men; and the null hypothesis was retained at the .05 level of significance.

Table 17

Chi Square (X^2), Comparison of the Professional Instate Travel of Men and Women of NABTE Business Education Faculty in the Western Region of NBEA for September, 1976. through April 15, 1977

No. of Trips Completed Instate 9/76 - 4/15/77	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	6	7	4	0	10	11.5	7	13.2
1	5	8	0	1	5	5.7	9	17.0
2	17	13	7	0	24	27.6	13	24.5
3	6	8	2	2	8	9.2	10	18.9
4	11	4	1	0	12	13.8	4	7.5
5	4	3	3	0	7	8.0	3	5.7
Over 5	11	4	8	3	19	21.8	7	13.2
Usable	60	47	25	6	85	97.6*	53	100.0
Unusable	1	0	1	0	2	2.3	0	---
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 9.39

Table 18

Chi Square (X^2), Comparison of the Planned Professional Instate Travel of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for April 16, 1977, through May/June, 1977

No. of Trips Planned Instate 4/16 -5, 6/77	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	21	20	5	1	26	29.9	21	39.6
1	12	16	8	1	20	23.0	17	32.1
2	14	2	6	1	20	23.0	3	5.7
3	5	5	5	1	10	11.5	6	11.3
Over 3	6	3	2	1	8	9.2	4	7.5
Usable	58	46	26	5	84	96.6*	51	96.2*
Unusable	3	1	0	1	3	3.4	2	3.8
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 8.09

Planned Professional Instate Travel (Table 18)

The null hypothesis stated that there would be no statistically significant difference in the number of professional trips planned instate by men and women employed full time who taught at least one business education course in Departments of Business

Education of NABTE institutions of the Western Region/NBEA from April 16, 1977, through May/June, 1977.

One respondent mentioned April 22 as the end of the school year, and this may have been influential in the responses. Table 18 shows the largest percentage of both men and women responding within the "no trips planned" category, with 29.9 percent of the men and 39.6 percent of the women.

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 8.09. Therefore, there was no statistically significant difference in the number of professional trips planned instate by men and women; and the null hypothesis was retained at the .05 level of significance.

Professional Out-of-State Travel (Table 19)

The null hypothesis stated that there would be no statistically significant difference in the number of professional trips completed out-of-state by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from September, 1976, through April 15, 1977.

Almost one-third, 32.2 percent of the men, and almost one-half, 49.1 percent of the women, responded with no out-of-state trips

Table 19

Chi Square (X^2), Comparison of the Professional Out-of-state Travel of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for September, 1976, through April 15, 1977

No. of Trips Completed Out-of-state 9/76 - 4/15/77	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	22	25	6	1	28	32.2	26	49.1
1	14	15	9	3	23	26.4	18	34.0
2	13	3	5	0	18	20.7	3	5.7
3	8	3	2	1	10	11.5	4	7.5
Over 3	4	1	3	1	7	8.0	2	3.8
Usable	61	47	25	6	86	98.8*	53	100.1*
Unusable	0	0	1	0	1	1.1	0	---
Totals	61	47	26	6	87	99.9*	53	100.1*

*Due to rounding

df = 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 9.45

completed as reported in Table 19. Several respondents mentioned the lack of travel monies.

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 9.45. Therefore, there was no statistically significant difference in the number of trips completed out-of-state by women

Table 20

Chi Square (X^2), Comparison of the Planned Professional Out-of-state Travel of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA from April 16, 1976, through May/June, 1977

No. of Trips Planned Out-of-state 4/16 -5, 6/77	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	23	25	11	1	34	39.1	26	49.1
1	21	16	11	4	32	36.8	20	37.7
2	7	2	2	0	9	10.3	2	3.8
Over 2	7	3	1	1	8	9.2	4	7.5
Usable	58	46	25	6	83	95.4*	52	98.1*
Unusable	3	1	1	0	4	4.6	1	1.9
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 2.64

and men; and the null hypothesis was retained at the .05 level of significance.

Planned Professional Out-of-State Travel (Table 20)

The null hypothesis stated that there would be no statistically significant difference in the number of professional trips

planned out-of-state by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from April 16, 1977, through May/June, 1977.

Table 20 reports that the largest percentages of women and men planned no out-of-state trips for the indicated time period. One respondent indicated that their year ended on April 22, so this may have been a factor in the responses. However, over one-third of both the women and men planned one out-of-state trip. Since WBEA was held late in May, 1977, this may have accounted for the 36.8 percent men and 37.7 percent women who had planned one trip.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 2.64. Therefore, there was no statistically significant difference in the number of out-of-state professional trips planned by women and men; and the null hypothesis was retained at the .05 level of significance.

Reimbursement for Travel
(Tables 21 and 21-A)

The null hypothesis stated that there would be no statistically significant difference in the mean institution reimbursement received for instate and out-of-state professional travel of men and women employed full time who taught at least one business

Table 21

Chi Square (X^2), Comparison of the Reimbursement for Travel of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Estimated Travel Reimbursement	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	12	9	2	0	14	16.1	9	17.0
$.01 - $50	6	7	0	0	6	6.9	7	13.2
$51 - $100	8	8	3	0	11	12.6	8	15.1
$101 - $500	21	14	11	1	32	36.8	15	28.3
Over $500	6	2	6	2	12	13.8	4	7.5
Usable	53	40	22	3	75	86.2*	43	81.1*
Unusable	8	7	4	3	12	13.8	10	18.9
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df - 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 3.36

education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Several of the respondents listed percentage amounts received rather than dollar amounts which accounted for the high unusable response cited in Table 21. Of the men who listed monies received

in amounts of "over $500," two men reported amounts between "$701 and $750"; one man reported an amount in the range of "$751 to $800"; one listed an amount of "$951 to $1,000"; one man listed "$1,200"; and one man responded with "$2,800."

Of the women who listed monies received in amounts of "over $500," one woman responded with an amount of "$601 to $650"; and one woman reported an amount in the range of "$701 to $750."

Of the men identified as part-time administrators, the "over $500" included: one in the range of "$551 to $600"; two of "$751 to $800"; one of "$551 to $600"; and two men responded within the range of "$951 to $1,000."

Of the women identified as part-time administrators, the "over $500" included: one in the range of "$501 to $550," and one woman responded within the range of "$551 to $600."

One man indicated receiving $500 while on leave, while one woman on sabbatical did not respond to the question. Several of the respondents, both men and women, referred to the lack of travel monies.

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 3.36. Therefore, there was no statistically significant difference in the mean reimbursement received for instate and out-of-state travel of men and women; and the null hypothesis was retained at the .05 level of significance.

Table 21-A

Chi Square (X^2), Comparison of the Reimbursement v. Non-reimbursement for Travel of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Reimbursement for Travel	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	48	35	24	5	72	82.8	40	75.5
No	12	9	2	0	14	16.1	9	17.0
Usable	60	44	26	5	86	98.9*	49	92.5*
Unusable	1	3	0	1	1	1.1	4	7.5
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 5.23

Table 21-A shows the comparison between women and men who had received reimbursement for travel with those who had not. The percentage responses and dollar responses were included; therefore, there was a larger number of men and women included in the analysis of Table 21-A than for the previous analysis presented in Table 21.

As can be seen in Table 21-A, 82.8 percent of the men and 75.5 percent of the women received reimbursement for travel. The

percentages of 16.1 for the men and 17.0 for the women were close percentages reporting no reimbursement for travel. A larger percentage, 7.5 of the women, had unusable responses, compared with only 1.1 percent of the men.

Although there was no stated hypothesis, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 5.23. Therefore, there was a statistically significant difference when comparing men and women who did or did not receive travel reimbursement.

This significant difference did not agree with the statistical results of Table 21 which showed no significant difference when comparing money distributions for travel of women and men. One reason for the different outcomes in the two analyses may have been that more persons were included in the analysis comparing whether women and men did or did not receive reimbursement for travel. Also, the two approaches were different which may have caused the divergent outcomes.

Publication of Professional Articles (Table 22)

The null hypothesis stated that there would be no statistically significant difference in the number of professional articles published by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from Fall, 1970,

Table 22

Chi Square (X^2), Comparison of the Publication of Professional Articles of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA from Fall, 1970, through Spring, 1977

No. of Artcls. Published Fall, 1970-Spring, 1977	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	19	30	5	4	24	27.6	34	64.2
1	7	6	1	1	8	9.2	7	13.2
2	10	4	2	1	12	13.8	5	9.4
3	8	0	6	0	14	16.1	0	---
4	3	2	1	0	4	4.6	2	3.8
5	2	1	4	0	6	6.9	1	1.9
Over 5	12	4	7	0	19	21.8	4	7.5
Usable	61	47	26	6	87	100.0	53	100.0

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 25.97

through Spring, 1977. Because of the nature of the question, a longer time period was required.

Almost one-third, 27.6 percent, of the men responded with "0," or no publication of articles, compared with almost two-thirds, 64.2 percent, of the women as Table 22 illustrates.

In the "over 5" category, eight men and four women reported publication of articles in the range of "6 to 10." Four men reported "11 to 15" publications, and seven men reported with "over 15 publications.

None of the women reported publication of articles in the range "11 to over 15." The highest number of articles reported by a man was 57, while the highest number of articles reported by a woman was 10.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 25.97. Therefore, there was a statistically significant difference in the number of professional articles published by women and men; and the null hypothesis was rejected at the .05 level of significance.

Publication of Professional Books (Table 23)

The null hypothesis stated that there would be no statistically significant difference in the number of professional books edited, authored, or co-authored by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from Fall, 1970, through Spring, 1977.

Table 23

Chi Square (X^2), Comparison of the Publication of Professional Books of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA from Fall, 1970, through Spring, 1977

No. of Books Published Fall, 1970-Spring, 1977	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	41	40	12	5	53	60.9	45	84.9
1	8	5	6	1	14	16.1	6	11.3
2	5	0	3	0	8	9.2	0	----
Over 2	7	2	4	0	11	12.6	2	3.8
Usable	61	47	25	6	86	98.8*	53	100.0
Unusable	0	0	1	0	1	1.1	0	---
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 10.86

Table 23 illustrates that over one-half of the men, 60.9 percent, and a larger percentage of the women, 84.9 percent, reported no publication of books. A larger percentage of the men, 21.8 percent, compared with only 3.8 percent of the women had published two or more books.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 10.86. Therefore, there was a statistically significant difference in the number of books published by women and men; and the null hypothesis was rejected a the .05 level of significance.

Professional Out-of-Class Speeches (Table 24)

The null hypothesis stated that there would be no statistically significant difference in the number of professional out-of-class speeches presented by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

As can be viewed in Table 24, only 12.6 percent of the men had given no out-of-class speeches, compared with over one-third, or 35.8 percent of the women. Close to one-fourth of the men, 25.3 percent, had given over three speeches, compared with 18.9 percent of the women.

A very close percentage, 18.4 percent of the men and 18.9 percent of the women, had given one out-of-class speech. However, larger percentages of the men than the women had given two, three, or over three speeches as reported in Table 24.

Table 24

Chi Square (X^2), Comparison of the Out-of-class Speeches of Men and Women of NABTE Business Education Faculty in the Western Region of NBEA for Academic Year, 1976-1977

Number of Speeches	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	8	19	3	0	11	12.6	19	35.8
1	12	9	4	1	16	18.4	10	18.9
2	16	6	4	1	20	23.0	7	13.2
3	9	5	7	1	16	18.4	6	11.3
Over 3	15	7	7	3	22	25.3	10	18.9
Usable	60	46	25	6	85	99.7*	52	98.1*
Unusable	1	1	1	0	2	2.3	1	1.9
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 11.54

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 11.54. Therefore, there was a statistically significant difference in the number of professional out-of-class speeches given by women and men; and the null hypothesis was rejected at the .05 level of significance.

Table 25

Chi Square (X^2), Comparison of the Month's of Paid Sabbaticals of Men and Women of NABTE Business Education Faculty in the Western Region of NBEA from Fall, 1970, through Spring, 1977

No. of Months of Paid Sabbaticals	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	46	38	18	3	64	73.6	41	77.4
1 - 6	7	5	6	2	13	14.9	7	13.2
7 - 12	8	2	2	1	10	11.5	3	5.7
Usable	61	45	26	6	87	100.0	51	96.3*
Unusable	0	2	0	0	0	---	2	3.8
Totals	61	47	26	6	87	100.0	53	100.1*

*Due to rounding

df = 2

Fisher & Yates, X^2 at .05 = 5.99

X^2 for Usable Total B.E. Faculty = 1.30

Months of Paid Sabbaticals (Table 25)

The null hypothesis stated that there would be no statistically significant difference in the number of months of paid sabbaticals of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from Fall, 1970, through

Spring, 1977. Because of the nature of the question, a longer time period was allowed.

Close to three-fourths of both the women and men responded with no months of paid sabbaticals, 77.4 percent of the women, compared with 73.6 percent of the men. Table 25 illustrates the responses. In the "1 to 6" and "7 to 12" categories, the men held slightly higher percentages.

The table Chi Square (X^2) was 5.99; the calculated Chi Square (X^2) was 1.30. Therefore, there was no statistically significant difference in the number of months of paid sabbaticals for women and men; and the null hypothesis was retained at the .05 level of significance.

Grant and Salary Reimbursement for Sabbaticals (Table 26)

The null hypothesis stated that there would be no statistically significant difference in the mean grant and salary reimbursement for sabbaticals of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA from Fall, 1970, through Spring, 1977. In order to obtain adequate data for comparison, a longer time period was allowed.

Table 26

Chi Square (X^2), Comparison Grant/Salary Reimbursement for Sabbaticals of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA from Fall, 1970, through Spring, 1977

Grant/Salary Reimbursement for Sabbaticals	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	18	7	7	3	25	28.7	10	18.9
No	42	37	18	2	60	69.0	39	73.6
Usable	60	44	25	5	85	97.7*	49	92.5*
Unusable	1	3	1	1	2	2.3	4	7.5
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = .88

Because only 13 men and 3 women responded with dollar amounts, the Chi Square (X^2) test was not performed. However, an additional 12 men and 7 women responded with percentage amounts. Therefore, it was decided to compute a Chi Square (X^2) test for those women and men who had received grant and salary reimbursements with those who had not. And, both percentage and dollar responses were included.

Table 26 illustrates the reimbursement and non-reimbursement responses of the men and women. Close to three-fourths of both the men and women had not received grant or salary reimbursement for sabbaticals, with 69.0 percent of the men and 73.6 percent of the women.

For the respondents who listed salary dollar reimbursement amounts, the salaries ranged from $1,200 to $18,000 for the men, and $3,000 to $15,000 for the women. Grant monies received for sabbaticals included, $1,200 and $7,000 for two men, and a $5,000 grant which was divided between salary and grant reimbursement for one woman.

Although no Chi Square (X^2) was performed for the stated hypothesis, the Chi Square (X^2) test was computed for the data presented in Table 26. The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was .88. Therefore, there was no statistically significant difference between the women and men who received grant and salary reimbursement with those faculty who did not receive reimbursement.

Committee Assignments by Appointment (Table 27)

The null hypothesis stated that there would be no statistically significant difference in the number of committee assignments received by appointment of men and women employed full time who

Table 27

Chi Square (X^2), Comparison of the Appointment to Committees of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Committees to which Appointed	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	19	18	6	0	25	28.7	18	34.0
1	15	16	9	1	24	27.6	17	32.1
2	16	5	6	1	22	25.3	6	11.3
Over 2	9	7	5	4	14	16.1	11	20.8
Usable	59	46	26	6	85	97.7*	52	98.2*
Unusable	2	1	0	0	2	2.3	1	1.9
Totals	61	47	26	6	87	100.0	53	100.1*

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 4.13

taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Table 27 shows that 25.3 percent of the men and 11.3 percent of the women had been appointed to two committees. Over two

committees to which appointments had been received were reported by 16.1 percent of the men and 20.8 percent of the women.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 4.13. Therefore, there was no statistically significant difference in the number of committees to which women and men had been appointed; and the null hypothesis was retained at the .05 level of significance.

Committee Assignments by Election (Table 28)

The null hypothesis stated that there would be no statistically significant difference in the number of committee assignments received by election by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

As illustrated in Table 28, almost two-thirds of both the men and women had not been elected to a committee assignment, 65.5 percent of the men and 67.9 percent of the women. The percentages of men and women who were elected to one committee were very similar, 18.4 percent of the men and 18.9 percent of the women. Close to 10 percent of both the men and women had been elected to over one committee, 11.5 percent of the men and 9.4 percent of the women.

Table 28

Chi Square (X^2), Comparison of the Election to Committees of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Committees to which Elected	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	39	35	18	1	57	65.5	36	67.9
1	12	9	4	1	16	18.4	10	18.9
Over 1	8	1	2	4	10	11.5	5	9.4
Usable	59	45	24	6	83	95.4*	51	96.2*
Unusable	2	2	2	0	4	4.6	2	3.8
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 2

Fisher & Yates, X^2 at .05 = 5.99

X^2 for Usable Total B.E. Faculty = .16

The table Chi Square (X^2) was 5.99; the calculated Chi Square (X^2) was .16. Therefore, there was no statistically significant difference in the number of committees to which men and women had been elected; and the null hypothesis was retained at the .05 level of significance.

JOB-RELATED CHARACTERISTICS

Part-Time Administrators (Table 29)

The null hypothesis stated that there would be no statistically significant difference in the number of faculty identified as part-time administrators of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

In response to the questionnaire, one woman stated, "I am chairman (sic) of the department," and listed "no" in response to whether she was a part-time administrator. One man responded to the quesionnaire, "More administrator than teaching," and stated "no" in answer to whether he was a part-time administrator. Both the woman and man were included in this study as being identified as part-time administrators.

Another woman identified herself as Assistant Vice-president for Administrative Services, teaching one class per year to retain rank; while another man identified himself as holding the title of Department Chairman (sic), but not being recognized as an administrator. Both of these respondents were included as part-time administrators in this study.

Table 29

Chi Square (X^2), Comparison of Men and Women Identified as Part-time Administrators of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Part-time Administrator	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	0	0	26	6	26	29.9	6	11.3
No	61	47	0	0	61	70.1	47	88.7
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 5.43

Almost one-third of the men, 29.9 percent, were identified as part-time administrators; while, 11.3 percent of the women were identified as part-time administrators. Table 29 reports the ratio of men and women of this study.

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 5.43. Therefore, there was a statistically significant difference in the number of women and men identified as part-time administrators; and the null hypothesis was rejected at the .05 level of significance.

Table 30

Chi Square (X^2), Comparison of Stipends v. No Stipends Received for Administrative Duties of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Stipends for Adminis. Duties	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	2	0	9	2	11	12.6	2	3.8
No	57	44	17	4	74	85.1	48	90.6
Usable	59	44	26	6	85	97.7*	50	94.4*
Unusable	2	3	0	0	2	2.3	3	5.7
Totals	61	47	26	6	87	100.0	53	100.1*

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 1.96

Stipends Received for Administrative Duties (Table 30)

The null hypothesis stated that there would be no statistically significant difference in whether stipends were or were not received for administrative duties by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

One woman responded with, "year in Summer, 1977"; while one man responded with, "get released 'assigned' time." Both the woman and man were counted in this study as "no" responses for stipends received.

Large percentages of the respondents did not receive any stipends for administrative duties. Table 30 reports 85.1 percent of the men and 90.6 percent of the women as not having received stipends. However, those high percentages included all the respondents, including the part-time administrators as well.

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 1.96. Therefore, there was no statistically significant difference in stipends received or not received for administrative duties of men and women; and the null hypothesis was retained at the .05 level of significance.

Although no hypothesis was stated for the part-time administrators and no table was prepared, additional examination showed that 9 of the 26 men and 2 of the 6 women identified as part-time administrators received stipends for administrative duties. This represented almost one-third of the men and one-third of the women identified as part-time administrators who received stipends.

Although there was no stated hypothesis for those women and men identified as part-time administrators only, the table Chi Square

(X^2) was 3.84; the calculated Chi Square (X^2) was .17. Therefore, there was no statistically significant difference in whether stipends were received or not received by men and women identified as part-time administrators.

Class Preparations
(Table 31)

The null hypothesis stated that there would be no statistically significant difference in the number of class preparations of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

In compiling the information for Table 31, the same class was counted only once during academic year, 1976-1977. Over one-fourth, or 26.4 percent of the women, responded with "over 7," compared with almost one-half that percentage, or 13.8 percent of the men.

Table 31 reports that the men showed larger percentages than the women in the one-, two-, three-, and four-class preparation categories; while the women showed larger percentages than the men in the five-, six-, seven-, and over seven-class preparation categories.

Table 31

Chi Square (X^2), Comparison of the Number of Class Preparations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Class Preparations	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
1	3	2	4	1	7	8.0	3	5.7
2	5	4	6	0	11	12.6	4	7.5
3	12	1	5	0	17	19.5	1	1.9
4	9	6	5	0	14	16.1	6	11.3
5	9	5	1	2	10	11.5	7	13.2
6	5	6	0	0	5	5.7	6	11.3
7	5	9	3	3	8	9.2	12	22.6
Over 7	11	14	1	0	12	13.8	14	26.4
Usable	59	47	25	6	84	96.4*	53	99.9*
Unusable	2	0	1	0	3	3.4	0	---
Totals	61	47	26	6	87	99.8*	53	99.9*

*Due to rounding

df = 7

Fisher & Yates, X^2 at .05 = 14.07

X^2 for Usable Total B.E. Faculty = 17.76

The table Chi Square (X^2) was 14.07; the calculated Chi Square (X^2) was 17.76. Therefore, there was a statistically significant difference in the number of class preparations of women and men; and the null hypothesis was rejected at the .05 level of significance.

Credit Hours of Class Taught
(Table 32)

The null hypothesis stated that there would be no statistically significant difference in the credit hours of class taught by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

In order to make a valid comparison and include all responses, all semester hours were converted to quarter hours using the formula: semester hours times 3/2 or 1.5 = quarter hours. Answers were then rounded to the next highest figure.

Table 32 presents the distribution of the women and men and the corresponding credit hours taught. The men showed higher percentages for the "under 11 to 25" categories, while the women showed higher percentages for the categories of "26 to over 40."

The table Chi Square (X^2) was 14.07; the calculated Chi Square (X^2) was 10.92. Therefore, there was no statistically significant

Table 32

Chi Square (X^2), Comparison of the Number of Quarter Credit Hours Taught by Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Credit Hours of Class Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Under 11	1	2	6	1	7	8.0	3	5.7
11 - 15	4	2	4	1	8	9.2	3	5.7
16 - 20	3	0	8	0	11	12.6	0	---
21 - 25	7	4	2	1	9	10.3	5	9.4
26 - 30	12	9	4	1	16	18.4	10	18.9
31 - 35	7	8	2	0	9	10.3	8	15.1
36 - 40	18	16	0	2	18	20.7	18	34.0
Over 40	5	5	0	0	5	5.7	5	9.4
Usable	57	46	26	6	83	95.2*	52	98.2*
Unusable	4	1	0	0	4	4.6	1	1.9
Totals	61	47	26	6	87	99.8*	53	100.1*

*Due to rounding

df = 7

Fisher & Yates, X^2 at .05 = 14.07

X^2 for Usable Total B.E. Faculty = 10.92

difference in the credit hours of class taught by women and men; and the null hypothesis was retained at the .05 level of significance.

Teaching Contact Hours (Table 33)

The null hypothesis stated that there would be no statistically significant difference in the teaching contact hours per week of men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The questionnaire asked for teaching contact hours per week (hours spent in the classroom) for Fall Quarter/Semester, 1976; Winter Quarter, 1977; and Spring Quarter/Semester, 1977. The respondents who listed answers in semester hours had total responses to semester hours divided by two to obtain the average teaching contact hours per week. The respondents who listed answers in quarter hours had total responses to quarter hours divided by three to obtain the average teaching contact hours per week. One man and one woman listed five hours for one quarter only. Both the man and the woman were counted as five contact hours.

Table 33 reports the men's higher percentages in the "0-5" and "6-10" intervals, compared with the higher percentages for the

Table 33

Chi Square (X^2), Comparison of the Teaching Contact Hours per Week of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Teaching Contact Hours Per Week	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 5	2	1	11	1	13	14.9	2	3.8
6 - 10	21	5	11	1	32	36.8	6	11.3
11 - 15	30	26	3	3	33	37.9	29	54.7
Over 15	4	11	0	0	4	4.6	11	20.8
Usable	57	43	25	5	82	94.2*	48	90.6*
Unusable	4	4	1	1	5	5.7	5	9.4
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 21.99

women in the "11-15" and "over 15" categories. Over one-half, or 54.7 percent of the women were in the "11-15" category.

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 21.99. Therefore, there was a statistically significant difference in the teaching contact hours per week of women and men; and the null hypothesis was rejected at the .05 level of significance.

Table 34

Chi Square (X^2), Comparison of the Teaching Contact Hours per Week for Graduate Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Contact Hours Graduate Clss. (Per Week)	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	35	35	11	3	46	52.9	38	71.7
1 - 3	11	3	6	1	17	19.5	4	7.5
Over 3	5	2	6	2	11	12.6	4	7.5
Usable	51	40	23	6	74	85.0*	46	86.7*
Unusable	10	7	3	0	13	14.9	7	13.2
Totals	61	47	26	6	87	99.9*	53	99.9*

*Due to rounding

df = 2

Fisher & Yates, X^2 at .05 = 5.99

X^2 for Usable Total B.E. Faculty = 5.86

Teaching Contact Hours for Graduate Classes (Tables 34 and 34-A)

The null hypothesis stated that there would be no statistically significant difference in the number of teaching contact hours per week for graduate classes taught by men and women employed full time who taught at least one business education course in Departments

of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Twenty respondents did not respond with a number of hours or referred to the unclear wording of the question. However, of the usable 74 men and 46 women respondents, a larger percentage of the women, 71.7 percent, compared with 52.9 percent of the men, responded with no contact hours for graduate classes. Table 34 shows the distribution of contact hours for graduate classes of men and women.

The table Chi Square (X^2) was 5.99; the calculated Chi Square (X^2) was 5.86. Therefore, there was no statistically significant difference in the number of teaching contact hours per week for graduate classes of men and women; and the null hypothesis was retained at the .05 level of significance.

Table 34-A shows the comparison of those who taught graduate classes with those men and women who had not taught graduate classes. Two additional men were included with Table 34-A, although neither could be included with Table 34 for a specific number of contact hours.

As reported in Table 34-A, the percentages of the men and women who did not teach graduate classes was the same as reported in Table 34. However, over one-third, or 34.5 percent, of the men

Table 34-A

Chi Square (X^2), Comparison of the Teaching v. Nonteaching of Graduate Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Graduate Classes Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	18	5	12	3	30	34.5	8	15.1
No	35	35	11	3	46	52.9	38	71.7
Usable	53	40	23	6	76	87.4*	46	86.8*
Unusable	8	7	3	0	11	12.6	7	13.2
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 5.53

responded affirmatively to having taught graduate classes, compared with only 15.1 percent of the women.

Although there was no stated hypothesis, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 5.53. Therefore, there was a statistically significant difference for the teaching and nonteaching of graduate classes by women and men.

In analyzing the differences of the statistical results which occurred between the data presented in Tables 34 and 34-A, it appeared that the inclusion of two additional men may have been the cause of the statistically significant difference which occurred for the teaching or nonteaching of graduate classes by men and women. However, the different approaches used for the two analyses had to be considered as influencing the results of the different outcomes.

Although there was no significant difference reported for the distribution of contact hours per week of graduate classes of women and men as shown in Table 34, a significant difference did occur when the teaching or nonteaching of graduate classes was compared for men and women as presented in Table 34-A.

Teaching Contact Hours for Undergraduate Classes (Tables 35 and 35-A)

The null hypothesis stated that there would be no statistically significant difference in the number of teaching contact hours per week for undergraduate classes taught by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Almost one-third of the men, 28.7 percent, and 32.1 percent of the women did not respond with a number of hours or referred to the unclear wording of the question. Of the 62 men and 36 women,

Table 35

Chi Square (X^2), Comparison of the Teaching Contact Hours per Week for Undergraduate Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Contact Hours Undergraduate Classes (Per Week)	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	5	0	3	0	8	9.2	0	----
1 - 5	2	1	5	1	7	8.0	2	3.8
6 - 10	10	7	7	3	17	19.5	10	18.9
11 - 15	10	11	3	0	13	14.9	11	20.8
Over 15	14	11	3	2	17	19.5	13	24.5
Usable	41	30	21	6	62	71.1*	36	68.0*
Unusable	20	17	5	0	25	28.7	17	32.1
Totals	61	47	26	6	87	99.8*	53	100.1*

*Due to rounding

df = 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 6.88

a larger percentage of the women listed undergraduate contact hours in the categories of "11-15" and "over 15 " as presented in Table 35.

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 6.88. Therefore, there was no statistically significant difference in the number of teaching contact hours per week for

Table 35-A

Chi Square (X^2), Comparison of the Teaching v. Nonteaching of Undergraduate classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Undergraduate Classes Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	38	31	19	5	57	65.5	36	67.9
No	6	1	3	0	9	10.3	1	1.9
Usable	44	32	22	5	66	75.8*	37	69.8*
Unusable	17	15	4	1	21	24.1	16	30.2
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 2.11

undergraduate courses of women and men; and the null hypothesis was retained at the .05 level of significance.

Table 35-A reports the comparison of those men and women who taught undergraduate classes with those who had not taught undergraduate classes. Four additional men and one additional woman were included with Table 35-A. Table 35-A shows that almost two-thirds of both the men and women taught undergraduate classes.

Although there was no stated hypothesis, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 2.11. Therefore, there was no statistically significant difference for the teaching or nonteaching of undergraduate classes by women and men.

The no significant difference for teaching or nonteaching of undergraduate classes supported the findings of no significant difference for the distribution of teaching contact hours per week of undergraduate classes by men and women.

Teaching Contact Hours for Junior/Senior-Level Classes (Tables 36 and 36-A)

The null hypothesis stated that there would be no statistically significant difference in the number of teaching contact hours per week for junior/senior-level classes taught by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Forty-five respondents did not respond with a number of hours or referred to the unclear wording of the question. However, of the usable responses of 62 men and 33 women, Table 36 shows that one-third of the men, 33.3 percent, listed contact hours from "0-5," compared with 22.6 percent of the women.

Table 36

Chi Square (X^2), Comparison of the Teaching Contact Hours per Week for Junior/Senior-level Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Contact Hours Junior/Senior Classes (Per Week)	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 5	18	10	11	2	29	33.3	12	22.6
6 - 10	10	9	7	1	17	19.5	10	18.9
11 - 15	6	5	1	0	7	8.0	5	9.4
Over 15	6	4	3	2	9	10.3	6	11.3
Usable	40	28	22	5	62	71.1*	33	62.2*
Unusable	21	19	4	1	25	28.7	20	37.7
Totals	61	47	26	6	87	99.8*	53	99.9*

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 1.04

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 1.04. Therefore, there was no statistically significant difference in the number of teaching contact hours per week of junior/senior-level classes of men and women; and the null hypothesis was retained at the .05 level of significance.

Table 36-A

Chi Square (X^2), Comparison of the Teaching v. Nonteaching of Junior/Senior-level Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Junior/Senior Classes Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	33	26	18	4	51	58.6	30	56.6
No	9	4	4	1	13	14.9	5	9.4
Usable	42	30	22	5	64	73.5*	35	66.0*
Unusable	19	17	4	1	23	26.4	18	34.0
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rouning

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = .22

Table 36-A reports the comparison of those who taught junior/senior-level classes with those who had not taught junior/senior-level classes. Two additional men and two additional women were included with Table 36-A.

As reported in Table 36-A, more than one-half of both the men and women responded that they taught junior/senior-level classes, with 56.6 percent of the women and 58.6 percent of the men.

Although there was no stated hypothesis, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was .22. Therefore, there was no statistically significant difference for the teaching or nonteaching of junior/senior-level classes by women and men.

The no significant difference for the teaching or nonteaching of junior/senior-level classes supported the findings of the no significant difference found for the distribution of teaching contact hours for junior/senior-level classes of women and men.

Teaching Contact Hours for Freshmen/Sophomore-Level Classes (Tables 37 and 37-A)

The null hypothesis stated that there would be no statistically significant difference in the number of teaching contact hours per week of freshmen/sophomore-level classes taught by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Forty-eight respondents did not respond with a number of hours or referred to the unclear wording of the question. However, of 62 men and 30 women usable respondents, Table 37 shows that almost double the percentage of men, 48.3, compared with 26.4 percent of the women, listed hours in the category of "0-5."

Table 37

Chi Square (X^2), Comparison of the Teaching Contact Hours per Week for Freshmen/Sophomore-level Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Contact Hours Frosh./Soph. Classes (Per Week)	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0 - 5	25	10	17	4	42	48.3	14	26.4
6 - 10	4	6	4	1	8	9.2	7	13.2
11 - 15	5	2	1	0	6	6.9	2	3.8
Over 15	6	7	0	0	6	6.9	7	13.2
Usable	40	25	22	5	62	71.3*	30	56.6
Unusable	21	22	4	1	25	28.7	23	43.4
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 3

Fisher & Yates, X^2 at .05 = 7.82

X^2 for Usable Total B.E. Faculty = 5.70

The table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 5.70. Therefore, there was no statistically significant difference in the number of teaching contact hours per week of freshmen/sophomore-level classes taught by men and women; and the null hypothesis was retained at the .05 level of significance.

Table 37-A

Chi Square (X^2), Comparison of the Teaching v. Nonteaching of Freshmen/Sophomore-level Classes of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Frosh./Soph. Classes Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	26	25	9	4	35	40.2	29	54.7
No	15	6	13	1	28	32.2	7	13.2
Usable	41	31	22	5	63	72.4*	36	67.9*
Unusable	20	16	4	1	24	27.6	17	32.1
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 5.22

Table 37-A presents the comparison of those faculty men and women who taught freshmen/sophomore-level classes with those who had not taught freshmen/sophomore-level classes. One additional man and six additional women were included with Table 37-A.

Table 37-A reports that over one-half of the women, 54.7 percent, taught freshmen/sophomore-level classes, compared with 40.2

percent of the men. Almost one-third of the men, 32.2 percent, compared with only 13.2 percent of the women reported not teaching freshmen/sophomore-level classes.

Although there was no stated hypothesis, the table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 5.22. Therefore, there was a statistically significant difference for the teaching and nonteaching of freshmen/sophomore-level classes by women and men.

In analyzing the differences of the statistical results which occurred between the data presented in Tables 37 and 37-A, it appeared that the inclusion of one additional man and six additional women may have been influential in the two results. However, the different approaches used for the two analyses also had to be considered when interpreting the results.

Although there was no significant difference reported for the the distribution of contact hours per week of teaching for freshmen/-sophomore-level classes of men and women as illustrated in Table 37, a significant difference did occur when the teaching and nonteaching of freshmen/sophomore-level classes was compared for men and women as illustrated in Table 37-A.

Significant differences occurred for teaching contact hours per week, teaching or nonteaching of graduate classes, and teaching or nonteaching of freshmen/sophomore-level classes.

Table 38

Chi Square (X^2), Comparison of the Advisement of Students for Independent Study of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Students Advised for Ind. Study	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	18	16	3	2	21	24.1	18	34.0
1	3	7	1	0	4	4.6	7	13.2
2	3	5	5	0	8	9.2	5	9.4
3	2	2	3	0	5	5.7	2	3.8
4	7	0	0	0	7	8.0	0	---
5	5	1	1	0	6	6.9	1	1.9
Over 5	20	16	12	4	32	36.8	20	37.7
Usable	58	47	25	6	83	95.3*	53	100.0
Unusable	3	0	1	0	4	4.6	0	---
Totals	61	47	26	6	87	99.9*	53	100.0

*Due to rounding

df = 6

Fisher & Yates, X^2 at .05 = 12.59

X^2 for Usable Total B.E. Faculty = 10.25

Advisement of Students for Independent Study (Table 38)

The null hypothesis stated that there would be no statistically significant difference in the number of students advised for

independent study by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The data, as reported in Table 38, showed that almost one-fourth of the men, 24.1 percent, and approximately one-third of the women, 34 percent, did not advise any students for independent study. Both the men and women were close in percentages for advising over five students, 36.8 percent of the men and 37.7 percent of the women.

The table Chi Square (X^2) was 12.59; the calculated Chi Square (X^2) was 10.25. Therefore, there was no statistically significant difference in the number of students advised for independent study by women and men; and the null hypothesis was retained at the .05 level of significance.

Student Enrollees (Table 39)

The null hypothesis stated that there would be no statistically significant difference in number of students enrolled in classes taught by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Table 39

Chi Square (X^2), Comparison of the Student Enrollees of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Students Enrolled	B. E. Faculty Excluding Part-time Administrators				B. E. Faculty Identified as Part-time Administrators				Total B.E. Faculty Including Part-time Administrators				Total B.E. Faculty Including Part-time Administrators			
	QTR.		SEM.		QTR.		SEM.		QTR.		SEM.					
	f M	f F	f M	f F	f M	f F	f M	f F	f M	f F	f M	f F	f M	% M	f F	% F
0 - 100	3	0	5	0	4	2	7	0	7	2	12	0	19	21.8	2	3.8
101- 150	4	5	10	3	5	0	4	0	9	5	14	3	23	26.4	8	15.1
151- 200	5	2	4	8	2	3	1	0	7	5	5	8	12	13.8	13	24.5
201- 250	8	5	3	4	2	1	0	0	10	6	3	4	13	14.9	10	18.9
251- 300	3	9	2	0	0	0	0	0	3	9	2	0	5	5.7	9	17.0
Over 300	5	5	1	0	1	0	0	0	6	5	1	0	7	8.0	5	9.4
Usable	28	26	25	15	14	6	12	0	42	32	37	15	79	90.6*	47	88.7*
Unusable	3	6	5	0	0	0	0	0	3	6	5	0	8	9.2	6	11.3
Totals	31	32	30	15	14	6	12	0	45	38	42	15	87	99.8*	53	100.0

*Due to rounding

df = 5

Fisher & Yates, X^2 at .05 = 11.07

X^2 for Usable Total B.E. Faculty = 15.82

Table 39 provides frequencies for both quarter and semester enrollees for three columns as well as the frequencies for all of the enrollees, semester and quarter, inclusive. Chi Squares (X^2s) were performed for all enrollees, semester and quarter, of men and women; for quarter enrollees of men and women; and for semester enrollees of men and women.

Additional columns were added to Table 39 which showed the breakdown of quarter and semester enrollees. For all enrollees, quarter and semester inclusive, the men showed higher percentages for the categories of "0 - 100" and "101 - 150," with 21.8 percent and 26.4 percent, respectively; compared with 3.8 percent and 15.1 percent for the women as reported in Table 39.

The table Chi Square (X^2) was 11.07; the calculated Chi Square (X^2) was 15.82. Therefore, there was a statistically significant difference in the number of students enrolled (quarter and semester enrollees, inclusive) in the classes of women and men; and the null hypothesis was rejected at the .05 level of significance.

Although there was no stated hypothesis comparing the enrollees of women and men on the quarter system only, the table Chi Square (X^2) was 11.07; the calculated Chi Square (X^2) was 7.12. Therefore, there was no statistically significant difference for the number of student enrollees for women and men on the quarter system only.

In order to compute the Chi Square (X^2) for the semester system enrollees of women and men, the last three categories of Table 39 were combined. The last interval was "201 - over 300." This also changed the degrees of freedom to 3 df.

For enrollees of women and men on the semester system, the table Chi Square (X^2) was 7.82; the calculated Chi Square (X^2) was 13.28. Therefore, there was a statistically significant difference in the number of semester student enrollees of women and men.

When comparisons were made for all student enrollees, quarter and semester, inclusive, there was a significant difference for women and men. Also, there was a significant difference for enrollees of women and men on the semester system. However, when enrollees were compared for men and women on the quarter system, there was no significant difference.

Teaching of Extension or Off-Campus Courses (Table 40)

The null hypothesis stated that there would be no statistically significant difference in the teaching of extension or off-campus courses by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

The percentages illustrated in Table 40 showed that a slightly higher percentage of men taught extension or off-campus courses than did women. The men who taught extension courses represented 25.3 percent, compared with women representation of 18.9 percent.

Table 40

Chi Square (X^2), Comparison of the Teaching of Extension or Off-campus Courses of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Extension/ Off-campus Courses Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	15	8	7	2	22	25.3	10	18.9
No	46	39	19	4	65	74.7	43	81.1
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = .45

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was .45. Therefore, there was no statistically significant difference in the teaching or nonteaching of extension or off-campus courses by women and men; and the null hypothesis was retained at the .05 level of significance.

Teaching of On-Campus Courses for Additional Salary (Table 41)

The null hypothesis stated that there would be no statistically significant difference in the teaching of on-campus courses

Table 41

Chi Square (X^2), Comparison of the Teaching of On-campus Courses for Additional Salary of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Additional On-campus Courses Taught	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
Yes	21	10	5	2	26	29.9	12	22.6
No	40	37	21	4	61	70.1	41	77.4
Usable	61	47	26	6	87	100.0	53	100.0

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = .55

for additional salary by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Approximately, three-fourths of both the women and men responded with no teaching of any additional on-campus courses for additional salary as reported in Table 41. The responses were 70.1 percent of the men, compared with 77.4 percent of the women.

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was .55. Therefore, there was no statistically significant difference in the teaching or nonteaching of on-campus courses for additional salary by women and men; and the null hypothesis was retained at the .05 level of significance.

Advisement of Student Organizations (Table 42)

The null hypothesis stated that there would be no statistically significant difference in the number of student organizations advised by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Table 42 reports that the men were almost evenly divided between the advising of "none" or "one or more" student organizations. As can be seen in Table 42, 49.4 percent of the men did not advise any student organizations, compared with 48.3 percent of the men who did advise one or more student organizations. Almost two-thirds of the women, 62.3 percent, did not advise any student organizations, compared with 37.7 percent of the women who listed "one or more."

Three of the men and three of the women respondents advised two student organizations. While one man, identified as a part-time

Table 42

Chi Square (X^2), Comparison of the Advising of Student Organizations of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Academic Year, 1976-1977

Number of Student Organizations (Advisor of)	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	29	29	14	4	43	49.4	33	62.3
1 or more	30	18	12	2	42	48.3	20	37.7
Usable	59	47	26	6	85	97.7*	53	100.0
Unusable	2	0	0	0	2	2.3	0	---
Totals	61	47	26	6	87	100.0	53	100.0

*Due to rounding

df = 1

Fisher & Yates, X^2 at .05 = 3.84

X^2 for Usable Total B.E. Faculty with use of Yates's Correction Factor = 1.36

administrator, advised two student organizations; and one woman, identified as a part-time administrator, advised three student organizations.

The table Chi Square (X^2) was 3.84; the calculated Chi Square (X^2) was 1.36. Therefore, there was no statistically significant difference in the number of organizations advised by women and men; and the null hypothesis was retained at the .05 level of significance.

Table 43

Chi Square (X^2), Comparison of the Hours of Secretarial, Work Study, or Assistants of Men and Women of NABTE Business Education Faculty in the Western Region/NBEA for Spring Quarter/Semester, 1977

Number of Hrs. Secretarial Work Study	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% M	f F	% F
0	16	10	3	0	19	21.8	10	18.9
1 - 6	15	14	5	1	20	23.0	15	28.3
7 - 12	16	7	1	1	17	19.5	8	15.1
13 - 18	2	5	1	1	3	3.4	6	11.3
Over 18	7	7	12	1	19	21.8	8	15.1
Usable	56	43	22	4	78	89.5*	47	88.7*
Unusable	5	4	4	2	9	10.3	6	11.3
Totals	61	47	26	6	87	99.8*	53	100.0

*Due to rounding

df = 4

Fisher & Yates, X^2 at .05 = 9.49

X^2 for Usable Total B.E. Faculty = 4.84

Student Assistance Received (Table 43)

The null hypothesis stated that there would be no statistically significant difference in the number of hours per week that work study, secretarial, or assistance in the form of student

"assistants" was received by men and women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during Spring Quarter/Semester, 1977. The time period was reduced to obtain a more accurate accounting of hours by the respondents.

Several of the respondents indicated that they had unlimited secretarial assistance through word processing centers or through their departments. Since student assistance was frequently assigned through departments and word processing centers, the assumption was made that student assistance was included for those faculty responses which referred to the word processing centers and departments.

Table 43 represents the distribution of the responses for the hours of student assistance received by women and men faculty. A slightly larger percentage of men, 21.8 percent, listed "over 18" hours of secretarial assistance received, compared with 15.1 percent of the women.

The table Chi Square (X^2) was 9.49; the calculated Chi Square (X^2) was 4.84. Therefore, there was no statistically significant difference reported in the number of hours per week that student assistance was received by women and men; and the null hypothesis was retained at the .05 level of significance.

SUMMARY OF CHAPTER 4

The findings were based upon the responses of 87 men and 53 women employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977.

Null hypotheses were stated for the 43 characteristics which were compared for women and men. A Chi Square (X^2) Test of Significance was performed for each null hypothesis, and a comparison was made with the table Chi Square (X^2) at the .05 level of significance. Each null hypothesis was retained or rejected based upon the comparisons between the table and calculated Chi Squares (X^2 s).

Forty-three tables and twelve additional tables were presented in Chapter 4. Each table showed the distribution of women and men for each interval and the percentages of the men and percentages of the women for each interval. The areas for which comparisons were made between women and men included: 13 personal, 15 professional, and 15 job-related items.

The findings for the 13 personal characteristics showed that statistically significant differences occurred for approximately one-half, or six of the items. Statistically significant differences also occurred for three additional items for which

comparisons were made between women and men. There were no statistically significant differences for seven of the thirteen personal characteristics. Two additional, related items also showed no significant differences.

The findings for the 15 professional characteristics showed that statistically significant differences occurred for only four of the items. One additional, related item also showed a significant difference. There were no statistically significant differences for most, or 11 of the professional characteristics. Two additional, related items also showed no significant differences.

The findings for the 15 job-related characteristics showed that statistically significant differences occurred for only four of the items. Three additional, related items also showed significant differences. There were no statistically signficant differences for most, or 11 of the job-related characteristics. Three additional, related items also showed no significant differences.

Table 44 presented the findings for the 43 characteristics and 14 additional, related characteristics. Reported in Table 44 were: table number, characteristic, degrees of freedom (df), table Chi Square (X^2), calculated Chi Square (X^2), and whether a statistically significant difference did or did not occur at the .05 level of significance.

Table 44

Listing of Findings for 43 Characteristics and 14 Additional, Related Characteristics

Table	Personal Characteristics	df	Fsh. & Yts. Table Chi Square	Calculated Chi Square	Sig. Dif. at .05 Yes	No
1.	Sex (Proportion of Men and Women, to 55% & 45%)	1	3.84	1.88		X
2.	Mean Ages	8	15.51	11.15		X
3.	Marital Status	3	7.82	18.45	X	
3-A	Married v. Not Married	1	3.84	13.95	X	
4.	Highest Degree Earned	3	7.82	33.41	X	
4-A	Doctorate v. Non-Doc.	1	3.84	30.82	X	
5.	Tenure	1	3.84	4.10	X	
6.	Academic Ranks	3	7.82	9.71	X	
7.	Years in Present Rank	6	12.59	6.89		X
8.	Academic-Year Salaries	7	14.07	14.37	X	
8-A	Academic and Fiscal-Year Salaries (All Respond.)	7	14.07	23.45	X	
8-B	Salaries with Doctorates (All Respondents)	6	12.59	8.84		X
8-C	Salaries without Doc. (All Respondents)	3	7.82	.79		X
9.	Post High School Teaching Experience	6	12.59	9.67		X

Table	Personal Characteristics	df	Fsh. & Yts. Table Chi Square	Calculated Chi Square	Sig. Dif. at .05 Yes	No
10.	Elementary & Secondary School Teaching Exper.	2	5.99	1.99		X
11.	Business Work Experience	6	12.59	15.33	X	
12.	Full-Time Teaching Job Locations	5	11.07	2.53		X
13.	Full-Time Nonteaching Job Locations	6	12.59	4.78		X
	Professional Characteristics					
14.	Professional Memberships	3	7.82	7.07		X
15.	Major Officeholder	3	7.82	14.19	X	
15-A.	Major v. Non-Major Officeholder	1	3.84	10.03	X	
16.	Minor Officeholder	3	7.82	3.31		X
16-A.	Minor v. Non-Minor Officeholder	1	3.84	2.58		X
17.	Professional Instate Travel Completed	6	12.59	9.39		X
18.	Professional Instate Travel Planned	4	9.49	8.09		X
19.	Professional Out-of-State Travel Completed	4	9.49	9.45		X
20.	Professional Out-of-State Travel Planned	3	7.82	2.64		X

Table	Professional Characteristics	df	Fsh. & Yts. Table Chi Square	Calculated Chi Square	Sig. Dif. at .05 Yes	Sig. Dif. at .05 No
21.	Reimbursement for Travel	4	9.49	3.36		X
21-A.	Reimbursement v. Non-Reimbursement for Travel	1	3.84	5.23	X	
22.	Publication, Professional Aritcles	6	12.59	25.97	X	
23.	Publications, Professional Books	3	7.82	10.86	X	
24.	Out-of-Class Speeches	4	9.49	11.54	X	
25.	Months, Paid Sabbaticals	2	5.99	1.30		X
26.	Grant & Salary Reimbursements for Sabbaticals	1	3.84	.88		X
27.	Appointment to Committees	3	7.82	4.13		X
28.	Election to Committees	2	5.99	.16		X
	Job-Related Characteristics					
29.	Part-Time Administrators	1	3.84	5.43	X	
30.	Stipends for Adminis. Duties	1	3.84	1.96		X
31.	Class Preparations	7	14.07	17.76	X	
32.	Credit Hours Taught	7	14.07	10.92		X
33.	Teaching Contact Hours Per Week	3	7.82	21.99	X	

Table	Job-Related Characteristics	df	Fsh. & Yts. Table Chi Square	Calculated Chi Square	Sig. Dif. at .05 Yes	No
34.	Contact Hours, Graduate	2	5.99	5.86		X
34-A.	Teaching v. Nonteaching Graduate Classes	1	3.84	5.53	X	
35.	Contact Hrs. Undergrad.	4	9.49	6.88		X
35-A.	Teaching v. Nonteaching Undergraduate Classes	1	3.84	2.11		X
36.	Contact Hours, Junior/ Senior-Level Classes	3	7.82	1.04		X
36-A.	Teaching v. Nonteaching Jr./Sr.-Level Classes	1	3.84	.22		X
37.	Contact Hours, Freshmen/ Soph.-Level Classes	3	7.82	5.70		X
37-A.	Teaching v. Nonteaching Fr./Soph.-Level Classes	1	3.84	5.22	X	
38.	Advise, Students Ind. Stdy.	6	12.59	10.25		X
39.	Student Enrollees (ALL)	5	11.07	15.82	X	
39.	Student Enrollees (QTR.)	5	11.07	7.12		X
39.	Student Enrollees (SEM.)	3	7.82	13.28	X	
40.	Extension Courses Taught	1	3.84	.45		X
41.	On-Campus Courses for Additional Salary	1	3.84	.55		X
42.	Advisor, Student Organ.	1	3.84	1.36		X
43.	Student, Secretarial, Work Study Assistance	4	9.49	4.84		X

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study was conducted to determine whether there were personal, professional, or job-related differences between women and men employed full time who taught at least one business education course in Departments of Business Education of NABTE institutions of the Western Region/NBEA during academic year, 1976-1977. Adjusted time periods were allowed for items such as publication of books.

A need for this study arose out of the fact that very little research data had been compiled and analyzed for the profession of Business Education, although other disciplines had undertaken such studies. No study was found which devoted its attention to a comparison study of the women and men faculty of the Western Region/NBEA for the discipline of Business Education.

Major purposes for this study focused upon obtaining knowledge to be used by administrators, faculty, and students. Through understanding the status of women and men Business Education faculty, it was hoped that those persons close to the profession would address problem areas and bring about improvement of the working and learning environment now as well as in the future.

Summary of Related Literature

Only one study was found which directly compared men and women Business Education faculty. Hewitt (1975:79) conducted a national study which compared the status of 220 men and 180 women of NABTE institutions. Only 23 men and 15 women were included from the Western Region. Another national study by Harrington provided a profile of 144 women Business Education faculty with doctor's degrees.

It quickly became apparent that Business Education often was not included in the general studies or was included with business- or other-related categories such as education, social science, business, business administration, or data processing. Because it was difficult to isolate the facts for Business Education, much of the review focused upon national data statistics and attitudes.

Generally, national data showed that women had made little progress since the 1930's when women constituted one-third of the faculties of higher education. By the 1970's, that percentage had dropped to approximately one-fourth. From the time equal opportunity laws were enacted, salary differences between women and men in higher education were cited as increasing. Data were presented which showed that women were less likely to hold tenure or be employed in the higher ranks. The publication record of both books and articles was

better for men than for women. And, advancement to administrative positions was more likely to occur for men.

In addition to the statistics cited comparing men and women in higher education, attitudes surrounding the differences were presented. Topics regarding mobility, teaching assignments, advising loads, and secretarial assistance for women and men were only a few of the attitudes about which discussion centered. This lent credence to the need for providing some factual input for those items which seemed to be based upon attitudes only.

Summary of Procedures

Data were obtained via a mailed questionnaire from Business Education faculty of 34 NABTE, higher education institutions of the Western Region. The 87 men and 53 women accepted for inclusion for analysis of the data represented an 81.4 percent usable response of the 172 distributed questionnaires. The total return was 88.4 percent.

Forty-three null hypotheses were formulated and tested. Included were 13 personal, 15 professional, and 15 job-related hypotheses. The Chi Square (X^2) Test of Significance was used to test the 43 null hypotheses. Retention or rejection of the null hypotheses was dependent upon the table Chi Square (X^2) at the .05 level of significance compared with the calculated Chi Square (X^2). The Yates's

correction factor was utilized for those items which had only one degree of freedom (1 df).

In addition to the 43 characteristics which were compared for women and men, 14 additional, related items were compared. Although no hypotheses were formulated for the 14 items, the Chi Square (X^2) test was performed to provide additional analysis of the status of women and men.

Tables were prepared for the 43 characteristics as well as 12 tables which presented the additional, related data. Two of the additional, related items were included with one of the original 43 tables. An additional column was included in the tables to provide data for faculty identified as part-time administrators. Frequencies were reported, and percentages were calculated for men and for women. The tables as well as the highlights for each table were presented in-depth in Chapter 4.

SUMMARY OF PERSONAL CHARACTERISTICS

Statistical testing showed that there were no statistically significant differences for seven of the thirteen personal items which were compared for women and men, and those seven null hypotheses were retained. Statistical testing showed that there were significant

differences for six of the thirteen personal characteristics, and those six null hypotheses were rejected.

Null Hypotheses Retained

1. Sex (Proportion of Men and Women, compared to 55% men and 45% women)
2. Mean Ages
3. Years in Present Rank
4. Post High School Teaching Experience
5. Elementary and Secondary Teaching Experience
6. Full-Time Teaching Job Locations
7. Full-Time Nonteaching Job Locations

Null Hypotheses Rejected

1. Marital Status
2. Highest Degree Earned
3. Tenure
4. Academic Rank
5. Academic-Year Salaries
6. Business Work Experience

Additional, related areas for which there were no stated hypotheses, but for which comparisons were made for women and men included five additonal items.

Additional, Related Characteristics
No Significant Difference

a. Salaries with Doctorate

b. Salaries without Doctorate

Additional, Related Characteristics
Significant Difference

a. Married v. Not Married

b. Doctorate v. Non-Doctorate

c. Salaries (Academic- and Fiscal-Year, Inclusive)

It appeared that the Business Education faculty of the Western Region paralleled the conclusions reached by much of the reported data. As the sources contacted stated, there was a difference in marital status, academic rank, and salaries. Not enough data were reported in the literature to relate highest degree earned or business work experience to the findings of this study.

Tenure was reported to be different for men and women of national research studies; however, the Hewitt study found no difference in tenure of women and men Business Education faculty. The findings of this study agreed with the national data which showed a difference in the tenure status of women and men.

SUMMARY OF PROFESSIONAL CHARACTERISTICS

Statistical testing of the null hypotheses showed that there were no statistically significant differences for eleven of the fifteen professional items, and those eleven null hypotheses were retained. Statistical testing showed that there were significant differences for four of the fifteen professional characteristics, and those four null hypotheses were rejected.

Null Hypotheses Retained

1. Professional Memberships
2. Minor Officeholder
3. Completed Professional Instate Travel
4. Planned Professional Instate Travel
5. Completed Professional Out-of-State Travel
6. Planned Professional Out-of-State Travel
7. Reimbursement for Travel
8. Paid Sabbaticals (Months)
9. Grant and Salary Reimbursement for Sabbaticals
10. Appointment to Committees
11. Election to Committees

Null Hypotheses Rejected

1. Major Officeholder
2. Publication, Professional Articles
3. Publication, Professional Books
4. Out-of-Class Speeches

Additional, related items for which there were no stated hypotheses, but for which comparisons were made for men and women included three additional characteristics.

Additional, Related Characteristic
No Significant Difference

Minor v. Non-Minor Officeholder

Additional, Related Characteristics
Significant Difference

a. Major v. Non-Major Officeholder

b. Reimbursement v. Non-Reimbursement for Travel

The significant difference found for publications by men and women faculty in Business Education of the Western Region agreed with the differences presented in the national data which showed that men published more than women. The no significant difference found for appointment and election to committees of this study tended to support the premise that more women were being selected to serve on

committees. However, the question of women serving on "prestige" committees was not factually pursued either in this study or in the national studies.

SUMMARY OF JOB-RELATED CHARACTERISTICS

Statistical testing showed that there were no statistically significant differences for 11 of the 15 job-related items, and those 11 null hypotheses were retained. Statistical testing showed that there were significant differences for four of the fifteen job-related characteristics, and those four null hypotheses were rejected.

Null Hypotheses Retained

1. Stipends Received for Administrative Duties
2. Credit Hours Taught (Quarter)
3. Contact Hours for Graduate Classes
4. Contact Hours, Undergraduate Classes
5. Contact Hours, Junior/Senior-Level Classes
6. Contact Hours, Freshmen/Sophomore-Level Classes
7. Advisement, Students for Independent Study
8. Extension or Off-Campus Courses Taught
9. On-Campus Courses Taught for Additional Salary
10. Advisor, Student Organizations
11. Work Study, Secretarial, or Student Assistance

Null Hypotheses Rejected

1. Part-Time Administrator
2. Class Preparations
3. Teaching Contact Hours per Week
4. Student Enrollees (Quarter and Semester, Inclusive)

Additional, related items for which there were no stated hypotheses, but for which comparisons were made for women and men, included six additional characteristics.

Additional, Related Characteristics
No Significant Difference

a. Teaching v. Nonteaching of Undergraduate Classes
b. Teaching v. Nonteaching of Junior/Senior-Level Classes
c. Student Enrollees (Quarter)

Additional, Related Characteristics
Significant Difference

a. Teaching v. Nonteaching of Graduate Classes
b. Teaching v. Nonteaching of Freshmen/Sophomore-Level Cls.
c. Student Enrollees (Semester)

The attitude suggesting women had heavier work loads, as reported in the sources, seemed to be supported with the results of significant differences found in this study for class preparations, teaching contact hours per week, and student enrollees (all and

semester). The main discussion in the literature for job-related characteristics centered upon the proportion of men and women administrators. However, there was no information found which presented proportions of men and women part-time administrators. It appeared that the advancement of men to administrative positions prevalent in higher education paralleled this study's findings of higher percentages of men identified as part-time administrators as well as the significant difference found for part-time administrators.

The literature also suggested that women were more likely to teach at the undergraduate level in higher education. The additonal, related items of this study which showed significant differences for teaching v. nonteaching of graduate- and freshmen/sophomore-level classes lent some support to the national premise.

Summary of Hypotheses and Additional, Related Items

Close to two-thirds of the 43 hypotheses, 29 items or 67.4 percent, showed no statistically significant differences. Close to one-third of the 43 hypotheses, 14 items or 32.6 percent, showed statistically significant differences. The hypotheses were retained or rejected at the .05 level of significance. Table 45 summarizes the frequencies and percentages of the hypotheses which were retained and rejected. The 14 additional, retaled items were also included with Table 45.

Table 45

Summary of Retained and Rejected Null Hypotheses and Additional, Related Characteristics

Categories	Total Items	Retained Hypotheses	% of Total	% of Cat.	Rejected Hypotheses	% of Total	% of Cat.
Personal	13	7	16.3	53.8	6	14.0	46.2
Professional	15	11	25.6	73.3	4	9.3	26.7
Job-Related	15	11	25.6	73.3	4	9.3	26.7
Totals	43	29	67.5*	----	14	32.6*	----
Additional, Related Items							
Personal	5	2	-----	-----	3	----	----
Professional	3	1	-----	-----	2	----	----
Job-Related	6	3	-----	-----	3	----	----
Totals	14	6			8		

*Due to Rounding

Because the study focused primarily upon the 43 null hypotheses, no percentages were calculated for the 14 additional, related items. The additional, related items were used for added insight for the 43 main characteristics of the study for which comparisons were made between men and women Business Education faculty.

Percentage Comparisons

Several percentage comparisons were selected from the findings which provided an expanded summarization of differences for personal, professional, and job-related characteristics of women and men. Only those items for which statistically significant differences occurred were selected for the percentage comparisons:

-- 80.5 percent of the men, compared with 50.9 percent of the women, were married;

-- 87.4 percent of the men, compared with 41.5 percent of the women, held the doctor's degree;

-- 71.3 percent of the men, compared with 52.8 percent of the women, were tenured;

-- 74.7 percent of the men, compared with 52.9 percent of the women, held the ranks of professor and associate professor, inclusive;

-- 18.7 percent of the men, compared with 6.7 percent of the women, listed academic-year salaries of "over $24,999";

-- 6.7 percent of the men, compared with 22.2 percent of the women, listed academic-year salaries of "under $12,999";

-- 2.3 percent of the men, compared with 13.2 percent of the women, reported one year of business work experience; 3 years were reported by 23 percent of the men and 13.2 percent of the women; and 13.8 percent men and 20.8 percent women reported "over 5 years";

-- 66.7 percent of the men, compared with 37.7 percent of the women, had held the office of president, president-elect, or vice-president of professional organizations;

-- 72.4 percent of the men, compared with 35.8 percent of the women, had published professional articles;

-- 39.1 percent of the men, compared with 15.1 percent of the women, had published professional books;

-- 87.4 percent of the men, compared with 64.2 percent of the women, reported giving out-of-class speeches;

-- 29.9 percent of the men, compared with 11.3 percent of the women, were identified as part-time administrators;

-- 40.1 percent of the men, compared with 15.1 percent of the women, reported "1 to 3" class preparations; while, 23 percent of the men, compared with 49 percent of the women, reported "7 and over" class preparations;

-- 51.7 percent of the men, compared with 15.1 percent of the women, stated "0 to 10" contact hours per week; while, 42.5 percent of the men, compared with 75.5 percent of the women, stated "over 10" contact hours per week; and

-- 13.7 percent of the men, compared with 26.4 percent of the women, reported student enrollees totaling "over 250."

CONCLUSIONS

Several conclusions were postulated as a result of the findings. The finding that 87.4 percent of the men had attained the doctorate, compared with 41.5 percent of the women, formed the basis for several of the conclusions.

1. It was concluded that the significant difference for highest degree earned of women and men appeared to be related to the significant differences which occurred for tenure, rank, academic-year salaries, and part-time administrator. It was further concluded that, indirectly, the significant difference for highest degree may have been related to the differences for publication of books and articles, out-of-class speeches, teaching v. nonteaching of graduate classes, and teaching v. nonteaching of freshmen/sophomore-level classes.

2. It was concluded that the attitudes expressed in the literature of women having heavier work loads appeared to have some basis. Class preparations, teaching contact hours, and total student enrollees (all as well as semester) were areas where statistically significant differences occurred between men and women.

3. It was concluded that the higher representation of men in administrative positions seemed not unique to the profession of Business Education but appeared to be related to a national problem. The significant difference between men and women identified as part-time

administrators paralleled the national statistics which showed women having low representation in administrative positions.

4. It was concluded that the significant differences found for out-of-class speeches, major officeholder, and publications of books and articles of men and women appeared related to differences in advancement patterns of men and women. Speeches and holding a major office seemed related to recognition-type activities; whereas, publications were referred to in the literature as influential for advancement and for being hired.

5. It was concluded that the general national attitude expressing lack of mobility for women appeared not to be true for Business Education faculty women. The number of teaching and non-teaching job locations compared for men and women of this study showed no statistically significant differences.

6. It was concluded that teaching experience did not seem to be a factor related to advancement of women and men in the profession of Business Education of the Western Region/NBEA. The literature related teaching experience to salaries as well as to entrance into higher education teaching positions. This study found no significant differences in teaching experience of either post high school teaching experience, or elementary and secondary teaching experience.

RECOMMENDATIONS

Based upon the findings and conclusions, several recommendations were forthcoming. The recommendations focused upon finding solutions for the differences of on-the-job performance and career advancement patterns of men and women, updating attitudes toward equal treatment of women and men, and offering suggestions for further study of the problem. The recommendations were presented in five sections: (1) general recommendations, (2) recommendations for further study, and (3-5) recommendations for administrators, faculty, and students.

General Recommendations

1. It is recommended that assistance be provided for administrators, faculty, and students in determining and finding solutions for the differences in men's and women's on-the-job performance patterns as well as advancement patterns. Especially, attention needs to be forthcoming for:

a. assisting administrators in understanding why women and men react and are treated differently on the job so that administrators can address their own feelings and treat men and women equally in the work environment;

b. assisting women faculty in building self-confidence so that they are able to perform securely on the job on an equal basis;

c. assisting women faculty in understanding themselves so that they are able to advance in their careers on an equal basis with men;

d. assisting men faculty in understanding themselves so that they are able to accept and encourage equal on-the-job treatment, performance, and advancement for both women and men; and

e. assisting students in understanding themselves so that they are able to influence and perpetuate equal on-the-job treatment of women and men faculty.

2. It is recommended that it be determined where Business Education is included in the national research in order to identify national data related to Business Education.

3. It is recommended that those factors which influence advancement in the profession of Business Education be identified.

4. It is recommended that the reasons for differences for personal, professional, and job-related characteristics be undertaken.

Recommendations for Further Study

1. It is recommended that this study be expanded to maintain a base of data upon which to continually update and define the status of women and men faculty for the profession of Business Education.

2. It is recommended that, after a reasonable period of time, this study be repeated to determine whether any progress has occurred. Especially, it is felt that data need to be analyzed for highest degree earned as well as those areas affected by the degree.

3. It is recommended that comparison studies be undertaken of men and women faculty with the doctorate as well as without the doctorate.

4. It is recommended that further study include other institutions in addition to NABTE schools. This study and the two related studies for Business Education use NABTE institutions.

5. It is recommended that comparison studies be conducted for other regions of NBEA.

6. It is recommended that further study include specific items related to:

a. the time required to advance from rank to rank;

b. the rank at which women and men are initially hired;

c. the teaching of content courses v. skills' courses;

d. the organizations in which women are excluded, including off-campus organizations;

e. the area for which the highest degree is acquired; and

f. the contact hours for graduate, undergraduate, junior/senior-level, and freshmen/sophomore-level classes.

7. It is recommended that assignments and appointments to committees be expanded to define and include "prestigious" committees.

8. It is recommended that an in-depth analysis of salaries be undertaken. Recommendations are that the following items be included for salary analyses:

a. definitions of variables related to salaries;

b. obtainment of actual salaries in order to convert salaries where appropriate;

c. extension of the highest salary range where obtainment of actual salaries is not appropriate, so that the upper salary levels can be determined;

d. compensation for publications; and

e. compensation for consulting.

Recommendations for Administrators

1. It is recommended that administrators provide guidance and encouragement for women pursuing the doctorate. Areas where support could be given include: teaching assignments, contact hours of class, class preparations, and arrangement of teaching hours. Personal contact of schools and administrators where the doctorate could be pursued represents an example of administrative assistance. It is assumed that both women and men could benefit from this assistance.

2. It is recommended that administrators prepare statistical data to assure that women and men have equal teaching loads, class preparations, student enrollees, teaching contact hours, and general working environments which are equal.

3. It is recommended that administrators encourage research and publication of articles as well as other recognition-type activities, such as out-of-class speeches and presentations.

4. It is recommended that administrators identify factors related to advancement and encourage participation by faculty in those activities which provide opportunities for advancement.

5. It is recommended that administrators provide assistance in updating attitudes by arranging appropriate workshops for faculty as well as attending related conferences so that positive attitudes are fostered.

Recommendations for Faculty

1. It is recommended that women make every effort to acquire the doctor's degree so that the lack of the doctorate will not interfere with equal treatment and career advancement.

2. It is recommended that women become more involved in the publication of articles and books.

3. It is recommended that women actively participate in out-of-class speeches and presentations.

4. It is recommended that women run for higher-level offices, such as president, president-elect, and vice-president of professional organizations.

5. It is recommended that both men and women be aware of work environment areas where significant differences occur in order to assure an equal work environment.

6. It is recommended that both women and men provide role models for their students by insisting that both the working and learning environments of Business Education be operated upon a basis of equality for all.

Recommendations for Students

1. It is recommended that students be aware of the significant differences for personal, professional, and job-related characteristics of women and men in the profession of Business Education, so that better preparation for careers may be incorporated into their planning.

2. It is recommended that students obtain appropriate degrees as well as experience in student and professional organizations. It is important for students to be aware of the additional requirements for success in higher education careers, such as participation in organizations and publishing.

3. It is recommended that students obtain an appropriate educational background for possible research and publishing should they be employed in a higher education setting in the future.

4. It is recommended that students acquire an understanding of the advantages of performing within an equal work environment.

SUMMARY OF CHAPTER 5

Chapter 5 summarized the statement of the problem, the need for the study, the purposes of the study, the related literature, the procedures, and the findings of the study. Lists of retained and rejected null hypotheses for 43 characteristics under analysis in this study were provided. Although no hypotheses were formulated for 14 additional, related items, lists showing significant differences and no significant differences were presented.

The null hypotheses retained for the 43 items represented 29 items or 67.5 percent, compared with 14 items or 32.6 percent which were rejected. The category of personal characteristics had six, or almost one-half of the rejected null hypotheses.

In addition to a presentation of the frequencies and percentages of the retained and rejected null hypotheses, principal percentage comparisons were provided for items for which statistically significant differences occurred between men and women.

Several conclusions were formulated which were based upon the finding that 87.4 percent of the men, compared with 41.5 percent of the women, had obtained the doctorate. Other conclusions related the review of the national data to the findings of this study.

The recommendations focused upon administrators, faculty, and students of Business Education. Suggestions were set forth for understanding and finding solutions for men's and women's differences in on-the-job performance patterns and career advancement patterns. In addition to general recommendations, suggestions for further study and specific recommendations related to administrators, faculty, and students were provided in Chapter 5.

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REFERENCES CITED

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APPENDIXES

APPENDIX A

MEMORANDUM FOR NABTE REPRESENTATIVES

msu

DEPARTMENT OF EDUCATIONAL SERVICES

COLLEGE OF EDUCATION · MONTANA STATE UNIVERSITY · BOZEMAN 59715

MEMORANDUM

TO:

FROM: Jeanette Bieber, Associate Professor of Business
Eastern Montana College; Billings, Montana 59101

SUBJECT: Request for Information (See enclosed form)

Are you interested in whether personal, professional, and employment responsibility characteristics are similar or different for women and men employed full time, who teach at least one Business Education course in Departments of Business Education of NABTE institutions in the Western region of NBEA for academic year, 1976-1977?

In addition to a sincere interest in this topic, I'm also fulfilling research requirements for a doctoral degree at Montana State University with direction from Dr. Harvey Larson and Dr. Dan Hertz of the School of Business.

You will be able to assist with this study by providing the names of your Business Education faculty to whom a questionnaire will be sent. Please take a few minutes and have your secretary type the needed information on the enclosed form. For your convenience, a stamped, self-addressed envelope is enclosed.

Because I'm aware of the numerous responsibilities placed upon Heads of Departments of Business Education, I'm especially appreciative of your taking time to complete and return the enclosed form.

Enclosures: Form
Envelope

TELEPHONE [illegible]

APPENDIX A (Cont.)

FORM FOR NABTE REPRESENTATIVES

September, 1976, to June, 1977

BUSINESS EDUCATION FACULTY EMPLOYED FULL TIME IN DEPARTMENTS OF BUSINESS EDUCATION WHO TEACH AT LEAST ONE BUSINESS EDUCATION COURSE:

Name and Title of Faculty	Sex (Male, Female)	Administrator (Indicate if Adm.)

THANK YOU for your assistance in this project!

Return envelope is enclosed for Miss Jeanette Bieber, Associate Professor of Business; Business Department, Eastern Montana College; Billings, Montana 59101.

APPENDIX B

PARTICIPATING INSTITUTIONS

Arizona

ARIZONA STATE UNIVERSITY, Tempe
NORTHERN ARIZONA UNIVERSITY, Flagstaff
UNIVERSITY OF ARIZONA, Tucson

California

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, Pomona
CALIFORNIA STATE UNIVERSITY, Chico
CALIFORNIA STATE UNIVERSITY, Fresno
CALIFORNIA STATE UNIVERSITY, Los Angeles
CALIFORNIA STATE UNIVERSITY, Northridge
CALIFORNIA STATE UNIVERSITY, Sacramento
HUMBOLDT STATE UNIVERSITY, Arcata
LOMA LINDA UNIVERSITY, Riverside
SAN DIEGO STATE UNIVERSITY, San Diego
SAN JOSE STATE UNIVERSITY, San Jose
UNIVERSITY OF CALIFORNIA, Los Angeles

Hawaii

UNIVERSITY OF HAWAII, Honolulu

APPENDIX B (Cont.)

Idaho

BOISE STATE COLLEGE, Boise
NORTHWEST NAZARENE COLLEGE, Nampa
UNIVERSITY OF IDAHO, Moscow

Montana

EASTERN MONTANA COLLEGE, Billings
MONTANA STATE UNIVERSITY, Bozeman
NORTHERN MONTANA COLLEGE, Havre
UNIVERSITY OF MONTANA, Missoula

Oregon

EASTERN OREGON STATE COLLEGE, La Grande
OREGON STATE UNIVERSITY, Corvallis
PORTLAND STATE UNIVERSITY, Portland
SOUTHERN OREGON STATE COLLEGE, Ashland

Utah

BRIGHAM YOUNG UNIVERSITY, Provo
UTAH STATE UNIVERSITY, Logan
WEBER STATE COLLEGE, Ogden

APPENDIX B (Cont.)

Washington

CENTRAL WASHINGTON STATE COLLEGE, Ellensburg
EASTERN WASHINGTON STATE COLLEGE, Cheney
WALLA WALLA COLLEGE, College Place
WASHINGTON STATE UNIVERSITY, Pullman
WESTERN WASHINGTON STATE COLLEGE, Bellingham

APPENDIX C

QUESTIONNAIRE

MSU DEPARTMENT OF EDUCATIONAL SERVICES

COLLEGE OF EDUCATION MONTANA STATE UNIVERSITY, BOZEMAN 59715

MEMORANDUM

TO:

FROM: Jeanette Bieber, Associate Professor of Business
Eastern Montana College; Billings, Montana 59101

SUBJECT: Request for Assistance with Questionnaire

Are you interested in whether personal, professional, and employment responsibility characteristics are similar or different for women and men employed full time, who teach at least one Business Education course in Departments of Business Education of NABTE institutions in the Western region of NBEA for academic year, 1976-1977?

Hopefully, you'll assist me in pursuing a personal interest in this topic, as well as in fulfilling research requirements for doctoral studies at Montana State University with direction from Dr. Harvey Larson and Dr. Dan Hertz of the MSU School of Business.

You'll be of immense assistance in this study by completing the following questionnaire. The questionnaire has been prepared in easy-to-answer form to assist you in answering the questions as quickly as possible. A stamped, self-addressed envelope has been enclosed for your convenience.

Your responses will be kept in absolute confidence. It is with sincere appreciation of your time and professional contributions that the following questions are presented.

Enclosure

TURN THE PAGE AND BEGIN. . .

APPENDIX C (Cont.)

YOUR COMMENTS

APPENDIX C (Cont.)

CONFIDENTIAL QUESTIONNAIRE for a study comparing characteristics of men and women teaching in Departments of Business Education in NABTE institutions during academic year, 1976-1977.

DIRECTIONS: Fill in the blanks; where appropriate, circle answers. PLEASE IDENTIFY "OTHER."

A. QUESTIONS ABOUT YOUR INSTITUTION:

_____ 1. What was the highest total student enrollment figure of your institution for 1976-1977?

_____ 2. Under what system is your institution? (Quarter, Semester)

_____ 3. What is the structure of your institution?

(University, College, Community College, Vocational School)
If other, identify. . .

_____ 4. What degrees in Business Education does your institution offer?
(Ed.D., Ph.D., M.S., M.A., M.B.A., D.B.A., B.S.)
If other, identify. . .

B. QUESTIONS ABOUT YOUR AREA/DISCIPLINE OF TEACHING:

1. With which of the following are you affiliated?

(Business Education, Office Education, Vocational Business Education, Business and Office Education, Business Administration) List any others.

2. List the names of courses you taught during academic year, 1976-1977 (Fall, 1976, through Spring, 1977):

APPENDIX C (Cont.)

C. QUESTIONS ABOUT YOU:

_____ 1. Sex? (Male, Female)

_____ 2. Marital Status? (Single, Married, Divorced, Widowed)

_____ 3. Age (Circle your range)
(Under 25), (26-30), (31-35), (36-40), (41-45), (46-50), (51-55), (56-60), (61-65), or (Over 65)

_____ 4. Present Academic Rank? (Professor, Associate Professor, Assistant Professor, Instructor), If other, identify. . .

_____ 5. Number of years in present rank (include 1976-1977).

_____ 6. Do you currently hold tenure at the institution at which you teach? (yes, no)

_____ 7. What is your highest degree earned? (Ed.D., Ph.D., M.S., M.A.,) If other, identify. . .

_____ 8. Academic year salary for 1976-1977? (Circle range)
(Under $9,000), ($9,000 - $10,999), ($11,000 - $12,999), ($13,000 - $14,999), ($15,000 - $16,999), ($17,000 - $18,999), ($19,000 - $20,999), ($21,000 - $22,999), ($23,000 - $24,999), (Over $24,999)

_____ 9. Number of months for the above salary?
(9-month, 10-month, 11-month, 12-month) If other, identify.

_____ 10. Did you teach any on-campus courses for additional salary during academic year, 1976-1977? (Yes, No)

_____ 11. Did you teach any extension or off-campus courses for additional salary during academic year, 1976-1977? (Yes, No)

APPENDIX C (Cont.)

_____ 12. Are you identified as a part-time administrator? (Yes, No)

_____ 13. Are you now paid additional stipends for administrative duties? (Yes, No)

_____ 14. Total academic years of full-time post-high school teaching experience, including 1976-1977?

_____ 15. Total academic years of elementary and secondary teaching experience?

_____ 16. Total calendar years (12-month) of full-time business work experience?

_____ 17. Number of non-teaching, full-time job locations? (Number of businesses or organizations for which you worked full time)

_____ 18. Number of full-time teaching locations, including present teaching location? (Number of schools in which you taught)

_____ 19. Number of months taken for paid sabbaticals from September, 1970, - June, 1977?

_____ 20. Total salary reimbursement received for sabbaticals from September, 1970, - June, 1977?

_____ 21. Total grant reimbursement received for sabbaticals from September, 1970, - June, 1977?

_____ 22. To which professional organizations do you currently belong? (Circle memberships)

(NBEA, AVA, NEA, AFT, AAUP, DPE, AMA, AEDS, NATEBOE, your State BEA, your State VA) Identify others.

_____ 23. For how many of the above organizations have you served as president, president-elect, or vice-president? (Do not count any organization more than once)

_____ 24. For how many of the above organizations have you served as secretary, treasurer, historian, or editor? (Do not count any organization more than once)

APPENDIX C (Cont.)

_____ 25. Number of professional out-of-state trips taken from September, 1976, through April 15, 1977?

_____ 26. Number of professional out-of-state trips planned for April 16, 1977, through end of your academic year in May/June?

_____ 27. Number of professional in-state trips taken from September, 1976, through April 15, 1977?

_____ 28. Number of professional in-state trips planned for April 16, 1977, through end of your academic year in May/June?

_____ 29. Estimated reimbursement received from your institution for out-of-state and in-state professional travel for academic year, 1976-1977?

_____ 30. Number of professional articles published from September, 1970, through April 15, 1977?

_____ 31. Number of professional books edited, authored, or co-authored from September, 1970, through April 15, 1977?

_____ 32. Number of professional out-of-class speeches (include speeches scheduled to end of year) for academic year, 1976-1977?

_____ 33. Number of students enrolled in all your classes from Fall, 1976, through Spring, 1977?

_____ 34. Number of students you fully advise for independent study credits from Fall, 1976, through Spring, 1977?

_____ 35. Number of student organizations for which you are advisor or co-advisor from Fall, 1976, through Spring, 1977?

_____ 36. Number of teaching contact hours per week (hours spent in the classroom) for Fall Quarter/Semester, 1976?

_____ 37. Number of teaching contact hours per week (hours spent in the classroom) for Winter Quarter, 1977? (Omit, if semester)

_____ 38. Number of teaching contact hours per week (hours spent in the classroom) for Spring Quarter/Semester, 1977?

APPENDIX C (Cont.)

_____ 39. Number of teaching contact hours per week (for Quarter, 3 weeks; for Semester, 2 weeks) for graduate classes from Fall, 1976, through Spring, 1977?

_____ 40. Number of teaching contact hours per week (for Quarter, 3 weeks; for Semester, 2 weeks) for undergraduate classes from Fall, 1976, through Spring, 1977?

_____ 41. Number of teaching contact hours per week (for Quarter, 3 weeks; for Semester, 2 weeks) for junior/senior-level classes from Fall, 1976, through Spring, 1977?

_____ 42. Number of teaching contact hours per week (for Quarter, 3 weeks; for Semester, 2 weeks) for sophomore/freshmen-level classes from Fall, 1976, through Spring, 1977?

_____ 43. Number of class preparations during academic year, 1976-1977? (Do not count the same class more than once)

_____ 44. How many credit hours of class did you teach from Fall, 1976, through Spring, 1977?

_____ 45. Number of hours per week you receive your own secretarial, work study, or assistants for Spring Quarter/Semester, 1977?

_____ 46. Number of institution-wide committees to which you were appointed for academic year, 1976-1977?

_____ 47. Number of institution-wide committees to which you were elected for academic year, 1976-1977?

_____ 48. Do you wish to receive a summary of the findings of this study? (Yes, No)

THANKS 49. Appreciation for a "SPLENDID" job on this questionnaire!

Return to: Jeanette Bieber
Associate Professor
of Business
Business Department
Eastern Montana College
Billings, Montana 59101
(Enclosed Envelope)

Code for Follow-up:

APPENDIX D

FOLLOW-UP LETTER 1

msu

DEPARTMENT OF EDUCATIONAL SERVICES

COLLEGE OF EDUCATION MONTANA STATE UNIVERSITY BOZEMAN 59715

May 3, 1977

ATTENTION:
Selected Business Faculty from NABTE School

Although I've had a fairly good response from the Business faculty to whom I sent a questionnaire on April 16, your input is very much needed in order for me to complete a research project for doctoral studies at Montana State University.

Won't you please provide data for this study by completing the questions on the attached questionnaire and returning it in the enclosed stamped, self-addressed envelope.

If your response is already in the mail--or when your response is in the mail, let me express my sincere gratitude to you for the generous contributions you made in time and in help with this study.

Sincerely,

Jeanette Bieber
Associate Professor of
Business, EMC

Attachment: Questionnaire

Enclosure: Envelope

APPENDIX E

FOLLOW-UP LETTER 2

MSU
COLLEGE OF EDUCATION
DEPARTMENT OF EDUCATIONAL SERVICES
MONTANA STATE UNIVERSITY, BOZEMAN 59715

May 16, 1977

Mr. O. J. Brynside, Jr.
Editor
BUSINESS EDUCATION FORUM
1906 Association Drive
Reston, Virginia 22091

Dear Mr. Brynside, Jr.:

Subject: Letter to the Editor, BUSINESS EDUCATION FORUM

As a graduate student fulfilling research requirements for doctoral studies at Montana State University at Bozeman, Montana, I utilized the "Directory of NABTE Member Colleges and Universities" from the BUSINESS EDUCATION FORUM.

A questionnaire was sent to selected Business Education faculty and administrators in the Western region of NBEA. I was most impressed with the number of responses I received from the persons listed after the NABTE schools, as well as from the Business faculty affiliated with those schools. One person commented that the questionnaire sent by me was the fifth completed that day. This certainly represents professional dedication at the highest level.

Therefore, it is with gratitude that I publicly express my sincere appreciation to those Business Education faculty and administrators who so generously provide data for these research studies.

Sincerely,

Jeanette Bieber

Jeanette Bieber
Associate Professor
of Business
Eastern Montana College
Billings, MT 59101

APPENDIX F

CHI SQUARE (X^2) COMPUTER PROGRAM (DISS)

DISS 11:11 03-AUG-78

```
10 PRINT "INPUT TOTAL MEN"
20 INPUT M
30 PRINT "INPUT TOTAL WOMEN"
40 INPUT W
50 F1=M/(M+W)
60 F2=W/(M+W)
70 S1=0
80 S2=0
85 S=0
87 PRINT "ENTER PAIR OF NUMBERS"
90 INPUT X,Y
120 E1=F1*(X+Y)
130 E2=F2*(X+Y)
140 X1=(X-E1)*(X-E1)/E1
150 X2=(Y-E2)*(Y-E2)/E2
160 S1=S1+X1
170 S2=S2+X2
180 S=S+X+Y
190 IF S=M+W THEN 210
200 GO TO 90
210 PRINT "CHI SQUARE","MEN","WOMEN","TOTAL"
220 PRINT"",S1,S2,S1+S2
999 END
```

APPENDIX G

CHI SQUARE (X^2) COMPUTER PROGRAM (DISS1)

WITH YATES'S CORRECTION FACTOR

DISS1 11:11 03-AUG-78

```
10 PRINT "INPUT TOTAL MEN"
20 INPUT M
30 PRINT "INPUT TOTAL WOMEN"
40 INPUT W
50 F1=M/(M+W)
60 F2=W/(M+W)
70 S1=0
80 S2=0
85 S=0
87 PRINT "ENTER PAIR OF NUMBERS"
90 INPUT X,Y
120 E1=F1*(X+Y)
130 E2=F2*(X+Y)
140 X1=((ABS(X-E1)-.5)**2)/E1
150 X2=((ABS(Y-E2)-.5)**2)/E2
160 S1=S1+X1
170 S2=S2+X2
180 S=S+X+Y
190 IF S=M+W THEN 210
200 GO TO 90
210 PRINT "CHI SQUARE","MEN","WOMEN","TOTAL"
220 PRINT"",S1,S2,S1+S2
999 END
```

APPENDIX H

PROFESSIONAL MEMBERSHIPS

Organizations	B. E. Faculty Excluding Part-time Administrators		B. E. Faculty Identified as Part-time Administrators		Total B.E. Faculty Including Part-time Administrators			
	f M	f F	f M	f F	f M	% (87)M	f F	% (53)F
AAUP	8	1	2	2	10	11.5	3	5.7
AEDS	--	--	1	--	1	1.1	--	----
AFT	5	3	1	--	6	6.9	3	5.7
AMA	4	--	1	--	5	5.7	--	----
AVA	22	15	14	2	36	41.4	17	32.1
State VA	24	17	15	1	39	44.8	18	34.0
DPE	43	30	19	3	62	71.3	33	62.3
NATEBOE	7	3	8	1	15	17.2	4	7.5
NBEA	57	46	25	5	82	94.3	51	96.2
WBEA	57	46	25	5	82	94.3	51	96.2
State BEA	54	43	24	6	78	89.7	49	92.5
NEA	10	8	8	2	18	20.7	10	18.9
(Others)*	78	48	37	6	--	----	--	----

*Other organizations included: ABCA, AMS, Phi Kappa Phi, PDK, POP, Regional/Sectional BEA, Beta Gamma Signa, and others. The others' category may have included more than one organization.

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Bieber, Jeannette J
Personal, professional, and job-related characteristics

DATE | ISSUED TO

JUL 13 [redacted]
JUL 27 1978
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SEP 2

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