JOB SATISFACTION AMONG WOMEN ACCOUNTING EDUCATORS

DISSERTATION

Presented to the Graduate Council of the University of North Texas in Partial Fulfillment of the Requirements For the Degree of

DOCTOR OF PHILOSOPHY

By

Cynthia Ann Vest, C.P.A., B.S., M.S., M.B.A.

Denton, Texas

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A national survey was conducted to investigate job satisfaction among women accounting educators at four-year college and universities in the United States. The purpose of the study was to determine if differences existed among women accounting educators at research, doctoral, master's, and baccalaureate institutions in three areas relating to job satisfaction: levels of job satisfaction, individual sources of job satisfaction, and structural sources of job satisfaction. Also, the relationships among these three areas of job satisfaction were examined.

A stratified random sample of 755 women accounting educators was selected from the population of 1,519 women. A mailed questionnaire was used to collect data. A total of 495 (66%) questionnaires were returned. Women accounting educators expressed satisfaction with co-workers, supervision, and work. They were neutral regarding satisfaction with pay and dissatisfied with promotion opportunities.

A difference was detected between satisfaction with pay and type of institution. Differences were found between individual sources of job satisfaction and type of institution. The differences were attributable to education level and the personality characteristics of conscientiousness and openness. Differences were detected between
structural sources of job satisfaction and type of institution. Academic rank, salary, tenure, institutional resources, and job functions accounted for the differences.

Significant relationships were found between individual and structural sources of job satisfaction and levels of job satisfaction. Satisfaction with co-workers was related to agreeableness, conscientiousness, neuroticism, institutional resources, mentoring, and time spent on research. Satisfaction with pay was related to neuroticism, salary, academic rank, and institutional resources. Satisfaction with promotion opportunities was related to agreeableness, salary, tenure, institutional resources, mentoring, networking, other job functions, and type of institution. Satisfaction with supervision was related to personal roles, agreeableness, salary, institutional resources, mentoring, research, and advising students. Satisfaction with work was related to marital status, personal roles, agreeableness, neuroticism, institutional resources, and mentoring.

It was concluded that differences exist among women accounting educators at research, doctorate, master's, and baccalaureate institutions. Also, it was possible to determine relationships between individual and structural sources of job satisfaction and levels of job satisfaction.
TABLE OF CONTENTS

LIST OF TABLES ................................................................. vii

Chapter

I. INTRODUCTION ............................................................. 1
   Overview
   Statement of the Problem
   Purposes of the Study
   Hypotheses
   Theoretical Framework of the Study
   Significance of the Study
   Assumptions
   Delimitations
   Limitations
   Definition of Terms
   Summary and Organization of the Study

II. REVIEW OF THE LITERATURE ............................................. 14
   Introduction
   Job Satisfaction Defined
   Theoretical Perspectives on Job Satisfaction
      Individual Approaches
      Structural Approaches
      Toward an Integrated Approach
   Individual Influences on Job Satisfaction
      Age
      Education
      Gender
      Family Roles
      Personality Characteristics
   Structural Influences on Job Satisfaction
      Job Characteristics
      Organizational Characteristics
      Unionization
      Promotion Opportunity
      Social Context
Factors Affecting Job Satisfaction in Higher Education

Salary
Tenure
Academic Rank
Supervision
Interpersonal Relationships
Working Conditions
Policies and Administration
Person-Environment Fit
Collective Bargaining

Measurement of Job Satisfaction
Summary

III. RESEARCH METHODOLOGY ........................................... 55

Introduction
Research Questions
Hypotheses of the Study
Research Design
Selection of the Population
Selection of the Sample
Instrumentation
  About You
  Personality Characteristics
  About Your Job
  Job Satisfaction

Procedures for Collection of Data
Data Analysis
Summary

IV. RESULTS OF DATA ANALYSIS ......................................... 75

Introduction
Demographic Characteristics of the Respondents
Description of Data Distributions
  Job Characteristics
  Job Descriptive Index (JDI)
  Personality Characteristics
  Personal and Professional Roles
  Institutions Resources
  Mentoring
  Networking

Empirical Testing of the Hypotheses
  Relationship Between Job Satisfaction and Type of Institution
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship Between Individual Sources of Job Satisfaction and Type of Institution</td>
<td></td>
</tr>
<tr>
<td>Relationship Between Structural Sources of Job Satisfaction and Type of Institution</td>
<td></td>
</tr>
<tr>
<td>Relationship Between Individual Sources of Job Satisfaction, Structural Sources of Job Satisfaction, and Levels of Job Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Summary of Major Data Findings</td>
<td></td>
</tr>
<tr>
<td>V. RECOMMENDATIONS FOR FUTURE RESEARCH</td>
<td>107</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Summary of Research</td>
<td></td>
</tr>
<tr>
<td>Statement of Purpose</td>
<td></td>
</tr>
<tr>
<td>Procedures</td>
<td></td>
</tr>
<tr>
<td>Results and Summary of Major Findings</td>
<td></td>
</tr>
<tr>
<td>Discussion of Major Findings</td>
<td></td>
</tr>
<tr>
<td>Hypothesis One</td>
<td></td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td></td>
</tr>
<tr>
<td>Hypothesis Three</td>
<td></td>
</tr>
<tr>
<td>Hypothesis Four</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td></td>
</tr>
<tr>
<td>APPENDIX A: QUESTIONNAIRE</td>
<td>129</td>
</tr>
<tr>
<td>APPENDIX B: COVER LETTER: INITIAL MAILING</td>
<td>133</td>
</tr>
<tr>
<td>APPENDIX C: POST CARD FOR FOLLOW-UP MAILING</td>
<td>135</td>
</tr>
<tr>
<td>APPENDIX D: COVER LETTER FOR FINAL MAILING</td>
<td>137</td>
</tr>
<tr>
<td>APPENDIX E: COVER LETTER FOR PERSONALITY INVENTORY SUMMARY</td>
<td>139</td>
</tr>
<tr>
<td>APPENDIX F: PERSONALITY INVENTORY SUMMARY</td>
<td>141</td>
</tr>
<tr>
<td>APPENDIX G: RESPONDENTS COMMENTS CATEGORIZED BY TOPIC</td>
<td>143</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>150</td>
</tr>
</tbody>
</table>
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Average Salaries for Full-time Faculty in Institutions of Higher Education</td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>Full-time Instructional Faculty in Institutions of Higher Education</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>Full-time Accounting Faculty in Institutions of Higher Education</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Population of Women Accounting Educators Classified by Rank and Type of Institution</td>
<td>59</td>
</tr>
<tr>
<td>5</td>
<td>Sample of Women Accounting Educators Classified by Rank and Type of Institution</td>
<td>61</td>
</tr>
<tr>
<td>6</td>
<td>Scoring of Personality Inventory</td>
<td>65</td>
</tr>
<tr>
<td>7</td>
<td>Demographic Characteristics of the Respondents</td>
<td>76</td>
</tr>
<tr>
<td>8</td>
<td>Distribution of Key Demographic Variables by Type of Institution</td>
<td>78</td>
</tr>
<tr>
<td>9</td>
<td>Descriptive Statistics for Job Functions</td>
<td>81</td>
</tr>
<tr>
<td>10</td>
<td>Descriptive Statistics for Job Descriptive Index (JDI)</td>
<td>81</td>
</tr>
<tr>
<td>11</td>
<td>Norms for the Job Descriptive Index (JDI)</td>
<td>82</td>
</tr>
<tr>
<td>12</td>
<td>Descriptive Statistics for Personality Characteristics</td>
<td>83</td>
</tr>
<tr>
<td>13</td>
<td>Frequency Distribution for Personality Scores</td>
<td>84</td>
</tr>
<tr>
<td>14</td>
<td>Descriptive Statistics for Personal and Professional Roles</td>
<td>85</td>
</tr>
<tr>
<td>15</td>
<td>Descriptive Statistics for Institutional Resources</td>
<td>85</td>
</tr>
<tr>
<td>16</td>
<td>Descriptive Statistics for Mentoring and Networking</td>
<td>86</td>
</tr>
<tr>
<td>17</td>
<td>Multivariate Analysis for Job Satisfaction and Type of Institution</td>
<td>87</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>18</td>
<td>Univariate Statistics for Job Satisfaction Variables</td>
<td>88</td>
</tr>
<tr>
<td>19</td>
<td>Summary of Satisfaction with Pay Mean Scores by Type of Institution</td>
<td>89</td>
</tr>
<tr>
<td>20</td>
<td>Multivariate Analysis of Variance for Individual Sources of Job Satisfaction and Type of Institution</td>
<td>90</td>
</tr>
<tr>
<td>21</td>
<td>Univariate Tests for Individual Sources of Job Satisfaction</td>
<td>90</td>
</tr>
<tr>
<td>22</td>
<td>Summary of Conscientiousness Mean Scores by Type of Institution</td>
<td>91</td>
</tr>
<tr>
<td>23</td>
<td>Summary of Openness Mean Scores by Type of Institution</td>
<td>92</td>
</tr>
<tr>
<td>24</td>
<td>Multivariate Analysis of Variance for Structural Sources of Job Satisfaction and Type of Institution</td>
<td>93</td>
</tr>
<tr>
<td>25</td>
<td>Univariate Tests for Structural Sources of Job Satisfaction</td>
<td>94</td>
</tr>
<tr>
<td>26</td>
<td>Summary of Institutional Resources Mean Scores by Type of Institution</td>
<td>94</td>
</tr>
<tr>
<td>27</td>
<td>Summary of Research Mean Scores by Type of Institution</td>
<td>95</td>
</tr>
<tr>
<td>28</td>
<td>Summary of Teaching Mean Scores by Type of Institution</td>
<td>96</td>
</tr>
<tr>
<td>29</td>
<td>Summary of Advising Students Mean Scores by Type of Institution</td>
<td>97</td>
</tr>
<tr>
<td>30</td>
<td>Summary of Other Job Functions Mean Scores by Type of Institution</td>
<td>97</td>
</tr>
<tr>
<td>31</td>
<td>Summary of Stepwise Regression for Variables Predicting Satisfaction with Co-Workers</td>
<td>100</td>
</tr>
<tr>
<td>32</td>
<td>Summary of Stepwise Regression for Variables Predicting Satisfaction with Pay</td>
<td>101</td>
</tr>
<tr>
<td>33</td>
<td>Summary of Stepwise Regression for Variables Predicting Satisfaction with Promotion Opportunities</td>
<td>102</td>
</tr>
<tr>
<td>34</td>
<td>Summary of Stepwise Regression for Variables Predicting Satisfaction with Supervision</td>
<td>103</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>35</td>
<td>Summary of Stepwise Regression for Variables Predicting Satisfaction with Work</td>
<td>104</td>
</tr>
<tr>
<td>36</td>
<td>Summary on Level of Significance for Regression Analysis on Variables Predicting Job Satisfaction</td>
<td>111</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Overview

Work fills the greater part of the day for most individuals. "For the fortunate it is the source of great satisfactions; for many others it is the cause of grief." (Herzberg, Mausner, and Snyderman, 1959, p.3)

What causes some individuals to be very satisfied with their job, while others are less satisfied, and some are dissatisfied? This complex and perplexing question has been addressed by scientific research since the early 1930s. Kornhauser (1930) was the first to suggest that worker satisfaction is a relevant variable in discussions of worker efficiency. Hoppock (1935) is credited with the earliest methodology for measuring job satisfaction. His series of groundbreaking studies in the 1930s, including his canvassing of the residents of the town of New Hope, Pennsylvania, investigated job satisfaction in considerable depth. Locke (1969) estimated that there had been over 4,000 studies of job satisfaction by 1968. Since that time, 2,174 articles on job satisfaction were indexed in the Educational Resources Information Center (ERIC) and 3,020 in the Psycinfo system (Tack & Patitu, 1992).

Despite the voluminous research on job satisfaction, the literature is relatively silent when it comes to faculty job satisfaction, existing "to the point of paucity"
(Winkler, 1982, p. 16). Of the 5,194 articles in the ERIC and Psycinfo systems published between 1970 through 1992, only 300 articles were related to job satisfaction of faculty in higher education. One explanation for this lack of research comes from Pearson and Seiler (1983). They state, "Perhaps this area has not received attention because a high level of job satisfaction generally has been presumed to exist in a university setting" (p.36). "Current conditions, however, indicate that the time for a closer look at this aspect of academic life may be in order" (p. 46).

Research conducted by the National Center for Education Statistics in cooperation with SRI International and the Center for the Study of Higher Education at Pennsylvania State University found "sizable portions of faculty members indicated that they would consider leaving their institutions, and higher education altogether, if the right opportunity appeared . . . [revealing] an undercurrent of dissatisfaction with prevailing conditions in academe" (Schuster, 1990, p. 37).

What is causing job dissatisfaction among faculty in higher education institutions? There are a variety of reasons (Tack & Patitu, 1992). They include:

1. poor working conditions
2. a perception that the workload has increased over the years
3. demands to publish or perish
4. lack of rewards
5. geographic immobility
6. a shift in educational values from undergraduate to graduate teaching
7. diminution of the faculty role in governance
8. opportunities for promotion

9. bureaucratic rules and excessive paperwork

Job satisfaction is an even greater problem among women in higher education. Females tend to be less satisfied than their male counterparts. A study of community college faculty members found that female teaching professionals reported less overall job satisfaction than their male counterparts (Hollon & Gemmill, 1976). Another study of four-year university faculty members supports these findings. Winkler (1982) used two separate instruments to measure job satisfaction, the Job Descriptive Index and the Minnesota Satisfaction Questionnaire. He found that using either instrument, the female respondents indicated less job satisfaction than the male respondents.

The problem of job dissatisfaction among higher educators becomes even more significant when coupled with the projected shortages predicted for the next few decades. Beginning in 2000 and continuing for several decades, a serious shortage of persons to fill all vacant faculty positions will exist, with women and minorities clearly underrepresented in a variety of disciplines. Even now, prior to these projected shortages, women faculty are underrepresented on college and university campuses (Tack & Patitu, 1992).

The representation of women on college and university faculties is, and always has been, relatively small. Women filled approximately 26 percent of all faculty positions in higher education in 1920. By the beginning of the 1930s, women represented 27 percent of the faculty, but the percentage declined to 22 percent in the 1960s (Cox, 1982; Dean, 1986; Halcomb, 1979). The number of women faculty grew to 28 percent
by 1970, 34 percent by 1980, and 35 percent by the mid-1980s (Reskin & Phipps, 1988). Women in nontraditional areas, such as accounting, have an even lower representation. Female accounting educators did not begin entry into the profession in great numbers until the early 1980s. In 1980, women represented 14 percent of the accounting faculty, but 10 percent of this group were at the rank of instructor or assistant professor. By 1988, female educators made up 22 percent of the accounting faculty, with 13.5 percent of those at the instructor and assistant professor ranks. Over this eight-year period, 1980 to 1988, women accounting educators increased in number from 560 to 934 respectively (Norgaard, 1989). This 67 percent increase marks a dramatic gain in female accounting educators. Despite this increase, women accounting educators (22%) still fall below the average representation of females (35%) in higher education.

Identifying factors contributing to job satisfaction and dissatisfaction are important in attracting, recruiting, and retaining faculty. This is especially true where certain groups, such as women, are underrepresented. However, job satisfaction among women college professors has been almost totally ignored by researchers, and it clearly deserves more attention (Hill, 1984). This sentiment is expressed by Tack and Patitu (1992):

*Consideration of factors that influence job satisfaction is important not only for the overall quality of the faculty, but also in consideration of distinctive faculty groups, such as women and minorities. If higher education is serious about attracting and retaining women and minorities in the faculty, then what creates satisfaction or dissatisfaction for these individuals must be specifically*
considered . . . Knowing what conditions influence job satisfaction for faculty
generally and for women and minorities specifically will contribute significantly
to developing a faculty of excellence (p. xviii).

Statement of the Problem

The problem of this study concerned job satisfaction among women accounting
educators at four-year colleges and universities in the United States.

Purposes of the Study

The purposes of this study were:

1. To determine the levels of job satisfaction among women accounting educators
   at four-year research, doctoral, master's, and baccalaureate colleges and universities
   (types of higher education institutions are defined later in this chapter).

2. To determine individual sources of job satisfaction among women accounting
   educators at four-year research, doctoral, master's, and baccalaureate colleges and
   universities.

3. To determine structural sources of job satisfaction among women accounting
   educators at four-year research, doctoral, master's, and baccalaureate colleges and
   universities.

4. To determine the relationship between individual sources of job satisfaction,
   structural sources of job satisfaction, and levels of job satisfaction among women
   accounting educators.
Hypotheses

The following hypotheses were tested in order to achieve the purposes of the study:

1. No difference exists between levels of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

2. No difference exists between the individual sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

3. No difference exists between the structural sources of job satisfaction among women accounting educators at four-year research, doctoral master's, and baccalaureate colleges and universities.

4. No relationship exists between the individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction.

Theoretical Framework of the Study

This study did not emerge as an isolated idea. The groundwork out of which the research questions materialized was based on the job satisfaction research in higher education, psychology, sociology, and business/industry.

Two broad perspectives have guided research on the determinants of job satisfaction: (1) individual approaches and (2) structural approaches. The individual approach emphasizes the particular needs, values, and dispositions that individuals bring
into the workplace which shape their attitudes or satisfaction toward their job. The structural approach accentuates the work environment and the way in which workers' jobs are structured. They assume the conditions of work have a significant impact on individuals, thereby affecting satisfaction with their job.

However, Feldberg and Glenn (1979) stress the need to move away from a single-focus approach, such as either an individual approach or a structural approach, in favor of an integrative model. This study employed an integrative approach. Both individual and structural sources of job satisfaction were examined as they related to women accounting educators. The individual sources of job satisfaction included in the study were: age, educational level, marital status, number of children, family roles -- examined from the aspect of stress experienced from shifting from professional to family roles, and personality characteristics. The structural sources of job satisfaction investigated in the study were: salary, tenure, academic rank, working conditions in terms of availability of resources, type of institution, characteristics of the job, and the social context of the job. The inclusion of the individual and structural influences noted above is based on an extensive review of literature on job satisfaction, which is discussed in Chapter II, and provides a theoretically sound framework for this study.

Significance of the Study

The American Accounting Association (AAA), an organization for accounting educators, issued a monograph in 1988 entitled *A Framework for the Development of Accounting Education Research*. This monograph set the stage for educational research
for the 1990s. The AAA monograph noted a void in research relating to women and minority accounting faculty. The monograph stated that research should be conducted which focuses on determining the causes and cures of problems for women and minority accounting faculty (Williams, et al., 1988). Identifying aspects of the job where women are less satisfied will lead to the recognition of some of the problems faced by women accounting educators.

An editorial by St. Pierre (1988) in the *Journal of Accounting Education* strongly encouraged the readers to review the monograph by the American Accounting Association noted above. He suggested that accounting educators utilize the research opportunities presented in Appendix A of the *AAA Monograph (1988).*

Lehman and Street (1990) conducted a study analyzing the content and citations of 187 main section articles appearing in the *Journal of Accounting Education* from 1983 to 1989. During this six-year period no articles appeared on women or minority accounting faculty. They suggested research projects be conducted on topic areas and issues in which few or no articles had been written. Women accounting educators certainly fall into this category.

The above discussion emphasizes the need for research on women in accounting education. This study took an initial step toward filling the void of research on women in accounting education. It identified key characteristics of women accounting educators, as well as providing insight into the individual and structural determinants of job satisfaction. In addition, differences among women accounting educators at the various types of institutions -- research, doctorate, master's, and baccalaureate -- were identified.
This has implications for higher education administration. Identifying what creates job satisfaction for women accounting educators may help in attracting, recruiting, and retaining women accounting educators (Tack & Patitu, 1992).

Assumptions

This study was planned on the basis of the following assumptions:

1. The selected subjects were representative of the population under investigation.

2. Job satisfaction is normally distributed among the general population of women accounting educators.

3. Personality characteristics are normally distributed among the general population of women accounting educators.

4. Assessment of personality types can be reliably and accurately measured.

5. Assessment of job satisfaction can be reliably and accurately measured.

6. Participants responded honestly and accurately when completing the instruments.

Delimitations

When designing this study, the author delimited the sources of data to the following:

1. The sample drawn for this study was limited to full-time women accounting educators listed in the 1995 Accounting Faculty Directory (Hasselback, 1995).

2. Measurement of personality was limited to scores obtained from the Neo
Five-Factor Personality Inventory (Costa & McCrae, 1992).

3. Measurement of job satisfaction was limited to scores obtained from the Job Descriptive Index (Smith, Kendall, Hulin, 1975).

4. Measurement of individual and structural sources of job satisfaction was limited to those variables included in the study.

Limitations

The following limitations may have had an impact on the accuracy, validity, or generalizability of the study:

1. Women accounting educators who were not satisfied with their jobs may have already left the profession; thus, the selected sample may not reflect the maximum level of job dissatisfaction.

2. The female respondents in the study were selected from the 1995 Accounting Faculty Directory, which lists four-year college and university accounting faculty. Gender was not always apparent according to name. Consequently, some unmeasured error exists in the reported results because of the failure to identify all females or to include males.

3. The information included in the directory noted above was provided by the listed institutions with no further verification.

4. The study included only higher education institutions in the United States. The population represented by non-U.S. institutions was not included.
5. The study was subject to all the limitations inherent in survey research using a mailed questionnaire.

6. The study investigated job satisfaction and the individual and structural influences of job satisfaction among women accounting educators in higher education institutions in the United States. Generalizing the results to all accountants in the accounting profession or to other professionals may be unwarranted.

Definition of Terms

The variables measured, and related key concepts, were defined as follows:

*Job Satisfaction*: A subject's score(s) obtained on the Job Descriptive Index.

*Personality*: Subjects' scores on the Neo Five-Factor Personality Inventory.

*Personality Characteristics*: Subjects' score(s) on one or more of the scales of the Neo Five-Factor Personality Inventory.

*Age*: Subjects' chronological age.

*Marital Status*: Single, married, divorced, or widowed.

*Academic Rank*: Faculty members' ranks — these included lecturer, instructor, assistant professor, associate professor, and professor.

*Institutional Characteristics*: The types of institutions based on the 1994 Carnegie Classification of college and universities in the United States. The types included four-year research, doctoral, master's, and baccalaureate institutions of higher education and are defined below (*A Classification of Institutions of Higher Education*, 1994).
Research Universities: These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and give high priority to research. They award 50 or more doctoral degrees each year. In addition, they receive at least $15.5 million annually in federal support.

Doctoral Universities: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award annually at least ten doctoral degrees, in three or more disciplines, or 20 or more doctoral degrees in one or more disciplines.

Master's Colleges and Universities: These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines.

Baccalaureate Colleges: These institutions are primarily undergraduate colleges with major emphasis on baccalaureate degree programs.

Job Characteristics: The academic responsibilities of teaching, research, service, advising, and other job responsibilities.

Mentoring: A developmental relationship that enhances an individual's career growth opportunities.

Networks: A system of buddies who exchange professional information and ideas voluntarily.
Summary and Organization of the Study

Chapter I provides an overview on the topic of job satisfaction. The statement of the problem, the purposes of the study, and the hypotheses tested are presented. The significance of the study, as well as the theoretical framework of the study are discussed. Also, included are the assumptions, delimitations, and limitations of the study. In addition, the variables and key concepts of the study are defined.

Chapter II contains a review of literature on job satisfaction. Definitions of job satisfaction are discussed, along with an examination of two theoretical perspectives on job satisfaction — an individual approach and a structural approach. Major factors affecting job satisfaction in general and job satisfaction specifically in higher education are examined. Various measures of job satisfaction are also presented.

In Chapter III, the methodology of the study is described. The research design, research questions, and resulting hypotheses are presented. The selection of the population and of the sample are discussed. The instrument is described, along with the procedures for data collection, and the statistical treatment of the data.

The analysis of data is discussed in Chapter IV. Descriptions of data distributions across independent and dependent variables are presented, and the results of the testing of the hypotheses of the study are discussed.

Chapter V includes a summary of the research and a discussion of major findings. It ends with conclusions and recommendations for future research.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Since the turn of the century, there have been several thousand studies conducted in the general area of job satisfaction. Given the volume of research, the question arises -- why should job satisfaction be studied? In a broad study of job satisfaction, Hoppock (1935) identified the reason for studying job satisfaction as:

A better understanding of the causes of job satisfaction is desirable, not because it will enable us to become completely satisfied, but because it may help to relieve that intense and painful dissatisfaction which injures both the individual and the society in which he lives. (p. 52)

Until the 1970s, most research about job satisfaction had been conducted in the areas of applied psychology, sociology, and management theorists. It focused mainly on industry, business, and government. However, more recently job satisfaction among higher education academicians has come under investigation, but the research in this area is sparse and diverse in content.

Before reviewing specific studies on job satisfaction, the definition of job satisfaction was examined. The theoretical frameworks used in the study of job satisfaction are discussed, and then specific studies relating to job satisfaction in higher
education are investigated. This chapter concludes by examining the measurement of job satisfaction.

**Job Satisfaction Defined**

Hoppock (1935) defines job satisfaction as a combination of psychological, physiological, and environmental circumstances that create a genuine feeling of satisfaction. In contrast, he views job dissatisfaction as a conscious expression of discontent with the occupation as a whole.

Locke (1969) states job satisfaction is a "pleasurable emotional state resulting from the appraisal of one's job experience" (p. 316). He points out there are three elements involved in the appraisal process: (1) a perception of some aspect of the job, (2) a value standard which may be either implicit or explicit, and (3) a judgment of the relationship between one's perception and one's values, which may be either conscious or subconscious.

Kalleberg (1977) defines job satisfaction as the overall affective orientation to the job. This parallels Locke's view in that both incorporate emotions in their definitions. Implicit in their definitions is the assumption that people can balance their specific satisfactions and dissatisfactions to arrive at a general degree of satisfaction with their job. However, in actuality this may not occur because it is possible to be satisfied with one facet of the job and dissatisfied with another dimension. This concept was addressed in the definition of job satisfaction developed by Smith, Kendall, and Hulin (1975). They state, "Job satisfactions are the feelings a worker has about his job... [they are] feelings
or affective responses to facets of the situation" (p. 6). This has implications for the measurement of job satisfaction. According to Price and Mueller (1986), a multi-dimensional approach for measuring job satisfaction is superior to a one-dimension measure. A recent study corroborates these findings and suggests that the single-question approach to measuring job satisfaction, although still quite common, is without validity (Wang, 1991).

Theoretical Perspectives on Job Satisfaction

Two broad perspectives have guided research on the determinants of job satisfaction: individual approaches as opposed to structural approaches. The structural approach can be traced back to Marx, who lamented that structural changes brought about jobs that were routine and lacked autonomy and personal meaning. Though today few subscribe to Marx's generalizations about work in capitalist societies, many do share his fundamental assumption that people require quality work and that they are affected strongly by the way in which their work is structured. Alternatively, the individual approach renounces the depiction of employees as passive, defined by their work and battered about by the working conditions imposed upon them. They contend that people come to the workplace with particular needs, values, and dispositions which shape their work attitudes (e.g., satisfaction). The major emphases of each perspective are discussed separately.
**Individual Approaches**

The individual approach to understanding how people form work attitudes harks back to needs-satisfaction models of Maslow (1954), McClelland (1961), and Herzberg (1966). Even though each of these individuals have different theories, the underlying theme of each is that people have basic, relatively constant needs which they seek to fulfill through work. Employees derive satisfaction from their jobs to the extent that their jobs meet these needs. Needs-based theories of work satisfaction have been rejected on a number of grounds. Perhaps the most important criticism is the assumption that needs are fixed characteristics of individuals (O'Brien, 1986; Roberts & Glick, 1981; Salancik & Pfeffer, 1977). Research shows a single pervasive need structure cannot be assumed. There are a number of ways in which individual differences may be responsible for variation in employee job satisfaction.

The social information processing perspective of Salancik and Pfeffer (1978) elaborates a set of processes through which people perceive their job rewards and therefore, ultimately, their work attitudes. Individuals selectively perceive and make reference to their jobs in accordance with the expectations they bring to the workplace. In addition, the social context of work, particularly cues given by the work group, shapes how people react to their jobs. The research of O'Reily and Caldwell (1979), Pfeffer (1980), and White and Mitchell (1976) appear to support the social information processing model that social influence and information processing determine job attitudes. However, an exhaustive meta-analysis by Taber and Taylor (1990) indicated
that social cues contributed relatively little to employee perceptions, and consequently satisfaction, of their jobs.

Alternatively, individual characteristics, such as aspects of personality or demographics, have been proposed as moderators of the relationship between job features and work attitudes (Hackman & Oldham, 1976; O'Brien, 1986). There is some support for the view that the impact of job properties on job satisfaction is conditioned by individual characteristics (e.g., Hackman & Oldham, 1976; Hatfield & Huseman, 1982; Katz, 1976; Loscocco, 1989; Rabinowitz & Hall, 1981). However, there is evidence in these same studies and many more that most job features evoke similar attitudes from the majority of employees (e.g., Kohn, 1990; O'Brien, 1986; Spender, 1988). Other authors call for interactive models of person-job fit to understand how employee attitudes and behaviors are determined. According to this view, the individual not only reacts to but also acts upon his or her work situation. Employees do not register passively the characteristics of their jobs; instead, they possess situational information in ways that are meaningful to them (Chatman, 1989; Epstein, 1990; Pervin, 1985; Rosen, 1987). Moreover, people's past and projected work experiences affect their reactions to their jobs, determining to what extent and in what ways the situation will affect the person (Chatman, 1989; Hodson, 1985).

Possibly the most controversial articulation of the individual perspective is the dispositional model, which gives the most prominent role to the individual. The dispositional model of work attitudes assumes that workers bring relatively fixed dispositions to the workplace, predisposing them to certain work attitudes (Weiss &
Adler, 1984). Support for this framework hinges on finding that work attitudes do not change much over time. Therefore, initial work in this area focused on demonstrating consistency in job satisfaction over time and across situation; the logic is that if satisfaction is determined, in part, by something inherent in the person (e.g., their personality), then satisfaction should be somewhat consistent. As an example, Staw and Ross (1985) demonstrated stability in job satisfaction over a 5-year period, even when employers and/or occupations were changed. Correlation and regression analyses of longitudinal data by Staw, Bell, and Clausen (1986) and Gerhart (1987) also found little change in work attitudes over time. However, the dispositional approach has been the target of a good deal of criticism. For example, it has been argued that evaluations of the stability of job satisfaction across time ignore the possibility that other stable demographic and job-related situational influences may be causally related to job satisfaction (Davis-Blake & Pfeffer, 1989). The strongest evidence against the dispositional model come from research using the structural approach.

**Structural Approaches**

The distinctions among structuralists are less pronounced that those among proponents of the individual perspective. However, there is one common element -- researchers utilizing the structural tradition to study job satisfaction assume that the conditions of work have a significant impact on individuals. The major lines of demarcation stem from differences in the type of structural influences which are deemed most important. The following discussion examines some of the structural influences examined in job satisfaction research.
An extensive body of research has reported the effects of numerous facets of the job on employees' job satisfaction. While the characteristics of the jobs themselves have long been considered to be important influences on work attitudes, the past two decades have witnessed much greater attention to aspects of the organizational context in which the job is performed. A range of organizational characteristics have shown to affect job satisfaction. Multilevel models suggest that research should continue to include job characteristics, but that organizational characteristics should also be examined.

Organizational characteristics exert both direct and indirect effect on the quality of work life (e.g., Rousseau, 1978; Lincoln & Kalleberg, 1985). Also, research examining the impact of organizational demography and social networks on work attitudes shows the social context of work in important in its own right (e.g., Lawrence, 1988; O'Reilly & Caldwell, 1979).

Some of the research in the structural tradition has established the causal influence of the job on the individual through sophisticated longitudinal analyses. There are relatively few of these studies because of the rigors of collecting such data, but their findings are remarkably consistent. Such research has demonstrated that job characteristics have a profound impact on employees' values, self-concept, and cognitive functioning (e.g., Andrisani & Nestel, 1976; Brousseau, 1978; Lindsay & Knox, 1984; Mortimer, Lorence & Kumka, 1986; Spenner & Otto, 1984). Perhaps the best known example of such research has been conducted by Kohn and his colleagues (e.g., Kohn & Schooler, 1982; Kohn et al., 1983). They identified 14 "structural imperatives of the job"
that have independent effects on fundamental aspects of personality regardless of the
traits which individuals bring to the workplace.

Even though the research of Kohn and his colleagues focuses more on aspects of
personality than is typically represented in research on job satisfaction, their results are
relevant to understanding how work attitudes are determined. There are two pertinent
findings that are often replicated. First, day-to-day working conditions, especially the
existence of complex work, mediate the effects of the larger social structure on
personality. Specifically, "people thrive in meeting occupational challenges" (Kohn,
1990, p.42). Second, they have determined that in turn personality affects job conditions,
although this is largely over the long-term. They have concluded that jobs are not as
easily molded as are people. This may explain why some studies have found that
employee attitudes are affected more by the structural context than by the employee
herself or himself (Herman, Dunham, & Hulin, 1975; Herman & Hulin, 1972; Loscocco,

Toward An Integrative Approach

Job satisfaction research has tended to take a single-focus perspective examining
either individual influences or structural influences. However, Feldberg and Glenn
(1979) call for research using integrated models. They state, "...it behooves researchers
to cast aside a single-focus perspective in favor of integrative models" (p. 534).

Some examples of integrative models which have been used in job satisfaction
studies include the research of Kohn (1990), Davis and Lofquist (1984), Holland (1983),
Individual Influences on Job Satisfaction

Many individual influences have been investigated as they relate to job satisfaction. However, five individual variables have dominated the literature. They include: (1) age, (2) education, (3) gender, (4) family roles, and (5) personality characteristics.

Age

Age may be the most commonly studied individual influence on job satisfaction. Studies which use widely differing samples find remarkably consistent results: older employees are more satisfied, more job-involved, and more committed to their work (Dewar & Werbel, 1979; Hall & Mansfield, 1975; Janson & Martin, 1982; Lorence, 1987a, 1987b; McKelvey & Sekaran, 1977; Quinn, Staines, & McCullough, 1974; Saal, 1978).

Studies of the relation between career stage and job satisfaction yield inconsistent findings (e.g., Hall & Mansfield, 1975; Katz, 1978; Gould & Hawkins, 1978; Mount, 1984). Morrow and McIroy (1987) show that this is due to the fact that the studies use different measures of career stage. For example, there is a positive relation between career stage and job satisfaction when career stage is defined in terms of age, but curvilinear relations appear when age is defined in terms of job or company tenure.

The positive relation between age and work attitudes has been interpreted in three ways (Kalleberg & Loscocco, 1983). One interpretation is that people revise their expectations and desires to fit the realities of their jobs as they move through developmental or life stages (e.g., Levinson, Darrow, Levinson, & Braxton, 1978). The
second is that age structures the workplace, such that older employees occupy better jobs than their younger counterparts and are therefore more satisfied with their work (e.g., Wright & Hamilton, 1978). Finally, the age-work attitudes relationship has been interpreted as a cohort phenomenon. According, to this explanation, different age groups of workers have received different messages about what they can expect from the job. Perhaps the most influential articulation of this perspective came from Sheppard and Herrick (1972), who argued that we could understand the unrest of young factory workers in the seventies on the basis of a shift in societal work values. These younger workers had come to expect far more from their jobs than they were getting, and they experienced tremendous discontent as a result.

Education

An inverse relationship has been found between education and job satisfaction. It is widely held that education raises expectations and therefore contributes to a lack of satisfaction with a given level of job reward (Gruenberg, 1980; Kalleberg, 1977; Lincoln & Kalleberg, 1985).

Gender

Researchers have devoted increased attention to the role of gender in the determination of work attitudes. However, the research findings have been inconsistent. One suggestion for the inconsistencies comes from Feldberg and Glenn (1979). They suggest that early studies tended to use "gender models" which focus on individual characteristics to explain women's work satisfaction, whereas the use of "job models" which emphasize the structure of work have been much more common in research on
male workers. These authors contend that the very questions posed about employed
women often imply that women are affected more by the predispositions associated with
their gender roles than by their work experiences.

More current research which uses integrated models reveals considerable
similarity between women's and men's satisfaction with their job (Mannheim, 1983;
Martin & Hanson, 1985; Miller, 1980). However, Hartmann (1976), Eisenstemin (1979),
and Sokoloff (1980) found that while women and men respond similarly to the structure
of their jobs, there are some gender differences in how reactions to work are determined
which result from structured differences in gender role definitions. For example, a study
of factory workers showed that women and men were affected similarly by a host of job
characteristics, but there were some gender differences consistent with the definition of
work as the male domain and home as the female domain.

Family Roles

Because of the notion of separate, gender-defined work and family spheres, it has
primarily been in the context of studying working women that researchers have begun to
explore the influence of family roles on job satisfaction. Recent studies indicate that
family roles reflect needs, opportunities, and constraints which have a decided influence
on individuals' reactions to work (Feree, 1987; Loscocco, 1990; Martin & Hanson, 1985;
Martin & Shehan, 1989; Rosen, 1987).

Recent studies have linked housework and economic outcomes. There is an
increasing amount of research which suggests that working women continue to shoulder
the major responsibility for domestic work, including childcare (e.g., Coverman &
Sheley, 1986; Thompson & Walker, 1989; Vanek, 1974; Walker & Woods, 1976). A study of college students' projections for the future indicates that this gender division of labor is likely to persist (Affleck, Morgan & Hayes, 1989). Women's household work makes it more difficult for women to achieve labor market success (Coverman, 1983; Glazer, 1980). Moreover, women are far more likely than men to choose jobs which accommodate work to family. Studies have shown that women tend to work part-time, or sporadically, when they have children (Hayghe, 1984) and that women choose jobs with hours and locations that suit the execution of home responsibilities (Erickson, 1977). To date, little is known about how domestic responsibilities affect job satisfaction.

**Personality Characteristics**

Numerous personality characteristics have been investigated as potential determinants of employee job satisfaction. Among the most commonly studied traits are work orientation, internal locus of control, need for achievement, and growth need strength. Although there is some evidence that personality characteristics affect work attitudes directly, the primary influence appears to be as moderators (e.g., Brief & Aldag, 1975; Hackman & Oldham, 1980; Wanous, 1974). For example, O'Reilly's (1977) investigation of Naval personnel in challenging aviation jobs showed that those who have an expressive orientation to the job report less satisfaction with the work itself than their counterparts. Low instrumental orientation is more closely associated with increased satisfaction in high challenge jobs than in low challenge jobs.

A new development in the field of personality indicates that the degree to which employees have negative affectivity may influence their job satisfaction (Watson &
Clark, 1984). The authors contend that negative affectivity is a relatively stable personality trait which leads people to emphasize the negative side of their experiences. Of course the implications of being low on the negative affectivity index are very different depending upon whether employees are truly satisfied with their jobs or are merely denying the negative aspects of their work situation. Watson and Clark suggest additional research is needed on individuals with low negative affectivity to address this issue.

Structural Influences on Job Satisfaction

Commonly investigated structural influences include the characteristics of the job, the characteristics of the organization, unionization, opportunities for promotion, and the social context of the work. Each of these structural influences will be discussed in more detail.

Job Characteristics

Characteristics of the job itself have received the greatest attention as determinants of job satisfaction. Perhaps the most influential specification of the core dimensions of the job is Hackman and Oldham's Job Diagnostic Survey (JDS; 1975). Based upon Durkheimian definitions of alienation (e.g., Seeman, 1959), the JDS assesses five necessary aspects of a good job: skill variety, task identity (the degree to which the job requires completion of a whole piece of work), task significance, autonomy, and feedback. The first three components contribute to the meaningfulness of the work. Autonomy taps responsibility for work outcomes and feedback reflects knowledge about
the results of work activities. Other major studies, such as the Quality of Employment (e.g., Quinn et al., 1974), measure job characteristics differently, but the major dimensions are the same.

There is compelling evidence that jobs which provide intrinsic rewards such as challenge, meaning, variety, and complexity are the most satisfying (Hackman & Oldham, 1975; Katz, 1978; Kalleberg, 1977, Gerhart, 1987; Glisson & Durick, 1988). Autonomy, measured in many different ways, has been found consistently to lead to job satisfaction across a number of industries, organization, occupations, and job titles (e.g., Greenberger, Strassor, Cummings, & Dunham, 1989; Jans, 1982; Kalleberg, 1977; Lorence & Mortimer, 1985; Lorence, 1987a; Martin & Hanson, 1985; Miller, 1980; Rabinowitz, Hall & Goodale, 1977; Saal, 1978; Sekarna, 1989).

Organizational Characteristics

One of the major developments on job satisfaction has been the recognition of the importance of organizational and contextual influences on employee reactions to work. Once-popular dichotomous models of organizational structure (e.g., bureaucratic/ nonbureaucratic; mechanistic/organic) have been rejected, as researchers have determined that there are distinct dimensions of structure which have varying effects on employees (Hall, 1990). On the basis of an extensive review, James and Jones (1976) conclude that organizational characteristics in and of themselves do not tell us much about employee satisfaction. Instead, we need to know how such variables translate into particular job characteristics in order to understand why they affect employees as they do.
Influential studies have begun to identify the direct and indirect influences of organizational characteristics on employee attitudes toward their jobs (see Hall, 1990, for a review). One interesting debate which has received empirical attention focuses on the impact of structural complexity on employee reactions to work. Organization scholars (e.g., Aiken & Hage, 1966) have long held that components of complexity such as vertical and horizontal differentiation, and a detailed division of labor, have a negative impact on workers' evaluations of their jobs. Yet neo-Marxists (e.g., Edwards, 1979; Gordon, Edwards, & Reich, 1982) contend that this complexity, central to the bureaucratic system of control, produces positive employee attitudes by manipulating workers. Empirical studies indicate that structural complexity does tend to lead to lower job satisfaction (Oldham & Hackman, 1981; Rousseau, 1978; Lincoln & Kalleberg, 1990).

Unionization

Many studies have shown that unionization is associated with negative work attitudes (Borjas, 1979; Freeman & Medoff, 1984; Hopkins, 1983; Kochan & Helfman, 1981). One interpretation is that unions provide an atmosphere in which employees are more likely to voice their dissatisfactions than to exit the company. That is, unions stress adversarial employer-employee relations, heightening employee consciousness of their dissatisfactions (Freeman, 1980; Leicht, 1989). However, an alternative possibility is that the worst jobs tend to be found in unionized companies. In fact, a recent study showed that, after controlling for the fact that jobs with few rewards were more likely to be unionized than desirable jobs, unionization had a positive impact on job satisfaction. The
authors suggest that unions reduce wage inequality and increase worker control (Pfeffer & Davis-Blake, 1990).

Promotion Opportunity

Kanter's (1977) study of an industrial supply corporation is well known for its argument that opportunities for upward mobility are very important to the development of positive attitudes about work. Studies based on different samples, using various analytic methods and having different theoretical emphases, support this view (e.g., Lincoln and Kalleberg, 1985; Loscocco, 1990; Mannheim, 1975; Miller, 1980).

Other studies have underscored the ways in which stratification by gender and race impedes the promotion of women and minorities. For example, a study of state government in New York demonstrated that the main barrier to promotion of women and minorities is that the job titles which qualify incumbents to take competitive exams for possible promotion are disproportionately held by white men. The gender distribution within job titles which permit administrative transfer without a test is even more skewed; these positions are overwhelmingly held by white men (Steinberg, Haignere, & Chertos, 1990).

There have also been interesting theoretical developments concerning the relation between promotion opportunity and employee attitudes toward their work. Harlan (1989) urges movement away from an overly structural approach. Her study of production and clerical workers from a single manufacturing plant demonstrated that there is not only a structural but also an independent evaluative influence, workers' perceptions of the fairness of the promotion system, on employee attitudes.
Social Context

Social scientists have long held that attitudes are affected by social contexts. Early studies demonstrated that the jobs of fathers, brothers, and class peers constitute important examples against which workers assess their own jobs (Form & Geschwender, 1962; Bonjean, Bruce, & Williams, 1967). However, this area of research received little attention from the mid-sixties through the mid-eighties. Recent research has confirmed the importance of reference groups to the formation of work attitudes, and it has broadened our understanding of the persons to whom comparisons are made.

Hodson (1985) examined the influence of a number of possible comparisons, based on occupational prestige, on job satisfaction using data from the Wisconsin Longitudinal Survey of Schooling and Attainments. He found that comparisons between current job and early aspirations, spouse's occupation, and future work expectations influence job satisfaction. However, siblings, parents, earlier career patterns, and peers of the same educational level did not offer significant bases of social comparison. In these times when so many families include two breadwinners, it is noteworthy that having a job that is more prestigious than one's spouse leads to job satisfaction. Hodson also found that people who have positive assessments of what their future jobs will be like are able to sustain satisfaction with their current jobs. Similarly, a study of manufacturing workers indicates that being able to envision a better job sometime in the future contributes to employees work satisfaction even in the face of blocked mobility due to difficult economic times (Loscocco, 1990).
One of the most curious findings in the job satisfaction literature has been that women tend to be more satisfied with their jobs, even though their jobs are objectively worse than the ones typically held by men (Acker & Van Houten, 1974; Rosenback, Dailey, & Morgan, 1979; Sauser & York, 1978; Varca, Shaffer, & McCanley, 1983). Although early research suggested that women were more easily satisfied because they did not care very much about work (Beynon & Blackburn, 1972; Blauner, 1964), social reference theory is increasingly used to explain this apparent contradiction; women probably compare themselves to other women or to other jobs that they have held. Women are aware of their disadvantages relative to men and therefore expect much less from their jobs.

A study of pay satisfaction among a large sample of men and women factory workers from 52 Midwestern firms suggest that much of women's greater pay satisfaction results from the fact that women tend to be concentrated together in job titles, occupations, and industries (Hammond & Mahoney, 1983; Stewart, 1989). In fact, they report more job satisfaction than women in traditional blue-collar and white-collar occupations (O'Farrell & Harlan, 1982; Walshok, 1981). Apparently, these women compare their work to other jobs which they have held or the kinds of jobs that they know are most available to women. A particularly important study of women who moved into nontraditional jobs over a 2-year period (Mcllwee, 1982) suggests that comparisons may change over time, with corresponding changes in job satisfaction. At the beginning, these women evaluated their jobs in relation to their previous female-typed jobs. After a year, they began to use the same criteria as their male co-workers and were less satisfied.
The few studies of racial differences in work attitudes indicate that, unlike women, black employees tend to report dissatisfaction with their less rewarding jobs (e.g., O'Reilly & Roberts, 1973; HEW, 1972). In fact, the discrepancy in job satisfaction between black and white workers is greater than that between any two social groups (Form & Hanson, 1985). Apparently, black workers do use more privileged white workers as social referents. Since black workers believe strongly in racial equality, they are frustrated by jobs which do not compare favorably to those of their white counterparts (Form & Hanson, 1985).

Another potential line of reasoning about social contexts and work attitudes comes from the application of organizational demography to the study of employee behavior (e.g., McCain, O'Reilly, & Pfeffer, 1983; Pfeffer & O'Reilly, 1987; Lawrence, 1988). Similarly, studies have established that workers are influenced by their social networks (Kanter, 1977; O'Reilly & Caldwell, 1979; Griffin, 1983). Rice and Mitchell (1973) demonstrated that employee attitudes are affected by the direct and indirect linkages to other members of the organization embodied in a particular organizational position. Lawrence's (1988) study of managers from an electric utility company showed that people's perceptions of age distributions in an organization can be more important than actual age distributions.

Factors Affecting Job Satisfaction in Higher Education

The preceding discussion on the theoretical perspectives, the individual influences, and the structural influences on job satisfaction was approached from a broad
perspective, and much of the research mentioned was conducted in business and industrial settings. In many respects, the work environment of higher education differs from those settings. Therefore, the discussion will become more focused, examining literature that relates specifically to the job satisfaction of faculty members in higher education.

Research shows that there are major factors in the workplace that contribute to faculty members' satisfaction or dissatisfaction with their professional work. These factors include: salary, tenure (faculty job security), academic rank, supervision, interpersonal relationships, working conditions, policies and administration, the person-environment fit, and collective bargaining.

**Salary**

The degree to which salary affects job satisfaction is debatable. Some workers are motivated solely by money, while others wish to be active in their jobs and express themselves through the medium of work (Sheppard and Herick, 1972). Even though the relationship between salary and job satisfaction is debatable, salary is one of the greatest sources of dissatisfaction among faculty in higher education (Edmundson, 1969; Ladd, 1979; Winkler, 1982).

While a certain level of pay will keep faculty from being dissatisfied (Sprague, 1974), salary does not provide satisfaction of all needs. "For academics generally, tenured and well-paid employment provides satisfaction of the lower-order needs" (Moses, 1986, p. 136), such as physiological needs, safety, and security. Salary and fringe benefits, certain administrative features (e.g., involvement in such things as
decisions about faculty hiring and termination and about campus promotion and tenure, general policy making, and extracurricular activities), and collegial associations should emerge as principal contributors to job satisfaction or dissatisfaction for college faculty (Hill, 1987). Further, the "perceived inequities in wages and salaries tend to contribute more to [workers'] dissatisfaction than the exact amount of pay" (Ivancevich and Donnelly, 1968, p. 176).

Dissatisfaction with work may occur when people believe they should receive more money for the type and amount of work accomplished (Morse, 1953). For example, professors in a college of medicine might believe they should receive more money than professors in a college of education because of the nature of their profession. Professors of medicine can perceive the demands for the preparation of their courses as being more critical because of the life-and-death nature of their work.

Employees can be dissatisfied because their salary is low compared to similar jobs in the same organization (Morse, 1953). A full professor of biology might receive a lower salary than a full professor of chemistry at the same institution, and the biology professor can be dissatisfied for that reason. Faculty can also become dissatisfied when they believe they should receive more compensation because of their education, experience, and /or length of service. For example, a professor in an Accounting department with a doctorate degree, 15 years of teaching experience, numerous publications, and 10 years of industry experience typically expects a higher salary than a professor who has a master's degree, 10 years of teaching experience, and only a few publications.
Dissatisfaction may also occur when employees in the same positions, performing the same tasks are paid different salaries. In higher education, males are paid more than their female counterparts. Even though the gap is narrowing, when it comes to compensation, "women are paid less than men, even after controlling for rank, institutional type, and discipline" (Finkelstein, 1987, p. 69). When men's and women's salaries were compared by category, affiliation, and rank for the 1991-1992 academic year, in all cases, the average salaries for women were lower than the average salaries for men. Table 1 shows the average salaries when the categories and affiliations were combined.

Table 1

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>$59,180</td>
<td>$52,380</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>$44,130</td>
<td>$41,040</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>$37,240</td>
<td>$34,380</td>
</tr>
<tr>
<td>Instructor</td>
<td>$28,220</td>
<td>$26,390</td>
</tr>
<tr>
<td>Lecturer</td>
<td>$32,800</td>
<td>$28,530</td>
</tr>
</tbody>
</table>

*Source: American Association of University Professors, 1992*

While job satisfaction of women faculty with respect to salary levels has not been the subject of much scrutiny, research data about female university administrators could shed some light on the subject. "Salary was found to have a significantly negative relationship when compared to role conflict, internal self-esteem, and external self-esteem" of females who served as administrators in a university setting (Anderson,
Consequently, female university administrators who receive low salaries might be less satisfied with their administrative work than those who receive high salaries. Perhaps, women faculty who are paid less than their male counterparts might also feel less satisfied with their work in academia because the rewards do not reflect the perceived level or intensity of their contributions. However, the solution to this source of dissatisfaction is simple according to Sheppard and Herrick (1972):

*Among men and women in the same income ranges, differences in work dissatisfaction tended to disappear. So much for the job dissatisfaction problem among women! The theoretical solution is simple: equal employment opportunity!* (p. 8)

Women accounting educators do not perceive that they have equal employment opportunity when it comes to pay. A survey conducted by Norgaard (1989), found that 44 percent of female accounting educators agreed that it was more difficult for a woman to receive a salary increase in comparison to an equally qualified man. Maupin (1982) found that women accounting educators were significantly less satisfied with their pay when compared to women accountants in business and industry and to female accountants in public accounting firms, including local, regional, and national firms.

**Tenure**

Tenure is another correlate of job satisfaction, which has been described as job security (Bowen & Schuster, 1986; Saunders, 1990). Many faculty members are tenured. In 1989-90, 63.5 percent of all faculty were tenured, with 69.7 percent of the men tenured and 48.5 percent of the women tenured (U.S. Department of Education, 1991).
Luu (1985) found a positive relationship between tenure and job satisfaction, and suggested:

*The resulting high correlation coefficient may also be attributed to the peculiar characteristics of the academy as an enterprise, where tenure (job security) is both a low level need -- a necessary condition for job satisfaction -- and a self-actualization need -- a sufficient condition for job satisfaction* (pp. 58-59).

Significant differences were found on three subscales of the Job Descriptive Index between tenured and nontenured faculty (Sprague, 1974). Nontenured faculty members were significantly less satisfied than tenured faculty on the following three subscales: Type of Work, Pay, and Coworkers. "In every case the nontenured faculty had lower mean satisfaction scores than tenured faculty" (p. 87). Other studies have found similar results. In a study of industrial arts and technology faculty, Wolfson (1986) found "teacher educators who are tenured are more satisfied that nontenured teacher education faculty" (p. 86). In a study of faculty in the General College at the University of Minnesota, tenured faculty reported a higher mean score than tenure-track faculty and nontenure-track faculty on the security scale of the Minnesota Satisfaction Questionnaire (Grahn, et al., 1981). A study of 426 education professors from 39 public and 25 private institutions found that the mean for work satisfaction for tenured faculty was significantly higher than the mean for nontenured faculty (Nussel, Wiesma, & Rusche, 1988).

However, a survey using the Minnesota Satisfaction Questionnaire short form found no statistically significant difference in the perceptions of full-time faculty members at selected southern institutions regarding job satisfaction and tenure status (Ibrahim, 1985).
Women are less likely to have been granted tenure because they are typically clustered in the lower academic ranks. Subsequently, "they are likely to experience much more sharply than males a sense of job insecurity" (Freeman, 1977, p. 177). Also, a smaller percentage of women are tenured when comparing the early eighties to the early nineties. In 1980-81, 49.7 percent of the full-time women faculty were tenured, compared to 70 percent of the men faculty members. In 1990-91, the percentage of male faculty members tenured is the same, while the percentage for women has dropped to 45.9 percent (American Association of University, 1992). Furthermore, women are tenured at a slower rate than their male counterparts (Astin & Snyder, 1982). For example, from 1972 to 1982, the proportion of tenured men increased by 17.7 percent, while the proportion of tenured women increased by 13.4 percent.

Tenure status is also affected by the type of institution where a woman is employed, with discrepancies in the tenure status of men and women greater at public institutions and universities than at two-year colleges and private institutions (Etaugh, 1984). Among women accounting educators, one-third of those at four-year institutions responded that in comparison to an equally qualified man, it is more difficult for a woman to receive tenure (Norgaard, 1989).

Academic Rank

"Even though there is little in the higher education literature, professorial rank might be compared to differing organizational levels in other kinds of organizations" (Sprague, 1974, p. 19). The higher one's level in an organization is, the greater his or her satisfaction will be (Herzberg, Mausner, & Snydermann, 1959). This is not surprising,
given that a "number of other satisfaction-related job factors are implied by higher levels, such as responsibility, money, prestige, and more intrinsically rewarding work (Harrison 1979, p. 20).

In one study, full professors reported the highest level of job satisfaction and assistant professors the lowest (Winkler, 1982). In another, academic rank and job satisfaction were related in that higher-ranked faculty expressed greater job satisfaction. The level of satisfaction by rank on a scale of one to five was 4.36 for full professors, 4.08 for associate professors, 3.89 for assistant professors, and 3.83 for instructors (Steen, Giunipero, & Newgren, 1985). A study of industrial arts/technology faculty found significant differences in the mean scores for job satisfaction between full professors and assistant professors. But the instructors' mean score was higher than both the mean scores for assistant and associate professors (Wolfson, 1986). However, a study of faculty members in selected southern universities found that faculty members did not differ significantly in their perceptions regarding job satisfaction when they were compared by rank (Ibrahim, 1985).

Table 2 shows faculty by rank and by gender, and points out that as the academic rank increases from instructor to full professor, the percentage of women holding a particular rank steadily declines.

In the early 1970s, 9 percent of women educators held the rank of full professor (Carnegie Commission, 1973), and that percentage had increased only slightly by 1985, to 11.7 percent. This lends support to Findlestein's (1987) research that "women are promoted at a slower rate than their male colleagues" (p. 69). Thus, it is understandable
that a recent study found men faculty more satisfied with opportunities for promotion than women faculty (Logan, 1990).

Table 2

*Full-Time Instructional Faculty in Institutions of Higher Education (1985)*

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Professor</td>
<td>15,011</td>
<td>11.7</td>
<td>114,258</td>
<td>34</td>
<td>129,269</td>
</tr>
<tr>
<td>Associate</td>
<td>25,936</td>
<td>20.3</td>
<td>85,156</td>
<td>25.3</td>
<td>111,092</td>
</tr>
<tr>
<td>Assistant</td>
<td>39,845</td>
<td>31.1</td>
<td>71,463</td>
<td>21.3</td>
<td>111,308</td>
</tr>
<tr>
<td>Instructor</td>
<td>32,160</td>
<td>25.1</td>
<td>43,251</td>
<td>12.9</td>
<td>75,411</td>
</tr>
<tr>
<td>Lecturer</td>
<td>4,668</td>
<td>3.6</td>
<td>5,098</td>
<td>1.5</td>
<td>9,766</td>
</tr>
<tr>
<td>Other</td>
<td>10,443</td>
<td>8.2</td>
<td>16,783</td>
<td>5</td>
<td>27,226</td>
</tr>
<tr>
<td>Total</td>
<td>128,063</td>
<td>100</td>
<td>336,009</td>
<td>100</td>
<td>464,072</td>
</tr>
</tbody>
</table>


Today, except for the levels of instructor and lecturer, women remain underrepresented in the academic ranks. In 1991, when examining women as a percentage of the total faculty, only 5.1 percent are full professors, compared to 31 percent of men; 7.7 percent of women are associate professors, while 19.9 percent of men are at this rank; and 11.1 percent of women are assistant professors, compared to 15.8 percent for men (American Association of University, 1992). These figures can be compared to the last two columns of Table 2, women and men as a percentage of the total, to view the changes in rank occurring since 1985.

Table 3 presents accounting educators by rank and gender. When compared to the ranks for all disciplines, women in accounting have an even lower percentage at the
professor and associate professor ranks. This is true even though the data in Table 3 (1988) is more recent than the information in Table 2 (1985), and three years have lapsed for women to move upward. This is true when woman as a group are analyzed and when women as a percentage of total faculty are examined.

Table 3

*Full-time Accounting Faculty in Four-Year Institutions of Higher Education (1988)*

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Women</th>
<th>Men</th>
<th>Total</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Professor</td>
<td>68</td>
<td>7.3</td>
<td>1,036</td>
<td>30.7</td>
<td>1,104</td>
</tr>
<tr>
<td>Associate</td>
<td>154</td>
<td>16.5</td>
<td>957</td>
<td>28.3</td>
<td>1,111</td>
</tr>
<tr>
<td>Assistant</td>
<td>384</td>
<td>41.1</td>
<td>960</td>
<td>28.4</td>
<td>1,344</td>
</tr>
<tr>
<td>Instructor</td>
<td>200</td>
<td>21.4</td>
<td>205</td>
<td>6.1</td>
<td>405</td>
</tr>
<tr>
<td>Lecturer</td>
<td>113</td>
<td>12.1</td>
<td>168</td>
<td>5</td>
<td>281</td>
</tr>
<tr>
<td>Other</td>
<td>15</td>
<td>1.6</td>
<td>50</td>
<td>1.5</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>934</td>
<td>100</td>
<td>3,376</td>
<td>100</td>
<td>4,310</td>
</tr>
</tbody>
</table>


A possible explanation for so few women at higher ranks is that women in accounting are in a nontraditional discipline, which is dominated by men. Fifty-four percent of women accounting educators agreed that an "old boy" network exists in academic accounting which makes it difficult for women to be treated on a parity with men. In addition, 38 percent of women in the same study agreed that it is more difficult for a woman to receive an academic promotion when compared to an equally qualified man (Norgaard, 1989). Another study (Maupin, 1982) found that women certified public accountants (CPAs) in education were significantly less satisfied with their promotional
opportunities than women CPAs in business/industry, CPAs in local accounting firms, and CPAs in national and regional firms.

Another possible explanation for the low percentage of women at higher ranks is related to women's entry into accounting education, which did not occur in great numbers until the early 1980s. Norgaard (1989) reported a 67 percent increase in the number of women accounting educators between 1980 and 1988, and it will take time for them to progress through the academic ranks.

A study of female faculty in traditional and nontraditional disciplines in the late 1980s found that, regardless of discipline, female full professors felt the most satisfied with work, followed by associate professors, assistant professors, and instructors (Crawford, 1987). Furthermore, female full professors in the same study said they felt most secure in their positions, again followed by associate professors, assistant professors, and instructors. Female full professors identified more strongly with their institutions and would not leave them as readily as would associate and assistant professors (Crawford, 1987).

Supervision

The kind of supervision used in the organization has an effect upon employees' job satisfaction (Harrison, 1979). Studies have indicated that employees like supervisors who are considerate (Vroom, 1964) and employee-centered (Likert, 1961). Considerate supervisors exhibit "behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff" (Halpin, 1959, 4), while employee-centered supervisors stress the relationship aspects of their job. "They
feel that every employee is important and take interest in everyone, accepting their individuality and personal needs" (Hersey and Blanchard, 1988, p. 92). Employees value supervisors who are considerate of them as individuals, who show respect for them, who are honest, communicative, and allow some participation in making decisions (Locke, Fitzpatrick, & White, 1983).

In a study of the faculty of baccalaureate degree nursing programs, a relationship was found between job satisfaction and supervision. Hickman (1986) states:

*Faculty . . . expressed increased job satisfaction when they perceived positive socioemotional relations among faculty (e.g., intimacy), a minimum of formal, nomothetic behavior on the part of the dean / chairperson (e.g., aloofness), and humane treatment of the faculty by the dean / chairperson (e.g., consideration) (p. 104).*

Another study among faculty in higher education found that faculty members' length of time at an institution played a role in their satisfaction with supervision. Those who had been at the university 16 years or over were the most satisfied with supervision, while those who had been at the university 8 to 15 years were the least satisfied with supervision (Sprague, 1974).

**Interpersonal Relationships**

While interaction with a superior is critical to job satisfaction, interpersonal relationships with co-workers (subordinates or peers) also affect employees' job satisfaction (Harrison, 1979). According to Locke (1976), "The employee will be satisfied with agents in the situation (supervisors, subordinates, co-workers, management)
to the degree that they are seen as facilitating the attainment of his work goals and work
rewards, and to the degree that these agents are perceived as having important values in
common with him" (p. 1342).

While women are typically considered to be exceptionally good communicators, women faculty working in community colleges reported greater difficulty in communicating their ideas to superiors, felt that they were less influential in terms of the ultimate outcome of the superiors' decision, and said they were consulted less frequently than men faculty with whom they worked (Hollon & Gemmill, 1976). Moreover, women typically are not permitted access to male networks that "effectively exclude women from meaningful participation in the affairs of their institutions and rob them of a sense of belonging" (Hill, 1984, p. 180). Unfortunately, minority women are more likely than other women to be excluded from informal and formal activities within their departments and institutions -- sometimes by white women as well as by white and minority men (Nieves-Squires, 1991).

**Working Conditions**

Working conditions refer to the physical environment (including ventilation, lighting, tools, space and other similar environmental characteristics), the facilities of the institution, and the amount of work (Herzberg, 1966). Employees want convenience in terms of location and hours, resources that help them do their work effectively, and physical safety (Locke, Fitzpatrick, & White, 1983). Poor working conditions often lead to job dissatisfaction.
In a study conducted by Diener (1984), 25.6 percent of the faculty identified job conditions, including equipment, facilities, and teaching schedules, as one of the chief dissatisfactions of college teaching. An earlier study of job satisfaction found that faculty members were satisfied with their working conditions, including the number of classes or groups for which they were responsible, the number of hours they worked each week, their work schedule compared to that of people with similar training in other professions, their office facilities or work area, the adequacy of the instructional equipment they used, the number of course preparations required, and their work schedule compared to that of their co-workers (Seegmiller, 1977). Another study found that those with 11 or more years of service had higher mean scores on the working conditions scale of the Minnesota Satisfaction Questionnaire than those with 10 or fewer years of service (Grahn et al., 1981).

Female instructors at community colleges in one study reported that they had less influence over their working conditions than their male colleagues (Hollon & Gemmill, 1976). Another study of women faculty found that females representing traditional and nontraditional fields in 12 of Ohio's state-assisted institutions generally perceived their work environments as satisfactory (Crawford, 1987).

In terms of institutional setting, "women are generally more satisfied in institutions where the sexual composition reflects a 'less highly' male-dominated milieu" (Hill, 1984, p. 179). However, this increased satisfaction related only to the factors associated with the job setting. Another study found women in applied fields who had completed their highest degree within the previous 10 years were slightly more satisfied
with their departments and institutions, while women in pure fields were slightly less satisfied with their departments. However, in selective liberal arts colleges women in pure disciplines have atypically high departmental satisfaction, while women in applied disciplines report uncommonly low levels of institutional satisfaction. When looking at research and doctoral-degree granting institutions, women faculty have unusually low levels of institutional and departmental dissatisfaction (Ethington, Smart, & Zeltmann, 1989).

Not only do women in higher education have jobs at the lower ranks of the organizational hierarchy and make less money than their male colleagues, they frequently have greater work demands. "When there are but a few women on a faculty, excessive demands are made upon them; not only must each fulfill the usual academic requirements but she must serve as the token woman on all kinds of committees" (Graham, 1971, p. 733).

When the job satisfaction of African-American women with their working conditions is considered, the situation is not very positive. "The racist and sexist attitudes of colleagues can often result in less than satisfactory work conditions and increased stress in the life of the black professional" (Steward, 1987, p. 3).

Policies and administration

The characteristics of overall company policy and administration can affect job satisfaction. Hertzberg (1972) describes policy and administration as factors that can lead to job dissatisfaction. Faculty want to participate in institutional decision making and might leave an institution if such opportunities are limited. Consequently, "it seems
important that administrators find ways to provide opportunities for faculty to influence the policies of their institutions" (Near & Sorcinelli, 1986, p. 386).

Faculty are also conscious of the effectiveness of the leaders of their institutions. In one study, 35 percent of all professors cited "administration and administrators not competent" as the reason for leaving their jobs (Brown, 1967, p. 162.) A more recent study found that 29 percent of the faculty in Idaho's public two-year postsecondary vocational education institutions and 30 percent of the faculty in Idaho's public four-year postsecondary vocational education institutions cited administration as a dissatisfier or identified it as a factor contributing to their exceptionally bad feelings about their job (Hilton, 1985).

**Person-environment fit**

Organizations prefer to hire individuals who will best meet the requirements of the job, can adapt to training and changes in job demand, and will remain loyal and committed to the organization. Similarly, prospective employees seek out organizations where their particular abilities and skills closely match what is required in the workplace. This relationship or interaction is commonly known as person-environment fit, a theory "proposed as a method for understanding the process of adjustment between organizational members and their work environments" (Caplan, 1987b, p. 249). The academic environment at colleges and universities must undoubtedly represent a good match between the needs and abilities of the faculty and the corresponding resources of and demands of the collegiate work environment (Caplan, 1987a).
Job characteristics theory may be conceptualized as a model of the person-environment fit that focuses on matching the characteristics of the jobs to the abilities and needs of the jobholders. According to job characteristics theory, there are three basic psychological states that must be experienced by individuals if desirable outcomes are to emerge. First, persons must experience the work as meaningful. They must feel that the work they do is generally worthwhile, valuable, or important by some system of values they accept. Second, individuals must experience personal responsibility for work outcomes. They must feel personally accountable for the results of their work. Third, persons must have knowledge of the results of their work. That is, they must know and understand how effectively they are performing their jobs on a continuous basis. If any one of these three states is absent, motivation and job satisfaction will be weakened (Kulik, Oldham, & Hackman, 1987).

The theory of person-environment fit helps explain the extent to which workers are successful in their particular environment, thus enhancing their overall job satisfaction. Colleges and universities that provide an environment conducive to the fulfilling of faculty members' psychological needs, allowing them to use their talents as they see fit, are the institutions where faculty will be the most satisfied and the ones where they will want to continue working.

Collective bargaining

In institutions of higher education, collective bargaining arrangements have begun to replace the more traditional employee-employer relationship (Hill, 1982). Collective bargaining is now the mechanism for reaching agreement on policies regarding
curriculum, grades, admissions, course scheduling, standards for matriculation, teaching methods, faculty hiring, tenure, sabbatical leaves and decisions about promotion on many campuses (Douglas, 1991).

A study of the relationship between faculty job satisfaction and collective bargaining found that faculty in unionized institutions were significantly more satisfied with the economic, administrative, associational and convenience dimensions of job satisfaction than those in nonunionized institutions. However, there was no difference between the two groups with regard to the teaching and recognition-support dimensions of their jobs (Hill, 1982). The results of this study cannot be generalized to institutions of higher education throughout the United States because the study was based on a sample of 20 Pennsylvania institutions, which consisted of four-year state colleges only. Hill states, "... future research will have to address the situation in different types of institutions, in different parts of the country, and in colleges with various forms of collective bargaining arrangements. Certainly, different conditions and situations may well affect the climate of job satisfaction among faculty" (p. 178).

A study of faculty at the University of Oregon found that those respondents who indicated they were dissatisfied with various conditions of their employment were significantly more inclined to indicate support for a collective bargaining system than were those respondents who were satisfied. The conditions that faculty expressed dissatisfaction over included: current salary, current fringe benefits, the representation of faculty interests in the campus administration, the state board of higher education, the
state legislature, and the existing personnel decision-making system (Feuille & Blandin, 1974).

A survey of faculty members and librarians at New York University found similar results (Bornheimer, 1985). The study focused on the degree of satisfaction with six conditions -- academic freedom, conditions of employment, educational policy, faculty personnel policy, financial benefits, and participation in governance -- and on the respondents' support for unionization. The higher the faculty members' satisfaction with these conditions, the greater the probability that they voted against unionization; the less satisfaction, the greater the chance that they voted to support the NYU Federation of United Professionals, the union representing faculty.

Measurement of Job Satisfaction

Many instruments have been designed to measure job satisfaction. O'Connor, Peters, and Gordon (1980) reviewed five leading industrial-occupational journals and reported that between 1973 and 1975, eighty-two different instruments were used to produce 155 studies on job satisfaction; from 1976 to 1978, ninety-five instruments were used to measure job satisfaction. In addition, they found that almost half of the studies used an instrument that was not used in any other study. These personalized or nonreplicated measures were typically constructed or adapted for the particular investigation. While it is impossible to review all of the job satisfaction instruments, a few of those instruments used most frequently in research will be discussed.
Hoppock (1935) developed one of the earliest instruments, which consisted of a simple yet highly valid four-question instrument. A basic assumption underlying the design of Hoppock's instrument is that people will weigh and evaluate all the pro's and con's of a job internally and will arrive at an overall summation of their thought and feelings. Thus, a measurement instrument that focuses on the overall level of satisfaction, as opposed to satisfaction with each facet of the job, is seen as preferable by Hoppock.

Kunin (1955) developed what would today be called a "right brain" approach (Russell, 1979) to measuring satisfaction using a Faces scale. While working at General Motors, he devised a series of simple drawing of human faces, each one showing a slightly different expression ranging from a frown to a neutral face to a smile. Numerical codings were assigned to each, and validation studies were conducted. Dunham and Herman (1975) subsequently devised a female version of this Faces instrument, and concluded that it could successfully measure both women and men. Brief and Robinson (1989) evaluated three job satisfaction measurement instruments -- the Faces scale, the Minnesota Satisfaction Questionnaire, and the Job Descriptive Index -- to gain further understanding of the construct of job satisfaction as an "attitude." They concluded that job satisfaction includes both a cognitive component and two affective components (positive and negative affect), and that the Faces scale most effectively measures all three components.

The Minnesota Satisfaction Questionnaire (MSQ) was developed in conjunction with the Work Adjustment Project at the University of Minnesota by Dawis and Lofquist and their associates (Dawis & Lofquist, 1984; Lofquist & Dawis, 1969; Weiss et al.,
The MSQ is available in both a long form, which is the original instrument, and a short form. The long form consists of 100 items and is designed to measure an individual's satisfaction with 20 different aspects of the work environment. It is an example of a facet instrument in that scores are available for each of the 20 scales. In addition, a general satisfaction score can be calculated. The short form consists of only 20 items and can be scored on only three scales: intrinsic satisfaction, extrinsic satisfaction, and general satisfaction. O'Connor et al. (1980) found that between 1973 and 1978 the MSQ ranked second in popularity in the studies appearing in five industrial-organizational journals; however, it was used in only 5 percent of the applications.

Smith, Kendall, and Hulin (1975) devoted years to the development of the Job Descriptive Index (JDI), and the instrument is an outgrowth of the Cornell Studies of Satisfaction that occurred during the late fifties and early sixties at Cornell University. The JDI was developed after an extensive review of the literature, and a review of the factor analytic studies which had been performed on various job satisfaction inventories. The five factors which emerged most consistently were a general factor, a pay and material-rewards factor, a factor dealing with the work itself, a supervision factor, and a factor related to the other workers on the job. Based on this research, a measurement instrument emerged, the JDI, which is probably the clearest example of a job satisfaction facet measure. It is designed to define five separate components of job satisfaction. The components of the final version of the JDI consist of the following five scales: (1) Work,
(2) Pay, (3) Opportunities for promotion, (4) Supervision, and (5) Co-workers on the job. A separate score is calculated for each of the five scales.

As of 1976, Locke believed that the JDI was the most carefully designed job satisfaction measure available, which provides one explanation for its popularity. It is far the most frequently used measure of job satisfaction. O'Connor et al. (1980) found that between 1973 and 1978, the JDI was used in slightly more than one quarter of all studies. Yeager (1981) found that the JDI was used more than half the time, a figure which is at least five to six times as great as the next most commonly used instrument.

In evaluating the Job Descriptive Index, Schriesheim and Kinicki (1984) state, "All in all, these conclusions indicate that the JDI is a high-quality measuring instrument, and that there is no existing measure of job satisfaction with as much positive evidence concerning its validity and reliability" (p. 10).

Summary

This chapter presents a review of the literature relating to job satisfaction in general, and job satisfaction in higher education in particular. Definitions of job satisfaction are mentioned, and two theoretical perspectives on job satisfaction are discussed -- the individual approach and the structural approach. Specific individual influences and structural influences on job satisfaction dominating the literature are discussed. The individual influences include age, education, gender, family roles, and personality characteristics, while the structural influences consist of job characteristics, organizational characteristics, unionization, promotion opportunity, and the social context.
of the job. Major factors contributing to faculty members' job satisfaction or dissatisfaction are discussed, including salary, tenure, academic rank, supervision, interpersonal relationships, working conditions, policies and administration, person-environment fit, and collective bargaining. The chapter concludes by reviewing various measures of job satisfaction.
CHAPTER III

RESEARCH METHODOLOGY

Introduction

The purpose of the study, as indicated in Chapter 1, was to examine the job satisfaction of women accounting educators at four-year colleges and universities. A questionnaire was designed to determine levels of job satisfaction and other characteristics of female accounting educators.

This chapter discusses the development of the questionnaire along with the following topics: (1) the research questions leading to the hypotheses of the study, (2) the research design, (3) the selection of the population, (4) selection of the sample and the sampling method, (5) collection of the data, and (6) analysis of the data.

Research Questions

The study was directed by four major questions arising out of research on job satisfaction. These questions stated in a general sense are:

1. Is there a difference between levels of job satisfaction among women accounting educators at different types of four-year institutions of higher education?
2. Is there a difference between individual sources of job satisfaction among women accounting educators at different types of four-year institutions of higher education?
3. Is there a difference between structural sources of job satisfaction among women accounting educators at different types of four-year institutions of higher education?

4. Is there a relationship between levels of job satisfaction, individual sources of job satisfaction, and structural sources of job satisfaction among women accounting educators?

Hypotheses of the Study

In order to investigate the research questions posed above, null hypotheses were developed. Directional hypotheses were not used because job satisfaction among women accounting educators at various types of four-year institutions of higher education has not previously been investigated. The following null hypotheses were tested:

\( H_01 \): No difference exists between levels of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

\( H_02 \): No difference exists between the individual sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

\( H_03 \): No difference exists between the structural sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.
H₀₄: No relationship exists between the individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction.

Research Design

The research design employed in this study was a survey which represents a non-experimental design methodology. The study made use of a mailed questionnaire to collect data regarding the job satisfaction of women accounting educators. The mailed questionnaire was chosen for the following reasons. There were no geographic limitations; it was sent to women accounting educators across the United States. The greater coverage offered by the mailed questionnaire yields greater external validity. It is also free from interviewer bias. When compared to the interview, this method is relatively inexpensive and data can be collected in a shorter period of time. In addition, mailed questionnaires can offer greater reliability than personal or telephone interviews because respondents can take more time to think through their responses (Clover & Balsey, 1974).

However, there are some disadvantages associated with the mailed questionnaire, the major one being the problem of nonresponse. To cope with this problem, El-Badry (1956) suggested that successive waves of questionnaires be sent to survey participants in an effort to achieve a higher response rate. This procedure was followed in this study.

Three groups of variables or variable sets were used in the design of the study. The three variable sets included: (1) job satisfaction, (2) individual sources of job satisfaction, (3) and structural sources of job satisfaction.
Job satisfaction was measured by the Job Descriptive Index (Smith, Kendall, & Hulen, 1975). The Job Descriptive Index measures five separate components of job satisfaction -- work, pay, opportunities for promotion, supervision, and co-workers.

The variables related to individual sources of job satisfaction were: age, educational level, marital status, number of children, family roles, and personality characteristics.

The variable set relating to structural sources of job satisfaction included the following variables: salary, tenure, academic rank, working conditions, type of institution, job characteristics, and social context of the job.

The dependent and independent variables for each of the four hypotheses that were tested are summarized below:

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Dependent Variables</th>
<th>Independent Variable(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis One</td>
<td>Job satisfaction</td>
<td>Type of institution</td>
</tr>
<tr>
<td>Hypothesis Two</td>
<td>Individual variable set</td>
<td>Type of institution</td>
</tr>
<tr>
<td>Hypothesis Three</td>
<td>Structural variable set</td>
<td>Type of institution</td>
</tr>
<tr>
<td>Hypothesis Four</td>
<td>Job satisfaction</td>
<td>Individual &amp; structural variable sets</td>
</tr>
</tbody>
</table>

Selection of the Population

The population consisted of women accounting educators in all four-year institutions of higher education throughout the United States. The 1995 Accounting Faculty Directory, compiled by James Hasselback, was used to identify the individuals in the population. The Accounting Directory includes both male and female accounting
educators at all four-year institutions of higher education in the United States. Therefore, the first task was to identify those accounting educators who were female. The first name of the educator was used to determine gender. The following information was entered in a database for those accounting educators determined to be female: (1) first and last name, (2) academic rank, (3) institution name and address. The next task was to determine the type of institution for all female accounting educators included in the population. The Carnegie Classification was used to determine if the institutions were research, doctorate, master's, or baccalaureate institutions (A Classification of Institutions of Higher Education, 1994). The institution type was also entered in the database for the population. The database was then sorted by type of institution and academic rank.

Table 4 contains a summary on the population of women accounting educators, classified by rank and type of institution.

Table 4

Population of Women Accounting Educators Classified by Rank and Type of Institution

<table>
<thead>
<tr>
<th>Academic Rank</th>
<th>Research</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Professor</td>
<td>31</td>
<td>2.1</td>
<td>26</td>
<td>1.7</td>
<td>77</td>
<td>5.1</td>
<td>15</td>
</tr>
<tr>
<td>Associate</td>
<td>87</td>
<td>5.6</td>
<td>64</td>
<td>4.2</td>
<td>202</td>
<td>13.3</td>
<td>59</td>
</tr>
<tr>
<td>Assistant</td>
<td>154</td>
<td>10.1</td>
<td>107</td>
<td>7.1</td>
<td>302</td>
<td>19.9</td>
<td>80</td>
</tr>
<tr>
<td>Instructor</td>
<td>24</td>
<td>1.6</td>
<td>58</td>
<td>3.8</td>
<td>83</td>
<td>5.5</td>
<td>24</td>
</tr>
<tr>
<td>Lecturer</td>
<td>51</td>
<td>3.4</td>
<td>28</td>
<td>1.8</td>
<td>42</td>
<td>2.8</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>347</td>
<td>22.8</td>
<td>283</td>
<td>18.6</td>
<td>706</td>
<td>46.6</td>
<td>183</td>
</tr>
</tbody>
</table>
The information regarding rank and type of institution for the population of women accounting educators was used in selecting the sample, which is discussed in the following section.

Selection of the Sample

The first step involved in selection of the sample was to determine the sample size. Academic rank and type of institution were considered in calculation of sample size because adequate representation of all ranks and institutional types was desired. There were four types of institutions and five academic ranks; therefore, at least five groups would be used in analyzing data. Once the number of groups was determined (5), a statistical table was utilized to determine the appropriate sample size needed per group -- 96 (Hinkle, Wiersma, & Jurs, 1988). The number needed per group is based on an alpha level of .05, power of .80, and an effect size of .50, which were established a priori. The size per group of 96 assumes a 100% response rate, which was very unlikely; therefore, an assumption was made that the response rate would be 60%. Based on this assumption, sample size per group was calculated at 160. Because there were five groups, total sample size was calculated at 800 (160 x 5). However, there were not 160 women in two of the groups -- professor and lecturer. Therefore, the total sample size was determined to be 755 once an adjustment was made for the two groups who did not have 160 members.

After the sample size was calculated, a stratified random sample was drawn from the population. While this type of sampling procedure is more complicated and time consuming, there are several advantages. It yields a sample which has the same...
characteristics as the population, so the sample is more representative of the population. This sampling technique can also help in controlling for sampling error and the sample can be stratified based on factors relevant to the study. The primary factor relevant to this study, in relation to the selection of the sample, was the type of institution. The study was concerned with differences between the four types of institutions relating to job satisfaction among women accounting educators. A secondary factor relevant to sample selection was academic rank. An adequate representation of all ranks was desired so that the sample would be reflective of the population, and also to determine if there was a relationship between job satisfaction and rank.

The population database, which was sorted by type of institution and rank, was used to select the stratified random sample. All of the professors (149) and all of the lecturers (126) were included in the sample because their size was less than the 160 needed per group. A table of random numbers was used to select the remaining members of the sample. Table 5 is a summary of the sample selected.

Table 5

Sample of Women Accounting Educators Classified by Rank and Type of Institution

| Academic Rank | Research | | | | | | Doctoral | | | | Master's | | | | Baccalaureate | | | | Total | | |
|---------------|----------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Professor     | n        | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               | n               | %               |
| n = 31        | 149      | 19.7            | 31              | 4.1             | 26              | 3.4             | 77              | 10.2            | 15              | 2.0             |
| Associate     | n = 34   | 4.5             | 25              | 3.3             | 27              | 3.6             | 78              | 10.3            | 23              | 3.0             | 23              | 3.0             | 160             | 21.2            |
| Assistant     | n = 38   | 5.1             | 27              | 3.6             | 75              | 9.9             | 20              | 2.6             | 20              | 2.6             | 20              | 2.6             | 160             | 21.2            |
| Instructor    | n = 20   | 2.6             | 49              | 6.5             | 70              | 9.3             | 21              | 2.8             | 21              | 2.8             | 21              | 2.8             | 160             | 21.2            |
| Lecturer      | n = 51   | 6.8             | 28              | 3.7             | 42              | 5.6             | 5               | 0.7             | 5               | 0.7             | 5               | 0.7             | 126             | 16.7            |
| Total         | 174      | 23.1            | 155             | 20.5            | 342             | 45.3            | 84              | 11.1            | 126             | 16.7            | 755             | 100.0           |
The characteristics of the sample selected, shown in Table 5, can be compared to the population characteristics in Table 4, indicating that the sample is almost a mirror image of the population. Therefore, a representative sample was obtained.

Instrumentation

The design of the questionnaire was related to the theoretical framework of the study, discussed in Chapter I. It solicited information relating to job satisfaction, individual sources of job satisfaction, and structural sources of job satisfaction. The questionnaire is included in Appendix A (Measurement instruments for job satisfaction and personality characteristics are not included because of copyright laws). The following discussion covers the selection of items and the measurement instruments that were included in the questionnaire.

About You

This section of the questionnaire contained questions pertaining to the individual sources of job satisfaction. The demographic variables of age, educational level, marital status, and number of children were obtained through direct single questions.

The variable of family roles was examined from the aspect of the stress experienced from shifting from professional to family and/or personal roles. The measurement instrument consisted of seven questions developed by Kopelman, Greenhaus, and Connolly (1983), and it has a reliability estimate of .89. A 5-point Likert scale was used for each of the seven questions, with the response options ranging from strongly disagree to strongly agree. Scores for each response ranged from 1, for a
response of strongly disagree, to 5 for strongly agree. A score was obtained by totaling the points for the seven questions. The minimum score was 7 and the maximum score was 35. Lower scores indicate less stress, while higher scores indicate more stress in shifting from professional to family and/or personal roles. A sample item is "My work schedule often conflicts with my family life."

The remaining variable pertaining to individual sources of job satisfaction was personality characteristics. Because there was a large set of questions (60) relating to this variable, they were included in a separate section of the questionnaire and are discussed below.

**Personality Characteristics**

Recent research and meta-analyses (Barrick & Mount, 1991; Costa & McCrae, 1989; Costa & McCrae, 1992; Digman, 1990; Goldberg, 1993; Johnson & Saunders, 1990) have established that despite the hundreds of personality traits and attributes that have been identified over the past five decades, five core factors continually emerge as the primary personality factors that make-up the human psyche. Although these five factors appear under different labels, they can be basically described as:

1. Emotional stability, self-esteem, adjustment, or neuroticism
2. Extraversion or social ascendancy
3. Openness to ideas and experience
4. Agreeableness or likeability
5. Dependability or conscientiousness
When reviewing the substantial volume of research on personality and job performance published over the last fifty years, Hogan and Hogan (1990) reached the following conclusion:

Because personality is multidimensional, it is never proper to define it in terms of a single measure such as self-esteem or anxiety or locus of control or Machiavellianism; personality, if appropriately defined, will be determined at the very least in terms of the five broad dimensions (p. 28).

The Neo Five-Factor Personality Inventory (Costa & McCrae, 1992) was chosen to measure personality characteristics for the reasons cited above. It is a multifaceted personality instrument that measures the following five domains of personality: (1) neuroticism, (2) extraversion, (3) openness, (4) agreeableness, and (5) conscientiousness. There are 60 statements on the instrument, with 12 statements relating to each of the five domains of personality. The responses for each statement range from strongly disagree to strongly agree. The reliability estimates for each scale are: neuroticism -- .86; extraversion -- .77; openness -- .73; agreeableness -- .68; and conscientiousness -- .81 (Costa & McCrae, 1992).

The personality inventory was scored by totaling the responses to the questions relating to each of the five personality domains. A raw score was obtained for each of the personality domains, and it was then converted to a T score. Table 6 provides descriptions for each personality domain measured based on the different ranges of T scores.
Table 6

Scoring of Personality Inventory

<table>
<thead>
<tr>
<th>Personality Domain</th>
<th>High T score: 56 - 74</th>
<th>Average T Score: 45 - 55</th>
<th>Low T score: 26 - 44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>Sensitive, emotional,</td>
<td>Generally calm and able</td>
<td>Secure, hardy, and</td>
</tr>
<tr>
<td></td>
<td>and prone to experience</td>
<td>to deal with stress, but</td>
<td>generally relaxed even</td>
</tr>
<tr>
<td></td>
<td>feelings that are</td>
<td>you sometimes</td>
<td>under stressful</td>
</tr>
<tr>
<td></td>
<td>upsetting.</td>
<td>experience feelings of</td>
<td>conditions.</td>
</tr>
<tr>
<td>Extraversion</td>
<td>Extraverted, outgoing,</td>
<td>Moderate in activity and</td>
<td>Introverted, reserved,</td>
</tr>
<tr>
<td></td>
<td>active, and high-spirited.</td>
<td>enthusiasm. You enjoy</td>
<td>and serious. You prefer</td>
</tr>
<tr>
<td></td>
<td>You prefer to be around</td>
<td>the company of others</td>
<td>to be alone or with a</td>
</tr>
<tr>
<td></td>
<td>people most of the time.</td>
<td>but you also value</td>
<td>few close friends.</td>
</tr>
<tr>
<td>Openness</td>
<td>Open to new experiences. You have broad interests and are very imaginative.</td>
<td>Practical but willing to consider new ways of doing things. You seek a balance between the old and the new.</td>
<td>Down-to-earth, practical, traditional, and pretty much set in your ways.</td>
</tr>
<tr>
<td>Agreableness</td>
<td>Compassionate, good-natured, and eager to cooperate and avoid conflict.</td>
<td>Generally warm, trusting, and agreeable, but you can sometimes be stubborn and competitive.</td>
<td>Hardheaded, skeptical, proud, and competitive. You tend to express your anger directly.</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>Conscientious and well-organized. You have high standards and always strive to achieve your goals.</td>
<td>Dependable and moderately well-organized. You generally have clear goals but are able to set your work aside.</td>
<td>Easygoing, not very well-organized, and sometimes careless. You prefer not to make plans.</td>
</tr>
</tbody>
</table>

(Costa & McCrae, 1992)

About Your Job

This section of the questionnaire contained questions relating to the structural sources of job satisfaction. The variables of salary, tenure, academic rank, job characteristics, and type of institution were addressed with single direct questions.

The variable of working conditions relates to the availability of resources at the institution where the participant is employed. Six statements, developed by McGee and
Ford (1987), assess availability of resources. The reliability estimate for this measurement instrument is .68. A sample statement is "To what extent is computer support available at your institution?" A 5-point Likert scale, with response options ranging from far below average (assigned a score of 1) to far above average (assigned a score of 5) is used for each statement. The scores for the six statements are added to yield a total score for institutional resources. The minimum score is 6, and the maximum score is 30. The minimum score of 6 indicates that institutional resources are far below average, while the maximum score of 30 denotes institutional resources are far above average.

The remaining variable relating to the structure of the job deals with the social context of the job. Two areas relating to social context are investigated -- mentoring and networking.

Four questions on mentoring are included on the questionnaire. They are based on the research of Colarelli and Bishop (1990) and Peluchette (1993). An example of an item is "To what extent has having a mentor enhanced your career success?" A 5-point Likert scale is used for each of the four questions. The responses range from not at all, which is assigned a score of 1, to very much, which is assigned a score of 5. A minimum score of 4 indicates that mentors have not influenced career success, while a maximum score of 20 notes mentors have very much influenced career success.

Three questions on networking are included on the questionnaire, and they are based on Peluchette's (1993) research. The questions deal with the extent to which respondents perceive themselves as part of "buddy systems." An example of a question
on networking is, "To what extent do you rely on your network(s) for your career advancement?" A 5-point Likert scale is used, with responses ranging from not at all (a score of 1) to very much (a score of 5). This measure focuses on the extent to which individuals perceived themselves as belonging to, keeping in touch with, and relying on networks for career advancement. A minimum score of 3 denotes networks have not affected career advancement. A maximum score of 15 indicates networking has had a great impact on career advancement.

**Job Satisfaction**

The variable of job satisfaction was measured using the Job Descriptive Index (JDI, Smith, Kendall, & Hulin, 1975). Five facets or scales of job satisfaction are measured -- (1) work, (2) pay, (3) opportunities for promotion, (4) supervision, and (5) co-workers. The instrument consists of a total of 72 items. There are 18 items in each of the following scales -- work, supervision, and co-workers, while the pay and promotion scales have 9 items each. Respondents are asked to put a "Y" (yes) beside an item if it describes a particular aspect of their job, a "N" (no) if the item does not describe that aspect, or a "?" if they cannot decide. About half of the items are worded favorable, so that a "Y" response indicates satisfaction. For these items, a "Y" receives 3 points, "N" receives 0 points, and a "?" receives 1 point. The remaining items are worded unfavorably, meaning that a "Y" response indicates dissatisfaction. These unfavorable items are reverse-scored with a "N" receiving 3 points, a "Y" receiving 0 points, and a "?" receiving 1 point. A score is computed for each of the five JDI facet scales separately. The score for each facet is computed by summing the points obtained from the
individual's responses to the items in each scale. The scores obtained on the Pay and Promotion are then doubled because they include only half as many items as the other three scales. Thus, the possible range of scores on each of the JDI facet scales is from 0 to 54. Higher scores indicate greater satisfaction, while lower scores indicate dissatisfaction (Blazer & Smith, 1990).

Smith, Kendall, and Hulin (1975) reported on four separate studies which evaluated the soundness and validity of the JDI using very different samples. The same general design was used in three of the studies, and each provided information about the relative validity of somewhat different sets of measures, both from different forms of the JDI and from different direct ratings. In each study, validity was assessed by a modification of the Campbell-Fiske model for establishing convergent and discriminant validity using cluster analysis or principal component analysis. The results of the studies indicated that the JDI measures possessed very good discriminant and convergent validity.

The following is a sample of the voluminous correlational data compiled by Smith, Kendall, & Hulin.

<table>
<thead>
<tr>
<th></th>
<th>Work</th>
<th>Supervision</th>
<th>People</th>
<th>Pay</th>
<th>Promotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median item intercorrelation</td>
<td>.25</td>
<td>.29</td>
<td>.45</td>
<td>.29</td>
<td>.30</td>
</tr>
<tr>
<td>Median item validity</td>
<td>.44</td>
<td>.40</td>
<td>.52</td>
<td>.50</td>
<td>.35</td>
</tr>
<tr>
<td>Split half correlation (uncorrected)</td>
<td>.73</td>
<td>.67</td>
<td>.75</td>
<td>.77</td>
<td>.78</td>
</tr>
<tr>
<td>Correlation with alternative method</td>
<td>.75</td>
<td>.72</td>
<td>.64</td>
<td>.78</td>
<td>.57</td>
</tr>
</tbody>
</table>
Several other studies have been conducted that substantiate the discriminant and convergent validity of the JDI (Evans, 1969; Gillet & Schwab, 1975; Smith, Smith & Rollo, 1974). Golembieski and Yeager (1978) used a large sample consisting of 2,671 employees in five distinct demographic groups to test the JDI. Their results indicated substantial congruence between the five pairs of factorial structures. The lowest percentage of variance explained was 91 percent, while the average was 95 percent.

However, the JDI has not obtained extraordinarily high internal consistency coefficients. Smith, Kendall, and Hulin (1975) reported on the internal consistency of two studies. In Study A, using 168 Cornell students as subjects, they reported an average corrected reliability coefficient of .79 on the five scales for split-half estimates of internal consistency. In Study B, 80 male employees from two electronic plants were the subjects, and higher internal consistency reliabilities were reported. The estimated split-half internal consistencies for all of the scales was more than .80; for each individual scale, it was .84 for work, .80 for pay, .86 for promotion, .87 for supervision, and .88 for co-workers.

In test-retest procedures for reliability, the reliability coefficients were low to moderate (.45 to .75). These figures are based on a study conducted by Smith, Kendall, and Hulin (1975) on 45 employees in a farmers' cooperative that had undergone major changes during a three year period. This caused the researchers to conclude that the JDI measures elements of satisfaction affected by the situation rather than those which remain stable over time.
One problem associated with the JDI is that the five scales or factors do not appear to be statistically independent. The intercorrelations of the JDI scales are quite high, ranging from .28 to .42 for males and from .16 to .52 for females. However, the authors did not feel that this was a problem because the JDI scales measure discriminately different areas. Because of the nature of jobs, different areas of a job affect the individual's feelings about other parts of the job (Smith, Kendall, & Hulin, 1975).

In spite of this criticism, the JDI remains the most frequently used measurement instrument for job satisfaction. It is also highly regarded. Kerr (1984) states, "In many ways the Job Descriptive Index is an exemplary instrument, the development of which was marked by cautiousness and psychometric rigor" (p. 754). Vroom (1964) notes, "... the Job Descriptive Index, is without a doubt the most carefully constructed measure of job satisfaction in existence today" (p. 35).

Procedures for Collection of Data

Before data were collected, approval was obtained for the investigation involving the use of human subjects by the University of North Texas. El-Badry (1956) suggested that successive waves of questionnaires be sent to survey participants in an effort to achieve a higher response rate. Three waves or mailings were employed in this study. The waves occurred in 2-week intervals.

The first wave was the initial mailing, which occurred on September 16, 1995. A packet consisting of a cover letter (Appendix B), the questionnaire (Appendix A), and a postage-paid return envelope was mailed to 755 women accounting educators included in
the sample. This date was chosen in an effort to also increase the response rate. It was the beginning of the fall semester, so hopefully the questionnaires would be completed before workloads become burdensome as the semester progressed.

On October 3, 1995, 422 postcards (Appendix C) were mailed to those who had not yet responded to the initial mailing. The postcards were brief, reminding subjects that they had received a questionnaire and asking them to respond.

The final mailing was made to 379 non-respondents on October 16, 1995, two weeks after the postcards were mailed. It consisted of a new cover letter (Appendix D), the questionnaire, and a postage-paid return envelope.

A total of 495 questionnaires were returned, yielding a 66% return rate. However, 30 of the questionnaires were not useable due to the following reasons: 12 were returned by men who were inadvertently included in the sample because their first names could be either male or female (e.g., Dana); 9 were returned to the sender; 4 returned their questionnaires because they no longer teach accounting; 4 questionnaires were returned because they did not want to participate in the study; and 1 was returned by the institution because the individual was on leave of absence. Therefore, there were 465 useable questionnaires, which represents a 62% response rate.

Respondents were given the opportunity to indicate if they wanted to receive a one-page summary of their personality dimensions based on the Personality Inventory completed on their questionnaires. Four hundred fourteen (414) respondents specified they would like to receive a summary of their personality dimensions. A personalized
letter (Appendix E) and a personality inventory summary (Appendix F) were mailed to those individuals on November 27, 1995.

Scores were calculated by the author for the following measurement instruments included on the questionnaire:

1. Professional and Personal Roles
2. Institutional Resources
3. Social Contacts -- Mentoring
4. Social Contacts -- Networking
5. Personality Inventory
6. Job Descriptive Index (JDI) measuring job satisfaction

Information on single-item questions and scores from the measurement instruments noted above were then entered into a DOS-based computer system so that statistical data analysis could be performed.

Data Analysis

The analyses of data were performed using the Statistical Package for the Social Sciences (SPSS). Data were analyzed for descriptive purposes and for inferential purposes. Demographic data were analyzed in terms of frequency and percent to give a portrait of women accounting educators. Data distributions were also prepared for the measurement instruments included on the questionnaire.

Hypotheses One, Two, and Three were tested with multivariate analysis of variance (MANOVA). This statistical procedure was used because there were several
dependent variables. The relevant statistic for determining the rejection of the hypotheses was Wilks' lambda, which is analogous to the F-test statistic in ANOVA. An alpha level of .05 was used to determine if the null hypotheses were rejected. If the null hypothesis was rejected, then a one-way analysis of variance was performed for each dependent variable to determine which dependent variable(s) contributed to the overall significance between the groups. The Least-Significant Differences (LSD) test, a post-hoc multiple comparison test, was then performed to determine which groups (institutions) differed significantly.

Hypothesis Four was tested by multivariate regression analysis, which describes the relationship between a dependent variable and a collection of independent variables.

Summary

A non-experimental design methodology, a survey, was used in this study. The population consisted of women accounting educators at four-year colleges and universities in the United States. A stratified random sample was taken from this population, and mailed questionnaires were sent to 755 women accounting educators to collect data regarding job satisfaction. To increase the response rate, the mailings took place in three waves. A total of 495 questionnaires were returned (66% response rate); however, 30 of the questionnaires were not useable. Therefore, 465 questionnaires (62% response rate) were used to analyze the data. The research design consisted of four hypotheses. Three hypotheses were tested using multivariate and one-way analysis of
variance, and the remaining hypothesis was tested using multivariate regression analysis.

The level of significance was set at \( \alpha = .05 \).
CHAPTER IV

RESULTS OF DATA ANALYSIS

Introduction

The intent of this study was to investigate job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities. A mailed questionnaire was used to collect data from a sample of 755 women accounting educators in the United States. A total of 495 questionnaires were returned; however, 30 were not usable. Therefore, 465 questionnaires were used in the data analysis.

This chapter reports the data and the results of statistical analyses conducted to test the hypotheses of the study. The results are presented under four main sections:

1. Demographic characteristics of the respondents;
2. Description of data distributions;
3. Empirical testing of the hypotheses of the study; and
4. Summary of major data findings.

Demographic Characteristics of the Respondents

In an effort to accurately depict women accounting educators working at four-year colleges and universities, several questions were asked relating to demographics. The characteristics of the respondents are summarized in Table 7. Also, included in the table
is information on the type of institution, which was determined during the sample selection process using the Carnegie Classification of Higher Education (*A Classification of Institutions of Higher Education*, 1994).

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian, Asian American</td>
<td>9</td>
<td>1.9</td>
</tr>
<tr>
<td>African American</td>
<td>18</td>
<td>3.9</td>
</tr>
<tr>
<td>Latino, Hispanic, Mexican American</td>
<td>6</td>
<td>1.3</td>
</tr>
<tr>
<td>White, Caucasian</td>
<td>428</td>
<td>92.2</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Education -- Highest Degree</strong></td>
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<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>207</td>
<td>44.5</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>228</td>
<td>49.1</td>
</tr>
<tr>
<td>All but Dissertation</td>
<td>22</td>
<td>4.7</td>
</tr>
<tr>
<td>Other</td>
<td>7</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 29</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>30 - 39</td>
<td>86</td>
<td>25.1</td>
</tr>
<tr>
<td>40 - 49</td>
<td>168</td>
<td>49.1</td>
</tr>
<tr>
<td>50 - 59</td>
<td>63</td>
<td>18.5</td>
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<td>60 - 69</td>
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<tr>
<td>70 - 73</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Demographic Characteristic</td>
<td>n</td>
<td>Percent</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
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<td></td>
</tr>
<tr>
<td>Single</td>
<td>42</td>
<td>9.4</td>
</tr>
<tr>
<td>Married</td>
<td>319</td>
<td>72.1</td>
</tr>
<tr>
<td>Divorced or Separated</td>
<td>64</td>
<td>14.4</td>
</tr>
<tr>
<td>Widowed</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>Total Number of Children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>124</td>
<td>26.7</td>
</tr>
<tr>
<td>One</td>
<td>82</td>
<td>17.6</td>
</tr>
<tr>
<td>Two</td>
<td>187</td>
<td>40.2</td>
</tr>
<tr>
<td>Three</td>
<td>53</td>
<td>11.4</td>
</tr>
<tr>
<td>Four</td>
<td>14</td>
<td>3.1</td>
</tr>
<tr>
<td>Five</td>
<td>3</td>
<td>0.6</td>
</tr>
<tr>
<td>Six</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>Academic Rank</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>90</td>
<td>19.4</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>117</td>
<td>25.2</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>108</td>
<td>23.2</td>
</tr>
<tr>
<td>Instructor</td>
<td>84</td>
<td>18.1</td>
</tr>
<tr>
<td>Lecturer</td>
<td>57</td>
<td>12.3</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>Tenure Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully tenured</td>
<td>206</td>
<td>44.5</td>
</tr>
<tr>
<td>Non-tenure, tenure track position</td>
<td>105</td>
<td>22.7</td>
</tr>
<tr>
<td>Non-tenure track position</td>
<td>144</td>
<td>31.1</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>1.7</td>
</tr>
</tbody>
</table>
Table 8

Distribution of Key Demographic Variables by Type of Institution

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Research</th>
<th>Doctorate</th>
<th>Master's</th>
<th>Baccalaureate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Education -- Highest Degree*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>38</td>
<td>8.3</td>
<td>40</td>
<td>8.7</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>62</td>
<td>13.5</td>
<td>48</td>
<td>10.5</td>
</tr>
<tr>
<td>All but Dissertation</td>
<td>2</td>
<td>0.4</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.4</td>
<td>1</td>
<td>0.2</td>
</tr>
</tbody>
</table>

The study was concerned with differences among women accounting educators at four-year colleges and universities. Therefore, selected demographic variables have been stratified by type of institution (research, doctorate, master's, and baccalaureate) and are presented in Table 8.
<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Research</th>
<th>Doctorate</th>
<th>Master's</th>
<th>Baccalaureate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>9</td>
<td>2.1</td>
<td>11</td>
<td>2.5</td>
</tr>
<tr>
<td>Married</td>
<td>72</td>
<td>16.5</td>
<td>55</td>
<td>12.6</td>
</tr>
<tr>
<td>Divorced or Separated</td>
<td>17</td>
<td>3.9</td>
<td>14</td>
<td>3.2</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>0.5</td>
<td>2</td>
<td>0.5</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Academic Rank**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professor</td>
<td>18</td>
<td>3.9</td>
<td>19</td>
<td>4.1</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>19</td>
<td>4.1</td>
<td>19</td>
<td>4.1</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>24</td>
<td>5.2</td>
<td>17</td>
<td>3.7</td>
</tr>
<tr>
<td>Instructor</td>
<td>14</td>
<td>3.1</td>
<td>22</td>
<td>4.8</td>
</tr>
<tr>
<td>Lecturer</td>
<td>26</td>
<td>5.7</td>
<td>9</td>
<td>2.0</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>0.7</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>Tenure Status*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fully tenured</td>
<td>36</td>
<td>7.9</td>
<td>39</td>
<td>8.6</td>
</tr>
<tr>
<td>Non-tenure, tenure track position</td>
<td>22</td>
<td>4.8</td>
<td>19</td>
<td>4.2</td>
</tr>
<tr>
<td>Non-tenure track position</td>
<td>46</td>
<td>10.1</td>
<td>31</td>
<td>6.8</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Salary, excluding summer school &amp; overloads**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than $30,000</td>
<td>8</td>
<td>1.8</td>
<td>9</td>
<td>2.0</td>
</tr>
<tr>
<td>Between $30,000 and $39,999</td>
<td>21</td>
<td>4.6</td>
<td>22</td>
<td>4.9</td>
</tr>
<tr>
<td>Between $40,000 and $49,999</td>
<td>13</td>
<td>2.9</td>
<td>10</td>
<td>2.2</td>
</tr>
<tr>
<td>Between $50,000 and $59,999</td>
<td>6</td>
<td>1.3</td>
<td>12</td>
<td>2.7</td>
</tr>
<tr>
<td>Between $60,000 and $69,999</td>
<td>17</td>
<td>3.8</td>
<td>11</td>
<td>2.4</td>
</tr>
<tr>
<td>$70,000 or more</td>
<td>38</td>
<td>8.4</td>
<td>25</td>
<td>5.5</td>
</tr>
</tbody>
</table>

* Chi square significant at < .05
** Chi square significant at < .001
A Chi square test of independence was calculated to determine if the selected demographic variables shown in Table 8 were related to the type of institution. Four of the variables were statistically significant: academic rank (chi square = 39.58, df = 15, \( p = .0005 \)); salary (chi square = 71.12, df = 15, \( p = .0005 \)); tenure (chi square = 19.91, df = 9, \( p = .0185 \)); and education (chi square = 24.275, df = 12, \( p = .0187 \)).

Description of Data Distributions

Several of the variables in the study were continuous measures. One was a single question relating to job characteristics and six were measurement instruments which consisted of multiple questions. This section describes the data distributions for each of those variables.

Job Characteristics

One question was asked which related to the variable of job characteristics. Respondents were asked what estimated percent of time was spent on job functions distinguishing the professoriate. These functions included: research, teaching, service, advising students, and other activities. The descriptive statistics for these functions are summarized in Table 9.

Women accounting educators spend over half of their time (57.2%) on teaching related activities. Time spent on research consumed the second greatest portion of their time, followed closely by service activities. They spent slightly less than 10% of their time advising students. The job function taking the least amount of time was other, and the activity most frequently specified as other was administrative tasks.
Table 9

*Descriptive Statistics for Job Functions*

<table>
<thead>
<tr>
<th>Job Function</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>14.2</td>
<td>10</td>
<td>0</td>
<td>80</td>
<td>16.4</td>
</tr>
<tr>
<td>Teaching</td>
<td>57.2</td>
<td>60</td>
<td>50</td>
<td>100</td>
<td>21.8</td>
</tr>
<tr>
<td>Service</td>
<td>11.2</td>
<td>10</td>
<td>10</td>
<td>50</td>
<td>9.1</td>
</tr>
<tr>
<td>Advising Students</td>
<td>9.3</td>
<td>10</td>
<td>10</td>
<td>80</td>
<td>8.9</td>
</tr>
<tr>
<td>Other</td>
<td>8.1</td>
<td>0</td>
<td>0</td>
<td>90</td>
<td>16.7</td>
</tr>
</tbody>
</table>

*Job Descriptive Index (JDI)*

The Job Descriptive Index, developed by Smith, Kendall, and Hulin (1975), measures five separate components of job satisfaction. Table 10 summarizes descriptive data for each of those components. The minimum score for each scale was 0, while the maximum score was 54. The following range of scores indicates level of satisfaction:

<table>
<thead>
<tr>
<th>Range of Scores</th>
<th>Level of Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>32 to 54</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>23 to 31</td>
<td>Neutral -- persons feel neither good or bad about particular aspects of the job</td>
</tr>
<tr>
<td>0 to 22</td>
<td>Dissatisfaction</td>
</tr>
</tbody>
</table>

Table 10

*Descriptive Statistics for the Job Descriptive Index (JDI)*

<table>
<thead>
<tr>
<th>JDI Scale</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Workers</td>
<td>39.2</td>
<td>42</td>
<td>48</td>
<td>54</td>
<td>11.7</td>
</tr>
<tr>
<td>Pay</td>
<td>29.5</td>
<td>30</td>
<td>30</td>
<td>54</td>
<td>14.5</td>
</tr>
<tr>
<td>Promotions</td>
<td>21.3</td>
<td>18</td>
<td>0</td>
<td>54</td>
<td>17.1</td>
</tr>
<tr>
<td>Supervision</td>
<td>39.1</td>
<td>43</td>
<td>54</td>
<td>54</td>
<td>13.5</td>
</tr>
<tr>
<td>Work</td>
<td>38.3</td>
<td>40</td>
<td>42</td>
<td>54</td>
<td>8.3</td>
</tr>
</tbody>
</table>
Comparing the scoring guidelines to both mean and median scores in Table 9 reveals that women accounting educators are dissatisfied with opportunities for promotions, while they are neutral on the pay scale. Satisfaction is indicated for the scales of co-workers, supervision, and work.

The scores for women accounting educators can also be compared to the norms for the Job Descriptive Index shown in Table 11.

Table 11

<table>
<thead>
<tr>
<th>JDI Scale</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Workers</td>
<td>43.5</td>
<td>45</td>
<td>10.1</td>
</tr>
<tr>
<td>Pay</td>
<td>29.9</td>
<td>34</td>
<td>14.5</td>
</tr>
<tr>
<td>Promotions</td>
<td>22.1</td>
<td>18</td>
<td>15.8</td>
</tr>
<tr>
<td>Supervision</td>
<td>41.1</td>
<td>42</td>
<td>10.6</td>
</tr>
<tr>
<td>Work</td>
<td>36.6</td>
<td>40</td>
<td>10.5</td>
</tr>
</tbody>
</table>

(Source: Smith, Kendall, & Hulin, 1975)

The creators of the JDI caution that when comparing the norms to the sample data, the median score be used because the distribution of JDI scores may make the mean scale score a biased index of employee satisfaction. Therefore, comparing the median scale scores for women accounting educators to norms, we find that they scored the same on the promotion and work scales. They were slightly above the norm on the supervision scale, while they were below the norm on the co-workers and pay scales.

Personality Characteristics

Personality characteristics were measured by the NEO Five-Factor Inventory developed by Costa and McCrae (1992). Five personality domains were measured:
neuroticism, extraversion, openness, agreeableness, and conscientiousness. The descriptive statistics for personality characteristics are summarized in Table 12.

Table 12

Descriptive Statistics for Personality Characteristics

<table>
<thead>
<tr>
<th>Personality Domain</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>46.8</td>
<td>45</td>
<td>48</td>
<td>48</td>
<td>10.5</td>
</tr>
<tr>
<td>Extraversion</td>
<td>54.4</td>
<td>55</td>
<td>57</td>
<td>48</td>
<td>10.9</td>
</tr>
<tr>
<td>Openness</td>
<td>52.9</td>
<td>53</td>
<td>53</td>
<td>48</td>
<td>11.3</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>50.9</td>
<td>51</td>
<td>51</td>
<td>48</td>
<td>11.2</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>51.1</td>
<td>52</td>
<td>52</td>
<td>46</td>
<td>10.6</td>
</tr>
</tbody>
</table>

The scoring for the Personality Inventory, along with descriptions for each personality domain based on score, was described in Chapter III (Table 6). Score were grouped into three categories: (1) Low: 26 to 44; (2) Average: 45 to 55; and (3) High: 56 to 74. Both the mean and median scores for each of the five personality domains fall in the average range.

However, more information is provided when respondents' scores are stratified on the three scoring categories of low, average, and high. A frequency distribution of personality scores based on the three scoring categories is provided in Table 13.

Almost half (48.1%) of the women scored low on the neuroticism scale, signifying they are secure, hardy, and generally relaxed even under stressful conditions. Again approximately half (48.2%), of the respondents scores appeared on a scale; however, it was on the high end of the extraversion scale. This indicates many of the
women accounting educators are outgoing, active, and high-spirited, and prefer to be around people most of the time. On the openness scale, 40.5% had high scores. This denotes they are open to new experiences, have broad interests, and are imaginative.

There was not a consensus on the agreeableness scale, the score were pretty evenly split among the three scoring categories. Therefore, no generalizations about women accounting educators are made for that scale. On the conscientiousness scale, 40.7% scored in the average range. This suggests women in accounting education are dependable, moderately well-organized, and generally have clear goals but are able to set their work aside.

Table 13

Frequency Distribution for Personality Scores

<table>
<thead>
<tr>
<th>Personality Domain</th>
<th>High Score</th>
<th>Average Score</th>
<th>Low Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Percent</td>
<td>n</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>95</td>
<td>20.8</td>
<td>141</td>
</tr>
<tr>
<td>Extraversion</td>
<td>219</td>
<td>48.2</td>
<td>160</td>
</tr>
<tr>
<td>Openness</td>
<td>184</td>
<td>40.5</td>
<td>169</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>158</td>
<td>34.8</td>
<td>160</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>156</td>
<td>34.4</td>
<td>185</td>
</tr>
</tbody>
</table>

Personal and Professional Roles

The measurement instrument on personal and professional roles relates to the variable of family roles. The instrument was developed by Kopelman, Greenhaus, and Connolly (1983), and it was designed to examine the stress experienced in shifting from professional to family roles. There were seven questions. The minimum score was 7.
while the maximum score was 35. Table 14 contains the descriptive statistics for this measurement instrument. The median and the mode are identical, and the mean is only .4 lower than both of those. The scores indicate that respondents are neutral in relation to the stress experienced when shifting from professional to personal roles.

Table 14

Descriptive Statistics for Personal and Professional Roles

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal &amp; Professional Roles</td>
<td>21.6</td>
<td>22</td>
<td>22</td>
<td>28</td>
<td>6.4</td>
</tr>
</tbody>
</table>

Institutional Resources

Institutional resources are related to the variable of working conditions. Six questions dealt with the availability of resources at the institution where the respondents were employed. The minimum score was 6, and the maximum score was 30. The descriptive statistics for institutional resources are presented in Table 15. The mean score indicates respondents felt institutional resources were average at their institution.

Table 15

Descriptive Statistics for Institutional Resources

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional</td>
<td>16.8</td>
<td>17</td>
<td>16</td>
<td>24</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Social Context of the Job

Two variables relating to the social context of the job were included on the questionnaire -- mentoring and networking. There were four questions on mentoring and three questions relating to networking. On the mentoring scale the minimum score was 4 and the maximum score was 20. The minimum score on the networking scale was 3, while the maximum score was 15. Table 16 summarizes the descriptive statistics for the scales of mentoring and networking. The mean scores for mentoring and networking indicate that both areas had somewhat enhanced career growth.

Table 16

Descriptive Statistics for Mentoring and Networking

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentoring</td>
<td>10.4</td>
<td>11</td>
<td>4</td>
<td>16</td>
<td>4.2</td>
</tr>
<tr>
<td>Networking</td>
<td>8.4</td>
<td>8</td>
<td>8</td>
<td>12</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Empirical Testing of the Hypotheses

Four hypotheses were developed to explore research questions arising out of an examination of the literature on job satisfaction. The statistical testing of these hypotheses is reported in this section. The null hypotheses were tested using the Statistical Package for the Social Sciences (SPSS). An alpha level of .05 was used to determine if the null hypotheses were rejected.

The statistical tests used to analyze hypotheses one, two, and three were multivariate analysis of variance (MANOVA) and univariate or one-way analysis of
variance (ANOVA). The independent variable for all three of these hypotheses was the
type of institution, which was divided into four categories (research, doctoral, master's,
and baccalaureate). The dependent variables for hypothesis one, two, and three
respectively were levels of job satisfaction, individual sources of job satisfaction, and
structural sources of job satisfaction.

Hypothesis Four was tested by multivariate regression analysis. This statistical
tests was use to study the relations among variables. The dependent variable was job
satisfaction and the independent variables were individual sources of job satisfaction and
structural sources of job satisfaction.

Relationship Between Job Satisfaction and Type of Institution

Ho1: No difference exists between levels of job satisfaction among
women accounting educators at four-year research, doctoral, master's, and
baccalaureate colleges and universities.

Results. The statistical test, multivariate analysis of variance (MANOVA), was
performed to determine if a significant difference existed between levels of job
satisfaction at different types of higher education institutions. An examination of Table
17 indicates that the exact $F$ (2.249) was statistically significant ($p = .004$).
Consequently, the null hypothesis was rejected.

Table 17

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks</td>
<td>0.929</td>
<td>2.249</td>
<td>15</td>
<td>1242.65</td>
<td>0.004</td>
</tr>
</tbody>
</table>
Rejecting the null hypothesis indicates that there are differences in levels of job satisfaction at the four types of institutions. Therefore, the next step was to determine which job satisfaction variables contributed to the overall differences between the types of institutions. To accomplish this, univariate tests were performed for the job satisfaction variables. The results are summarized in Table 18.

Table 18

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth SS</th>
<th>Error SS</th>
<th>Hypoth MS</th>
<th>Error MS</th>
<th>F</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-workers</td>
<td>969.833</td>
<td>61437.942</td>
<td>323.278</td>
<td>135.326</td>
<td>2.389</td>
<td>0.068</td>
</tr>
<tr>
<td>Pay</td>
<td>3382.028</td>
<td>92732.452</td>
<td>1127.343</td>
<td>204.257</td>
<td>5.519</td>
<td>0.001*</td>
</tr>
<tr>
<td>Promotions</td>
<td>89.622</td>
<td>132054.797</td>
<td>29.874</td>
<td>290.87</td>
<td>0.103</td>
<td>0.958</td>
</tr>
<tr>
<td>Supervision</td>
<td>207.063</td>
<td>83365.882</td>
<td>69.021</td>
<td>183.625</td>
<td>0.376</td>
<td>0.771</td>
</tr>
<tr>
<td>Work</td>
<td>222.721</td>
<td>31461.361</td>
<td>74.241</td>
<td>69.298</td>
<td>1.071</td>
<td>0.361</td>
</tr>
</tbody>
</table>

* Significant at < .05

The job satisfaction variable of pay was statistically significant (p = .001), while the other four variables on job satisfaction were not. Therefore, satisfaction with co-workers, opportunity for promotions, supervision, and work did not contribute to the overall differences between the four different types of institutions.

To determine which specific institutions differ on satisfaction with pay, a subsequent test of Least Significant Differences was executed. A significant difference was found between women at baccalaureate institutions and research and doctoral universities, and also between women at master's and research institutions. The information contained in Table 19 indicates that the mean scores for pay are higher for
women at research and doctoral universities, indicating they are more satisfied than those women at master's and baccalaureate institutions. This finding is supported by data in Table 8, which show a significant difference between salary and type of institution (chi square = .0005).

Table 19

Summary of Satisfaction with Pay Mean Scores by Type of Institution

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>104</td>
<td>32.3</td>
<td>14.9</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Doctorate</td>
<td>90</td>
<td>32.6</td>
<td>14.8</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Master's</td>
<td>203</td>
<td>28.1</td>
<td>14.1</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>61</td>
<td>24.9</td>
<td>12.9</td>
<td>2</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>458</td>
<td>29.5</td>
<td>14.5</td>
<td>0</td>
<td>54</td>
</tr>
</tbody>
</table>

Relationship Between Individual Sources of Job Satisfaction and Type of Institution

H\textsubscript{0}2: No difference exists between the individual sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

Results. Multivariate analysis of variance (MANOVA), was performed to determine if a significant difference existed at the .05 level between individual sources of job satisfaction at different types of four-year colleges and universities. Table 20 indicates the exact F value (1.677) is statistically significant (p = .028), therefore the null hypothesis is rejected. The rejection of the null hypothesis indicates there are differences
in individual sources of job satisfaction among women accounting educators at the four
different types of higher education institutions.

Table 20

**Multivariate Analysis of Variance for Individual Sources of Job Satisfaction and Type of Institution**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks</td>
<td>0.925</td>
<td>1.677</td>
<td>21</td>
<td>1272.61</td>
<td>0.028</td>
</tr>
</tbody>
</table>

Because null hypothesis two was rejected, univariate tests were performed to
determine which individual sources of job satisfaction contributed to the overall
differences among women accounting educators at the different types of institutions.

Those findings are summarized in Table 21.

Table 21

**Univariate Tests for Individual Sources of Job Satisfaction**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth SS</th>
<th>Error SS</th>
<th>Hypoth MS</th>
<th>Error MS</th>
<th>F</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>223.866</td>
<td>22483.293</td>
<td>74.622</td>
<td>68.338</td>
<td>1.092</td>
<td>0.353</td>
</tr>
<tr>
<td>Personal Roles</td>
<td>110.981</td>
<td>18248.715</td>
<td>36.993</td>
<td>40.643</td>
<td>0.911</td>
<td>0.436</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>841.871</td>
<td>56471.698</td>
<td>280.623</td>
<td>125.772</td>
<td>2.231</td>
<td>0.084</td>
</tr>
<tr>
<td>Extraversion</td>
<td>555.226</td>
<td>53687.468</td>
<td>185.075</td>
<td>119.571</td>
<td>1.548</td>
<td>0.201</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>1108.908</td>
<td>50077.198</td>
<td>369.636</td>
<td>111.531</td>
<td>3.314</td>
<td>0.020*</td>
</tr>
<tr>
<td>Openness</td>
<td>1226.097</td>
<td>56279.814</td>
<td>408.699</td>
<td>125.345</td>
<td>3.261</td>
<td>0.021*</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>695.616</td>
<td>49188.291</td>
<td>231.872</td>
<td>109.551</td>
<td>2.117</td>
<td>0.097</td>
</tr>
<tr>
<td>No. Children</td>
<td>2.041</td>
<td>619.195</td>
<td>0.681</td>
<td>1.379</td>
<td>0.493</td>
<td>0.687</td>
</tr>
</tbody>
</table>

* Significant at < .05
The individual sources of job satisfaction accounting for the overall differences between institutions were conscientiousness and openness, two personality characteristics. Table 21 denotes a statistical significance for conscientiousness ($p = .020$) and for openness ($p = .021$).

A test of Least Significant Differences (LSD) was performed to determine where significant differences occurred for the variables of conscientiousness and openness. The LSD test for conscientiousness noted significant differences between women accounting educators at research universities and those at doctorate and baccalaureate institutions. Table 22 reveals that the conscientiousness mean score was lower for women at research institutions than it was for those at doctorate and baccalaureate institutions. A lower mean score for conscientiousness suggests that women at research universities might not be as dependable and as well-organized as are their counterparts at doctorate and baccalaureate institutions.

### Table 22

*Summary of Conscientiousness Mean Scores by Type of Institution*

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>$n$</th>
<th>Mean</th>
<th>$SD$</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>103</td>
<td>48.8</td>
<td>10.7</td>
<td>26</td>
<td>72</td>
</tr>
<tr>
<td>Doctorate</td>
<td>90</td>
<td>53.2</td>
<td>10.6</td>
<td>26</td>
<td>72</td>
</tr>
<tr>
<td>Master's</td>
<td>201</td>
<td>50.9</td>
<td>10.6</td>
<td>26</td>
<td>72</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>52.5</td>
<td>10.1</td>
<td>26</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>51.1</td>
<td>10.6</td>
<td>26</td>
<td>72</td>
</tr>
</tbody>
</table>
The test of Least Significant Differences on the openness variable showed a significant difference between women accounting educators at research universities and those at doctorate and baccalaureate institutions. A higher mean score for openness occurred for women at research universities, as indicated in Table 23. This suggests that women at research universities are more open to new experiences, have broader interests, and are more imaginative than are women at doctorate and baccalaureate institutions.

Table 23

*Summary of Openness Mean Scores by Type of Institution*

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>103</td>
<td>55.2</td>
<td>11.4</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>Doctorate</td>
<td>90</td>
<td>50.9</td>
<td>11.1</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>Master's</td>
<td>201</td>
<td>53.2</td>
<td>11.4</td>
<td>26</td>
<td>74</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>50.9</td>
<td>10.7</td>
<td>26</td>
<td>72</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>52.9</td>
<td>11.3</td>
<td>26</td>
<td>74</td>
</tr>
</tbody>
</table>

Two variables that were included in the variable set for individual sources of job satisfaction were not included in the MANOVA and Univariate statistical testing for hypothesis two. These were educational level and marital status. Because both of these dependent variables are categorical they were analyzed using Pearson's Chi square test of independence. The results are shown in Table 8. Marital status was not statistically significant, but educational level was significant (chi square = 24.275, p = .0187). This indicates that there were differences between educational level and type of institution.
Relationship Between Structural Sources of Job Satisfaction and Type of Institution

H₀₃: No difference exists between the structural sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

Results. The statistical test, multivariate analysis of variance (MANOVA), was performed to determine if a significant difference existed at the .05 level between structural sources of job satisfaction at different types of higher education institutions. An inspection of Table 24 indicates that the \( F(4.6939) \) was statistically significant (\( p = .005 \)); consequently, the null hypothesis was rejected.

Table 24

Multivariate Analysis of Variance for Structural Sources of Job Satisfaction and Type of Institution

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilks</td>
<td>0.783</td>
<td>4.694</td>
<td>24</td>
<td>1279.64</td>
<td>0.005</td>
</tr>
</tbody>
</table>

The rejection of hypothesis three led to subsequent analysis to determine which structural sources of job satisfaction contributed to the overall differences between institutions. Univariate tests were calculated for the dependent variables comprising structural sources of job satisfaction. A review of Table 25 indicates that five variables were statistically significant. One variable was institutional resources (\( p = .001 \)). The remaining four all relate to job characteristics or job functions performed by women accounting educators. They include research (\( p = .005 \)), teaching (\( p = .015 \)), advising
students ($p = .001$), and other job functions ($p = .031$). A subsequent test of Least Significant Differences was executed in order to determine differences in institutionals means for each of the variables that were statistically significant.

Table 25

<table>
<thead>
<tr>
<th>Variable</th>
<th>Hypoth SS</th>
<th>Error SS</th>
<th>Hypoth MS</th>
<th>Error MS</th>
<th>F</th>
<th>F prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Res.</td>
<td>1157.965</td>
<td>8147.097</td>
<td>385.988</td>
<td>18.185</td>
<td>21.225</td>
<td>0.001**</td>
</tr>
<tr>
<td>Mentoring</td>
<td>30.101</td>
<td>7711.729</td>
<td>10.034</td>
<td>17.214</td>
<td>0.583</td>
<td>0.626</td>
</tr>
<tr>
<td>Networking</td>
<td>5.9</td>
<td>3652.319</td>
<td>1.967</td>
<td>8.153</td>
<td>0.241</td>
<td>0.868</td>
</tr>
<tr>
<td>Research</td>
<td>7824.134</td>
<td>113600.121</td>
<td>2608.045</td>
<td>253.572</td>
<td>10.285</td>
<td>0.005**</td>
</tr>
<tr>
<td>Teaching</td>
<td>4906.027</td>
<td>207611.591</td>
<td>1635.342</td>
<td>463.419</td>
<td>3.529</td>
<td>0.015*</td>
</tr>
<tr>
<td>Service</td>
<td>196.687</td>
<td>37158.189</td>
<td>65.562</td>
<td>82.942</td>
<td>0.79</td>
<td>0.501</td>
</tr>
<tr>
<td>Advising Students</td>
<td>1706.721</td>
<td>34853.888</td>
<td>568.907</td>
<td>77.799</td>
<td>7.313</td>
<td>0.001**</td>
</tr>
<tr>
<td>Other Job Functions</td>
<td>2462.841</td>
<td>123282.654</td>
<td>820.947</td>
<td>275.185</td>
<td>2.983</td>
<td>0.031*</td>
</tr>
</tbody>
</table>

* Significant at < .05
** Significant at < .001

Table 26 summarizes mean scores for institutional resources. A subsequent test of Least Significant Differences revealed differences between all types of institutions.

Table 26

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>103</td>
<td>19.4</td>
<td>4.8</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Doctorate</td>
<td>88</td>
<td>17.5</td>
<td>4.6</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Master's</td>
<td>203</td>
<td>15.7</td>
<td>4.1</td>
<td>6</td>
<td>27</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>61</td>
<td>15.1</td>
<td>3.7</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>455</td>
<td>16.8</td>
<td>4.6</td>
<td>6</td>
<td>30</td>
</tr>
</tbody>
</table>
Women at both baccalaureate and master's institutions had significantly lower mean scores than women at doctorate and research universities. A significantly lower mean score was also found for women at doctorate institutions compared to those at research universities. Lower mean scores indicate women were less satisfied with resources such as computer support, research assistants, library resources, and travel funds provided by their institutions.

Table 27 is comprised of mean scores for the job function of research. A test of Least Significant Differences found that women at baccalaureate institutions had significantly lower mean scores than for those women at master's, doctorate, and research institutions. Mean scores were also significantly lower for women at master's and doctorate institutions when compared to research universities. The mean scores indicate the percent of time spent on research; therefore, lower mean scores indicate less time spent on research, while higher mean scores denote more time spent on research.

Table 27

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>104</td>
<td>20.4</td>
<td>21.4</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>Doctorate</td>
<td>88</td>
<td>14.5</td>
<td>16.6</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>Master's</td>
<td>202</td>
<td>13.2</td>
<td>13.9</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>6.7</td>
<td>7.8</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>14.2</td>
<td>16.4</td>
<td>0</td>
<td>80</td>
</tr>
</tbody>
</table>
Significant differences in mean scores were also found for the job characteristic of teaching, based on the Least Significant Differences test. An examination of Table 28 reveals that women in the baccalaureate group had significantly different mean scores than women at doctorate and research institutions. Women at research and doctorate universities spend less time teaching compared to those at baccalaureate institutions.

Table 28

Summary of Teaching Mean Scores by Type of Institution

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>104</td>
<td>54.4</td>
<td>23.2</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Doctorate</td>
<td>88</td>
<td>54.1</td>
<td>23.9</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Master's</td>
<td>202</td>
<td>57.9</td>
<td>20.4</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>64.1</td>
<td>18.6</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>57.2</td>
<td>21.8</td>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Mean scores for the job function of advising students are reported in Table 29. A Least Significant Differences test was performed to determine significant differences between the types of institutions. Research and doctorate universities differed significantly from master's and baccalaureate institutions, and master's also differed from baccalaureate. Women at research and doctorate institutions spend less time advising students than women at baccalaureate colleges. Less time is also spent advising students at master's institutions when compared to baccalaureate institutions.
Table 29

Summary of Advising Students Mean Scores by Type of Institution

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>104</td>
<td>7.1</td>
<td>6.8</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Doctorate</td>
<td>88</td>
<td>7.5</td>
<td>8.3</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Master's</td>
<td>202</td>
<td>10.1</td>
<td>9.9</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>12.9</td>
<td>8.6</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>9.3</td>
<td>8.9</td>
<td>0</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 30 provides mean scores on the job function referred to as other. Respondents were asked to specify what other duties they had besides those of research, teaching, service, and advising students. The most often cited responses were meetings, paperwork, and administrative responsibilities. The Least Significant Differences test indicated that the other job functions mean scores of baccalaureate and master's institutions differ significantly from the mean scores of doctorate universities. Women at doctorate universities spend more time on other job activities (e.g., administration, meetings, paperwork) than do women at baccalaureate and master's institutions.

Table 30

Summary of Other Job Functions Mean Scores by Type of Institution

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>104</td>
<td>7.9</td>
<td>16.4</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>Doctorate</td>
<td>88</td>
<td>12.5</td>
<td>21.1</td>
<td>0</td>
<td>85</td>
</tr>
<tr>
<td>Master's</td>
<td>202</td>
<td>6.9</td>
<td>15.4</td>
<td>0</td>
<td>90</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>60</td>
<td>5.6</td>
<td>12.8</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>454</td>
<td>8.1</td>
<td>16.7</td>
<td>0</td>
<td>90</td>
</tr>
</tbody>
</table>
Three structural sources of job satisfaction were not included in the MANOVA and Univariate statistical testing for hypothesis three. They included academic rank, salary, and tenure. These variables are categorical. Therefore, Pearson's Chi square test of independence was used to test these variables. All three of the variables were statistically significant: academic rank (chi square = 39.58, df = 15, p = .0005); salary (chi square = 71.12, df = 15, p = .0005); and tenure (chi square = 19.91, df = 9, p = .0185). The chi square significance indicates differences for academic rank, salary, and tenure among women accounting educators at research, doctoral, master's, and baccalaureate institutions. Table 8 shows a cross-classification for these variables by type of institution.

**Relationship Between Individual Sources of Job Satisfaction, Structural Sources of Job Satisfaction, and Job Satisfaction**

**H₀₄:** No relationship exists between the individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction.

**Results.** Stepwise multivariate regression analysis was performed to determine if a significant relationship existed at the .05 level between individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction. The Job Descriptive Index (JDI) consisted of five satisfaction scales, which were the dependent variables. Regression analysis was executed for each job satisfaction scale (co-workers, pay, promotion, supervision, and work). The independent variables consisted of individual sources of job satisfaction (age, education, marital status, personal and professional roles, number of children, and personality characteristics) and structural
sources of job satisfaction (salary, tenure, rank, institutional resources, mentoring, networking, type of institution, and job characteristics or functions).

A statistically significant $E$ value was found for all five job satisfaction scales. Consequently, the null hypothesis was rejected. A discussion of the statistical testing for each job satisfaction scale follows.

**Co-Workers.** An inspection of Table 31 indicates a significant $E$ (.0001) between the dependent variable, satisfaction with co-workers, and six independent variables: agreeableness ($p = .0001$); conscientiousness ($p = .0014$); neuroticism ($p = .0002$); institutional resources ($p = .0002$); mentoring ($p = .0001$); and the job function of research ($p = .0035$). Three of these variables are personality characteristics (agreeableness, conscientiousness, and neuroticism), which are individual sources of job satisfaction. The remaining three variables (institutional resources, mentoring, and research) are structural sources of job satisfaction.

A correlation coefficient was calculated to identify the strength of the association between co-workers and each independent variable included in the regression equation. The correlation coefficient for co-workers and each independent variable is agreeableness (.369); conscientiousness (-.012); neuroticism (-.227); institutional resources (.224); mentoring (.209); and research (.090).
Table 31

Summary of Stepwise Regression Analysis for Variables Predicting Satisfaction with Co-Workers

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
<th>T prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>0.3382</td>
<td>0.0049</td>
<td>0.3205</td>
<td>7.5280</td>
<td>0.0001</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>-0.1580</td>
<td>0.0493</td>
<td>-0.1417</td>
<td>-3.2080</td>
<td>0.0014</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.1928</td>
<td>0.0511</td>
<td>-0.1705</td>
<td>-3.7740</td>
<td>0.0002</td>
</tr>
<tr>
<td>Institutional Resources</td>
<td>0.4152</td>
<td>0.1087</td>
<td>0.1601</td>
<td>3.8210</td>
<td>0.0002</td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.4910</td>
<td>0.1167</td>
<td>0.1741</td>
<td>4.2080</td>
<td>0.0001</td>
</tr>
<tr>
<td>Research</td>
<td>-0.0874</td>
<td>0.0298</td>
<td>-0.1217</td>
<td>-2.9360</td>
<td>0.0035</td>
</tr>
<tr>
<td>Constant</td>
<td>28.1886</td>
<td>5.1423</td>
<td>5.4820</td>
<td>5.4820</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

\[ F = 24.3692 \]  \hspace{1cm} \text{Sig. of } F = .0001 \hspace{1cm} \text{R}^2 = .2420

**Pay.** Table 32 shows that statistical significance \( (F = .0001) \) was detected between satisfaction with pay and the four independent variables: neuroticism \( (p = .035) \); salary \( (p = .0001) \); academic rank \( (p = .0392) \); and institutional resources \( (p = .0001) \).

One variable, neuroticism, a personality characteristic, and was an individual source of job satisfaction. Salary, academic rank, and institutional resources were structural sources of job satisfaction.

A correlation coefficient was calculated for each independent variable included in the regression equation for satisfaction with pay. The correlations of satisfaction with pay and the independent variables in the equation are neuroticism \(-.104\); salary \(.538\); academic rank \(-.251\); and institutional resources \(.393\).
Table 32

Summary of Stepwise Regression Analysis for Variables Predicting Satisfaction with Pay

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
<th>T prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>-0.1097</td>
<td>0.0519</td>
<td>-0.0782</td>
<td>-2.1150</td>
<td>0.0350</td>
</tr>
<tr>
<td>Salary</td>
<td>4.7216</td>
<td>0.4483</td>
<td>0.5361</td>
<td>10.5320</td>
<td>0.0001</td>
</tr>
<tr>
<td>Academic Rank</td>
<td>1.0883</td>
<td>0.5263</td>
<td>0.1019</td>
<td>2.0680</td>
<td>0.0392</td>
</tr>
<tr>
<td>Institutional Resources</td>
<td>0.8267</td>
<td>0.1252</td>
<td>0.2570</td>
<td>6.6050</td>
<td>0.0001</td>
</tr>
<tr>
<td>Constant</td>
<td>0.6693</td>
<td>3.9615</td>
<td>0.1690</td>
<td>0.8659</td>
<td></td>
</tr>
</tbody>
</table>

F = 68.0788  Sig. of F = .0001  \( R^2 = .3719 \)

Promotion Opportunities. An inspection of Table 33 indicates a significant F (.0001) between satisfaction with opportunities for promotion and eight independent variables. They include agreeableness (p = .0001); salary (p = .0010); tenure (p = .0004); institutional resources (p = .0001); mentoring (p = .0008); networking (p = .0019); other job functions (p = .0211); and type of institution (p = .0171). Only one of these variables was an individual source of job satisfaction, agreeableness, which is a personality characteristic. The remaining seven variables were structural sources of job satisfaction.

A correlation coefficient for satisfaction with promotion opportunities and each independent variable included in the regression equation was calculated. The correlations include agreeableness (.207); salary (.364); tenure (-.344); institutional resources (.270); mentoring (.297); networking (.314); other job functions (-.063); and type of institution (.020).
Table 33

Summary of Stepwise Regression Analysis for Variables Predicting Satisfaction with Promotion Opportunities

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
<th>T prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>0.2461</td>
<td>0.0609</td>
<td>0.1609</td>
<td>4.0410</td>
<td>0.0001</td>
</tr>
<tr>
<td>Salary</td>
<td>1.9249</td>
<td>0.5802</td>
<td>0.1868</td>
<td>3.3180</td>
<td>0.0010</td>
</tr>
<tr>
<td>Tenure</td>
<td>-3.6037</td>
<td>1.0104</td>
<td>-0.1912</td>
<td>-3.5660</td>
<td>0.0004</td>
</tr>
<tr>
<td>Institutional Resources</td>
<td>0.7263</td>
<td>0.1626</td>
<td>0.1931</td>
<td>4.4670</td>
<td>0.0001</td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.6322</td>
<td>0.1880</td>
<td>0.1546</td>
<td>3.3630</td>
<td>0.0008</td>
</tr>
<tr>
<td>Networking</td>
<td>0.8751</td>
<td>0.2804</td>
<td>0.1458</td>
<td>3.1210</td>
<td>0.0019</td>
</tr>
<tr>
<td>Other Job Functions</td>
<td>-0.9308</td>
<td>0.0402</td>
<td>-0.0911</td>
<td>-2.3140</td>
<td>0.0211</td>
</tr>
<tr>
<td>Type of Institution</td>
<td>1.7633</td>
<td>0.7369</td>
<td>0.1064</td>
<td>2.3930</td>
<td>0.0171</td>
</tr>
<tr>
<td>Constant</td>
<td>-21.0492</td>
<td>5.9905</td>
<td>-3.5140</td>
<td>0.0005</td>
<td></td>
</tr>
</tbody>
</table>

\[ F = 26.6888 \]

\[ \text{Sig. of } F = .0001 \]

\[ R^2 = .3189 \]

Supervision. An examination of Table 34 reveals a statistical significance \((F = .0001)\) between satisfaction with supervision and seven independent variables. The independent variables and their significance include personal roles \((p = .0207)\); agreeableness \((p = .0001)\); salary \((p = .0008)\); institutional resources \((p = .0001)\); mentoring \((p = .0001)\); research \((p = .0028)\); and advising students \((p = .0019)\). Personal and professional roles are individual sources of job satisfaction. The variables which are structural sources of job satisfaction include salary, institutional resources, mentoring, research, and advising students. The later two, research and advising students, are job characteristics or functions.

A correlation coefficient for each independent variable included in the regression equation for satisfaction with supervision was determined. The correlations are personal
and professional roles (-.176); agreeableness (.254); salary (-.208); institutional resources (.191); mentoring (.175); research (-.206); and advising students (-.076).

Table 34

**Summary of Stepwise Regression Analysis for Variables Predicting Satisfaction with Supervision**

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
<th>T prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Roles</td>
<td>-0.2066</td>
<td>0.0890</td>
<td>-0.0984</td>
<td>-2.3220</td>
<td>0.0207</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.2610</td>
<td>0.0510</td>
<td>0.2153</td>
<td>5.1130</td>
<td>0.0001</td>
</tr>
<tr>
<td>Salary</td>
<td>-1.4448</td>
<td>0.4301</td>
<td>-0.1769</td>
<td>-3.3590</td>
<td>0.0008</td>
</tr>
<tr>
<td>Institutional Resources</td>
<td>0.5369</td>
<td>0.1312</td>
<td>0.1801</td>
<td>4.0910</td>
<td>0.0001</td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.5715</td>
<td>0.1363</td>
<td>0.1763</td>
<td>4.1920</td>
<td>0.0001</td>
</tr>
<tr>
<td>Research</td>
<td>-0.1319</td>
<td>0.0439</td>
<td>-0.1597</td>
<td>-3.0060</td>
<td>0.0028</td>
</tr>
<tr>
<td>Advising Students</td>
<td>-0.2016</td>
<td>0.0647</td>
<td>-0.1342</td>
<td>-3.1190</td>
<td>0.0019</td>
</tr>
<tr>
<td>Constant</td>
<td>24.1320</td>
<td>4.0832</td>
<td>5.9100</td>
<td>0.0001</td>
<td></td>
</tr>
</tbody>
</table>

\[ E = 18.0947 \] \[ \text{Sig. of } E = .0001 \] \[ R^2 = .2170 \]

**Work.** The regression analysis on satisfaction with work was statistically significant \((E = .0001)\) for six independent variables, shown in Table 35. The significance of each independent variable is marital status \((p = .0314)\); personal and professional roles \((p = .0002)\); agreeableness \((p = .0009)\); neuroticism \((p = .0001)\); institutional resources \((p = .0077)\); and mentoring \((p = .0001)\). Four of the variables are individual sources of job satisfaction: marital status, personal and professional roles, agreeableness, and neuroticism. Both institutional resources and mentoring are variables included in structural sources of job satisfaction.
Table 35

Summary of Stepwise Regression Analysis for Variables Predicting Job Satisfaction with Work

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>Beta</th>
<th>T</th>
<th>T prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td>1.1792</td>
<td>0.5464</td>
<td>0.0906</td>
<td>2.1580</td>
<td>0.0314</td>
</tr>
<tr>
<td>Personal Roles</td>
<td>-0.2247</td>
<td>0.0588</td>
<td>-0.1734</td>
<td>-3.8210</td>
<td>0.0002</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.1086</td>
<td>0.0324</td>
<td>0.1452</td>
<td>3.3510</td>
<td>0.0009</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>-0.1563</td>
<td>0.0374</td>
<td>-0.1948</td>
<td>-4.1740</td>
<td>0.0001</td>
</tr>
<tr>
<td>Institutional Resources</td>
<td>0.2104</td>
<td>0.0786</td>
<td>0.1144</td>
<td>2.6770</td>
<td>0.0077</td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.3551</td>
<td>0.0845</td>
<td>0.1775</td>
<td>4.2000</td>
<td>0.0001</td>
</tr>
<tr>
<td>Constant</td>
<td>35.2059</td>
<td>3.2439</td>
<td>10.8530</td>
<td>.0001</td>
<td></td>
</tr>
</tbody>
</table>

F = 20.5298  Sig. of F = .0001  R² = .21195

A correlation coefficient was computed for the independent variables included in the regression equation for satisfaction with work. The correlations are marital status (.099); personal and professional roles (-.277); agreeableness (.229); neuroticism (-.322); institutional resources (.191); and mentoring (.210).

Summary of Major Data Findings

The results of the preceding analyses can be summarized to provide insight into both differences and relationships among the variables of the study. Three of the hypotheses dealt with differences relating to job satisfaction among women accounting educators at four-year research, doctorate, master's, and baccalaureate colleges and universities. The fourth hypothesis considered the relationship between individual
sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction.

A statistically significant difference was detected between levels of job satisfaction and type of institution. The difference was due to satisfaction with pay. There was a statistically significant difference between individual sources of job satisfaction and type of institution. The personality characteristics of conscientiousness and openness contributed to the significant difference, as did the educational level of women accounting educators. There was also a statistically significant difference between structural sources of job satisfaction and type of institution. The following variables accounted for the significant difference: institutional resources, job characteristics (research, teaching, advising students, and other job functions), academic rank, salary, and tenure.

A statistically significant relationship was found between individual sources of job satisfaction, structural sources of job satisfaction, and all five job satisfaction scales. The following summarizes the significant relationship for each job satisfaction scale:

1. Co-workers -- Satisfaction with co-workers is related to agreeableness, conscientiousness, neuroticism, institutional resources, mentoring, and the job function of research;
2. Pay -- satisfaction with pay is related to neuroticism, salary, academic rank, and institutional resources;
3. Promotion -- satisfaction with promotion opportunities is related to agreeableness, salary, tenure, institutional resources, mentoring, networking, other job functions, and type of institution;
4. Supervision -- satisfaction with supervision is related to personal and professional roles, agreeableness, salary,
institutional resources, mentoring, research, and advising students; (5) Work --
satisfaction with work is related to marital status, personal and professional roles,
agreeableness, neuroticism, institutional resources, and mentoring.
CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

Introduction

This study was a non-experimental research project investigating job satisfaction of women accounting educators at four-year colleges and universities throughout the United States. It was the intent of the study to determine if differences existed among women accounting educators at research, doctoral, master's, and baccalaureate colleges and universities in three areas relating to job satisfaction: levels of job satisfaction, individual sources of job satisfaction, and structural sources of job satisfaction. In addition, the relationships between individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction were examined.

This chapter concludes the study in four parts. The first part summarizes the major findings of the study while the second part contains a discussion of these results within the context of previous research and earlier findings. The third section includes general conclusions drawn from the investigation and their relationship with literature on job satisfaction. The final section advances recommendations for further research in job satisfaction in general and women in particular.
Summary of Research

Statement of Purpose

The study was directed by four major questions arising out of research on job satisfaction. These questions were explored to accomplish the objectives of the study and stated in a general sense were:

1. Is there a difference between levels of job satisfaction among women accounting educators at different types of four-year institutions of higher education?

2. Is there a difference between individual sources of job satisfaction among women accounting educators at different types of four-year institutions of higher education?

3. Is there a difference between structural sources of job satisfaction among women accounting educators at different types of four-year institutions of higher education?

4. Is there a relationship between levels of job satisfaction, individual sources of job satisfaction, and structural sources of job satisfaction among women accounting educators?

Procedures

Four hypotheses were developed to examine each of these questions. A stratified random sample was selected from the population of women accounting educators identified in the 1995 Accounting Faculty Directory (Hasselback, 1995). Stratification of the sample was based on the type of institution determined by the Carnegie Classification
A Classification of Institutions of Higher Education, 1994). The types of institutions include research, doctorate, master's, and baccalaureate.

A survey was used to collect the data. Questionnaires were mailed to 755 women accounting educators in three waves, resulting in a response rate of 62%. The questionnaire consisted of several sections designed to gather the following information:

1. About You -- identified individual demographic variables;
2. Professional and Personal Roles -- measured the stress experienced from shifting from professional to family and/or personal roles;
3. Personality Inventory -- measured five personality characteristics;
4. Institutional Resources -- measured the availability of institutional resources;
5. Social Contacts -- measured the effect of mentoring and networking on career;
6. About Your Job -- identified demographic variables relating to job structure; and
7. Job Satisfaction -- measured satisfaction with co-workers, pay, promotion, supervision, and work.

Sections 1, 2, and 3 of the questionnaire related to individual sources of job satisfaction, while sections 4 through 6 dealt with structural sources of job satisfaction. Section 7 applied to levels of job satisfaction.

Results and Summary of Major Findings

The following is an overview of the results and major findings of the study.

1. A significant difference at the .05 level was detected between levels of job satisfaction among women accounting educators and type of institution. The difference was attributable to satisfaction with pay. Women at research and doctoral universities were more satisfied with pay than women at baccalaureate institutions. A significant
difference was also found between research and master's institutions. Women at research universities were more satisfied with pay than were those at master's institutions.

2. A significant difference at the .05 level was detected between individual sources of job satisfaction among women accounting educators and type of institution. The difference is attributable to education level and the personality characteristics of conscientiousness and openness. Women at doctorate and baccalaureate institutions scored higher on the conscientiousness scale than women at research universities. For the personality characteristic of openness, women at research universities scored significantly higher than women at doctorate and baccalaureate institutions.

3. A significant difference at the .05 level was detected between structural sources of job satisfaction among women accounting educators and type of institution. Several variables contributed to the difference: academic rank, salary, tenure, institutional resources, time spent on research, teaching, advising students, and other job functions. Women at baccalaureate and master's institutions were less satisfied with institutional resources than women at doctorate and research universities, and women at doctorate institutions were less satisfied than those at research universities. Significant differences were found for the job functions of research, teaching, advising students, and other job functions; however, no significant differences were found for the job function of service. Women at baccalaureate institutions spend significantly less time on research than those at master's, doctorate, and research institutions. Less time is spent on teaching among women at research and doctorate universities when compared to baccalaureate institutions. Women at research and doctorate institutions spend less time advising
students than women at baccalaureate colleges; less time is also spent advising students when comparing master's to baccalaureate institutions. Women at baccalaureate and master's institutions spend less time on other job functions (e.g., administration, meeting, paperwork) than women at doctorate universities.

4. A significant relationship at the .05 level was detected between individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction among women accounting educators. The significant relationship was found for each of the job satisfaction scales -- co-workers, pay, promotion, supervision, and work. Table 36 summarizes the significance of the relationship between individual variables, structural variables, and job satisfaction.

Table 36

Summary on Level of Significance for Regression Analysis on Variables

Predicting Job Satisfaction

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Co-Workers</th>
<th>Pay</th>
<th>Promotion</th>
<th>Supervision</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Education</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Marital Status</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0314</td>
</tr>
<tr>
<td>Personal Roles</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0207</td>
<td>0.0002</td>
</tr>
<tr>
<td>No. Children</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>0.0001</td>
<td>n.s.</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0009</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.0014</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Extraversion</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.0002</td>
<td>0.0350</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0001</td>
</tr>
<tr>
<td>Openness</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
Independent Variable -- Job Satisfaction Scales

<table>
<thead>
<tr>
<th>Variables</th>
<th>Co-Workers</th>
<th>Pay</th>
<th>Promotion</th>
<th>Supervision</th>
<th>Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>n.s.</td>
<td>0.0001</td>
<td>0.0010</td>
<td>0.0008</td>
<td>n.s.</td>
</tr>
<tr>
<td>Tenure</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0004</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Rank</td>
<td>n.s.</td>
<td>0.0392</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Institutional Res.</td>
<td>0.0002</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0001</td>
<td>0.0077</td>
</tr>
<tr>
<td>Mentoring</td>
<td>0.0001</td>
<td>n.s.</td>
<td>0.0008</td>
<td>0.0001</td>
<td>0.0001</td>
</tr>
<tr>
<td>Networking</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0019</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Type Institution</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0171</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Research</td>
<td>0.0035</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0028</td>
<td>n.s.</td>
</tr>
<tr>
<td>Teaching</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Service</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Advising</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0019</td>
<td>n.s.</td>
<td></td>
</tr>
<tr>
<td>Other Job Funct.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.0211</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

n.s. is not significant

Discussion of Major Findings

An integrated approach to job satisfaction, advocated by Feldberg and Glenn (1979), was employed in this study. Both individual and structural influences on job satisfaction were investigated along with levels of job satisfaction.

Levels of job satisfaction were measured by the Job Descriptive Index (Smith, Kendall, & Hulin, 1975), which measures five components of job satisfaction. Based on their scores from the JDI, women accounting educators expressed satisfaction with their co-workers, supervision, and work. They were neutral (felt neither good or bad) in regard to satisfaction with pay, and they were dissatisfied with promotion opportunities.

Comparing the scores of women accounting educators to the norms for the JDI (Smith,
Kendall, & Hulin, 1975), indicates they scored the same as the norm on the promotion and work scales; they were slightly above the norm on the supervision scale; and they were below the norm on the co-workers and pay scales.

The findings for co-workers, promotion, supervision, and work were consistent with those of Maupin (1982), who studied job satisfaction of women CPAs in public accounting, business/industry, and education. She found women CPAs in education were satisfied on the scales of co-workers, supervision, and work, but were dissatisfied with promotion opportunities. However, the findings on the pay scale differ. Maupin found women CPAs in education were dissatisfied with pay. Others have also found that salary is one of the greatest sources of dissatisfaction among faculty in higher education (Edmundson, 1969; Ladd, 1979; Winkler, 1982; Ibrahim, 1985). The findings in this study differ -- women accounting educators were neutral regarding satisfaction with pay. The distribution of salaries is a possible reason for the difference between earlier studies and the findings in this study. Approximately 33% of the women had salaries above $60,000, while 34% had salaries below $40,000. Consequently, those who expressed satisfaction (higher salaries) offset those who were dissatisfied (lower salaries) which resulted in neutrality on satisfaction with pay.

Even through the respondents as a group were neutral on the pay scale, several made comments relating to inequities in pay. "While the salary is good, the relationship of the only woman full professor's salary to the men's is striking." "Male professors with similar credentials make more money than I do." "My current salary is $6,000 less than any male counterpart in my area, even though they have less teaching experience and no
better academic credentials. This harbors lots of ill will." "The merit pay system at this university does not work and actually discourages work." "Colleagues with PhD's, less service, fewer publications, and poor teacher evaluations make 30% more than I do, even though several publish in the same journals." These comments reflect the research of Ivancevich and Donnelly (1968) who state, "The perceived inequities in wages and salaries tend to contribute more to [workers] dissatisfaction than the exact amount of pay" (p. 176).

While the above discussion addressed general findings on job satisfaction, the remaining discussion focuses on the major findings related to the objectives of the study, the research questions, and the resulting hypotheses.

**Hypothesis One**

The first objective of the study was to determine the levels of job satisfaction among women accounting educators at the different types of four-year colleges and universities. The first research question and hypothesis were developed to examine this objective.

\[ H_01: \text{No difference exists between levels of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.} \]

The paucity of articles on job satisfaction of faculty in higher education was discussed in Chapter 1 (Tack & Patitu, 1992). Because of the limited research, no articles on job satisfaction based on the Carnegie Classification were found. However, an article on the job satisfaction of nurse educators did consider institutional characteristics.
Reddick (1987) surveyed five baccalaureate schools of nursing in North Carolina to
determine if there was a difference in job satisfaction based on the size of the institution.
The size was classified as either large or small based on enrollment. She found
significant differences in satisfaction with pay, supervision, and people. This research
detected significant differences on satisfaction with pay. Women at research and doctoral
universities were more satisfied with pay than women at baccalaureate institutions; and
women at research universities were more satisfied with pay than were those at master's
institutions. Because research and doctoral universities are larger than master's and
baccalaureate institutions, these findings are similar to Reddick's. However, it is difficult
to make comparisons because this was a national study surveying four types of higher
education institutions and Reddick's survey was limited to five baccalaureate colleges in
one state.

An examination of the data on salary for this study provides some insight to the
findings. Significant differences occurred between research, doctorate, and baccalaureate
institutions, and also between research and master's. Approximately 13% of the women
at research and doctorate universities earned more than $70,000 while no (0%) women at
baccalaureate institutions earned above $70,000. Women at research universities earning
more than $70,000 was 8.4% compared to 5.1% for women at master's institutions.

**Hypothesis Two**

The second objective of the study was to determine individual sources of job
satisfaction among women accounting educators at the different types of four-year
colleges and universities. The second research question and hypothesis were developed to examine this objective.

\( H_{02}: \) No difference exists between the individual sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

While a great deal of research has been done on individual sources of job satisfaction, specific research on individual influences of job satisfaction in relation to the type of institution is not available. Therefore, this discussion focuses on generalizations regarding the findings of the hypothesis.

Women at doctorate and baccalaureate institutions scored higher on the conscientiousness scale than women at research universities. Comparing the mean scores for women at doctorate (53.2) and baccalaureate (52.5) institutions to the norm score indicates they were higher than the norm (50.1). The conscientiousness mean score for women at research universities (48.8) was lower than the mean (50.1). Therefore, these finding were consistent with the norms established by Costa and McCrae (1992).

Conscientiousness is associated with the will to achieve and the more active process of planning, organizing, and carrying out tasks (Costa and McCrae, 1992). Therefore, this finding is somewhat surprising. Because research institutions are regarded as more prestigious one would expect women accounting educators at those universities to score higher on the conscientiousness scale than women at other types of institutions.
For the personality characteristic of openness, women at research universities scored significantly higher than women at doctorate and baccalaureate institutions. When comparing the mean scores for women at research (55.2) universities to the norm (50.0), we find they are higher than the norm. The means for women at doctorate (50.9) and baccalaureate (50.9) institutions are also slightly higher than the norm score (50.0), even though they were lower when compared to the mean score for women at research universities.

Openness is related to aspects of intelligence, such as divergent thinking, that contribute to creativity. Open individuals are curious about both inner and outer worlds. They are willing to entertain novel ideas, have a preference for variety, and an independence of judgment (Costa and McCrae, 1992). Women at research universities scored higher on the openness scale. The characteristics of this scale (curiosity, intelligence, variety) seem to fit the qualities needed to pursue research. Because women at research universities are expected to conduct more research than those at other institutions this finding is one that would be expected.

**Hypothesis Three**

The third objective of the study was to determine structural sources of job satisfaction among women accounting educators at the different types of four-year colleges and universities. The third research question and hypothesis were developed to examine this objective.
H₀₃: No difference exists between the structural sources of job satisfaction among women accounting educators at four-year research, doctoral, master's, and baccalaureate colleges and universities.

The Carnegie classification of higher education, used in this study, groups colleges and universities according to their missions (A Classification of Institutions of Higher Education, 1994). The results of this hypothesis certainly reflect that classification system.

Differences were found regarding institutional resources and job functions among women accounting educators. Women at research and doctorate universities were more satisfied with institutional resources than women at master's and baccalaureate institutions; women at research universities expressed more satisfaction with institutional resources than those at doctorate universities. This is indicative of the amount of resources (e.g., computers, research assistants, libraries, etc.) available at the different types of institutions. The financial resources at research universities are greater because of federal support. To be as classified as research universities they must receive at least $15.5 million annually in federal support. Therefore, more institutional resources are available for faculty at research universities which leads to a higher degree of satisfaction when compared to other institutions.

The time spent on job functions reflects the mission of the institutions. Research and doctorate universities place a high priority on research and graduate education at the doctorate level; master's institutions emphasis is on graduate education through the master's degree and undergraduate education; and baccalaureate colleges are committed
to undergraduate education. Women at research, doctorate, and master's institutions spend more time on research than those at baccalaureate colleges; while women at baccalaureate colleges spend more time on teaching than those at research and doctorate universities. More time is also spent advising students by women at baccalaureate colleges when compared to research, doctorate, and master's institutions. Women at doctorate universities spend more time on other job functions such as meetings and administrative responsibilities than women do at master's and baccalaureate institutions. This finding may not be reflective of the mission of the institutions, but more to the goal of doctorate universities attempting to become research universities.

**Hypothesis Four**

The fourth objective of the study was to determine the relationship between individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction among women accounting educators. The fourth research question and hypothesis were developed to examine this objective.

\[ H_0^4: \text{No relationship exists between the individual sources of job satisfaction, structural sources of job satisfaction, and levels of job satisfaction.} \]

This hypothesis was rejected for all five job satisfaction scales: co-workers, pay, promotion, supervision, and work. A summary of the significance levels for the independent variables included in the regression equation for each job satisfaction scale was presented in Table 36 of this chapter. Each of the independent variables will be discussed as they relate to previous research findings and to the findings of the study.
Age. Age has been one of the most commonly studied individual correlates of job satisfaction, and the studies have yielded consistent results -- older employees are more satisfied (Dewar & Werbe, 1979; Hall & Mansfield, 1975; Janson & Martin, 1982; Lorence, 1987a, 1987b; McKelvey & Sekaran, 1977; Quinn, Staines, & McCullough, 1974; Saal, 1978). However, in this study age was not significant in predicting satisfaction for any of the job satisfaction scales. One possible explanation is that the sample was relatively homogeneous in regard to age, with approximately 75% falling in the 30 to 49 year old range.

Education. Previous research has found an inverse relationship between education and job satisfaction. As educational level increases, job expectations increase which contributes to a lack of satisfaction (Gruenberg, 1980; Kalleberg, 1977; Lincoln & Kalleberg, 1985). However, studies dealing specifically with job satisfaction in higher education have found no relationship between education and job satisfaction (Ibrahim, 1985; Reddick, 1987; Winkler, 1982). The findings in this study are consistent with those in higher education; no relationship between education and job satisfaction was detected. Education was not significant in predicting satisfaction with co-workers, pay, promotion, supervision, or work.

Marital Status. Several research studies (Ibrahim, 1985; Loscocco, 1989; Maupin, 1982; Reddick, 1987) have found that marital status has no effect on job satisfaction. The findings in this study demonstrated that marital status was not significant in predicting satisfaction with co-workers, pay, promotion, or supervision; however, it was significant for predicting satisfaction with work.
Personal Roles. Only recently have researchers begun to explore the association between family roles and job satisfaction. Their research indicates that family roles have a decided influence on individuals' reaction to work (Feree, 1987; Loscocco, 1990; Martin & Hanson, 1985; Martin & Shehan, 1989; Rosen, 1987). Individuals who experienced high multiple role stress have been found to have lower levels of job satisfaction (Peluchette, 1993). In the context of this study, family roles were examined in terms of the stress experienced in shifting from professional to family and/or personal roles. A significance was found for this variable in predicting satisfaction with supervision and with work. However, no relationship was found between satisfaction with co-workers, pay, or promotion and stress experienced in shifting from professional to family/personal roles.

Number of Children. The number of children also has a link to family roles. There is an increasing amount of research which suggests that women continue to shoulder the major responsibility for domestic work, including childcare (Coverman & Sheley, 1986; Thomspson & Walker, 1989; Vanek, 1974; Walker & Woods, 1976). Also, women are more likely to choose jobs which accommodate work to family. Studies have shown that women tend to work part-time, or sporadically, when they have children (Hayghe, 1984) and that women choose jobs with hours and locations that suit the execution of home responsibilities (Erickson, 1977). The comments of respondents reflect this research. "I am often stressed and tired. I am not around campus as much as others which can be limiting. I am looking forward to when my kids are in school full-time. Maybe my opportunities to get ahead will increase." "This 3/4 time non-tenure
track position lets me balance work and family." However, these recent research findings were not reflected in this study. The number of children had no relationship to any of the five job satisfaction scales.

**Personality Characteristics.** There is some evidence that personality characteristics affect job satisfaction, but the primary influence appears to be as moderators (Brieg & Aldag, 1975; Hackman & Oldham, 1980; Wanous, 1974). However, this study found that personality characteristics did affect job satisfaction. Five personality characteristics were measured: agreeableness, conscientiousness, extraversion, neuroticism, and openness. Three of these personality characteristics were significant in predicting job satisfaction. Agreeableness was significant in predicting satisfaction with co-workers, promotion, supervision, and work. Conscientiousness was significant in predicting satisfaction with co-workers. Neuroticism was significant in predicting satisfaction with pay, promotion, and work.

**Salary.** Even though the relationship between salary and job satisfaction is debatable, salary is one of the greatest sources of dissatisfaction for faculty in higher education (Edmundson, 1969; Ladd, 1979; Winkler, 1982; Ibrahim, 1985). In this study, women accounting educators did not express dissatisfaction with salary, nor did they express satisfaction. They were neutral (felt neither good nor bad) regarding satisfaction with pay. However, salary was significant in predicting satisfaction with pay, promotion, and supervision. There was no significant relation between salary and satisfaction with co-workers and work.
Tenure. A positive relationship has been found between tenure and job satisfaction (Grahn, et al., 1981; Luu, 1985; Nussel, Wiesma, & Rusche, 1988; Wolfson, 1986). In this study, a significant relationship was found between tenure and satisfaction with promotion opportunities. However, tenure was not significant when predicting satisfaction with co-workers, pay, supervision, or work.

Rank. Several studies have found a positive relationship between academic rank and job satisfaction (Steen, Giunipero, & Newgren, 1985; Winkler, 1982; Wolfson, 1986). The findings of this study reveal a relationship between rank and satisfaction with pay; however, rank was not significant in predicting satisfaction with co-workers, promotion opportunities, supervision, or work.

Institutional Resources. A conflict exists in the research regarding institutional resources and job satisfaction. Studies by Diener (1984) and Hollon and Gemmill (1976) found that faculty members were dissatisfied with institutional resources, while studies by Seegmiller (1977) and Grahn, et al. (1981) found satisfaction with institutional resources. This study found a relationship between institutional resources and job satisfaction for all five JDI scales. Institutional resources were significant in predicting satisfaction with co-workers, pay, promotion, supervision, and work.

Social Context. Recent research has confirmed the importance of reference groups to the formation of work attitudes (Hodson, 1985; Loscocco, 1990) and have also shown that workers are influenced by their social networks (Pfeffer & O'Reilly, 1987; Lawrence, 1988). Based on this research, two areas relating to the social context of the job were examined in this study, viz., mentoring and networking. Mentoring was
significant in predicting job satisfaction with co-workers, promotion, supervision, and work. No relation was found between mentoring and satisfaction with pay. Networking was significant in predicting satisfaction with promotion opportunities; however, it was not significant for predicting satisfaction for the other four scales of co-workers, pay, supervision, and work.

**Type of Institution.** Empirical studies have established a relationship between the structural complexity of an organization and job satisfaction (Oldham & Hackman, 1981; Rousseau, 1978; Lincoln & Kalleberg, 1990). Therefore, this study investigated the relationship between the type of institution (research, doctorate, master's, and baccalaureate) and job satisfaction. The type of institution was significant in predicting satisfaction with promotion opportunities, but it was not significant in predicting satisfaction for the remaining four job satisfaction scales.

**Job Characteristics.** A relationship between job characteristics and job satisfaction has been observed in several studies (Hackman & Oldham, 1975; Katz, 1978; Kalleberg, 1977; Gerhart, 1987; Glisson & Durick (1988). In this study, job characteristics were examined in terms of job functions and the percent of time spent on the following functions: research, teaching, service, advising students, and other job functions. Research was significant in predicting satisfaction with co-workers and supervision. Neither teaching nor service were significant for predicting satisfaction with any of the job satisfaction scales. Advising students was significant for predicting satisfaction with supervision and other job functions (e.g., administrative functions,
meetings, paperwork) was significant for predicting satisfaction with promotion opportunities.

Conclusions

Based on the research from this sample of women accounting educators at four-year colleges and universities, the following conclusions can be made:

1. Women accounting educators at four-year colleges and universities are satisfied with their co-workers, supervision, and work. They are neutral regarding satisfaction with pay, and they are dissatisfied with promotion opportunities.

2. Women accounting educators at research and doctoral universities express greater satisfaction with pay than women at baccalaureate colleges, as do women at research universities when compared to master's institutions.

3. There are differences in personality characteristics among women accounting educators at four-year colleges and universities. Women at doctorate and baccalaureate institutions are more conscientiousness than women at research universities; however, women at research universities are more open to new experiences and are more imaginative than women at doctorate and baccalaureate institutions.

4. There is a difference among women accounting educators regarding satisfaction with institutional resources. Satisfaction with institutional resources, from highest to lowest degree of satisfaction, based type of institution is: research, doctorate, master's, and baccalaureate.
5. The percent of time spent on job functions by women accounting educators varies depending on the type of institution at which they work.

6. Satisfaction with co-workers for women accounting educators is associated with agreeableness, conscientiousness, neuroticism, institutional resources, mentoring, and of time spent on research.

7. Satisfaction with pay for women accounting educators is associated with neuroticism, salary, rank, and institutional resources.

8. Satisfaction with promotion opportunities for women accounting educators is associated with agreeableness, salary, tenure, institutional resources, mentoring, networking, type of institution, and time spent on other job functions.

9. Satisfaction with supervision for women accounting educators is associated with personal and professional roles, agreeableness, salary, institutional resources, mentoring, and time spent on research and advising students.

10. Satisfaction with work for women accounting educators is associated with marital status, personal and professional roles, agreeableness, neuroticism, institutional resources, and mentoring.

11. The study shows that there are both individual and structural influences that effect job satisfaction. Therefore, it is important to use an integrated model, which incorporates both individual sources of job satisfaction and structural sources of job satisfaction, to investigate job satisfaction. These research findings support Feldberg and Glenn's (1979) statement, "...it behooves researchers to cast aside a single-focus perspective in favor of integrative models" (p. 534).
Recommendations for Future Research

The recommendations for future research are based on the findings of this study, the comments made by the respondents (see Appendix G), and the literature on job satisfaction. The recommendations include:

1. The scope of the study should be expanded to include men in accounting education at four-year colleges and universities. By including men, comparisons could be made on levels of job satisfaction based on gender. Also, a feeling of inequity in regard to gender was found in the respondents' comments. Therefore, including men in the sample might lead to the identification of differences between men and women (e.g., salary, tenure, rank, etc.) to determine if inequities exist.

2. A small percentage (7.8) of women accounting educators in this study were minorities. This is representative of the faculty at higher education institutions. Tack and Patitu (1992) state, "Without a doubt, the small number of minority faculty in higher education has become an important national issue . . . Minority faculty members are crucial to the personal and academic success of minority students" (p.55). To increase minority faculty members in accounting it is important to identify areas which have contributed to their selection of accounting as a career choice and to identify factors which have contributed to career success. To accomplish this, a follow-up study is recommended which would consist of both a questionnaire and follow-up interviews.

3. While this study focused on differences in job satisfaction based on the type of institution, it would be interesting to investigate differences in job satisfaction based on
other factors. Examples of other areas which could be examined include differences in satisfaction levels due to academic rank, tenure, salary, age, and educational level.

4. Several comments were made by respondents regarding the work environment which existed at their institutions and within their departments. The work environment was an area which was not investigated in this study. However, based on the comments work environment should be included in future studies of job satisfaction.

5. The scope of the study should be expanded to include women in other disciplines within the business college or within the university. This would enable comparisons between other disciplines to determine if differences in job satisfaction exist based on academic discipline.
A National Survey on

**JOB SATISFACTION AMONG WOMEN ACCOUNTING EDUCATORS**

This study focuses on how individual and organizational factors impact job satisfaction. The survey has been numbered for follow-up purposes only, and you can be assured confidentiality.

Would you like to receive a free 1-page summary of your personality dimensions based on the Personality Inventory included in the questionnaire?  

Yes  
No

**About You**

**Directions:** Indicate your answer by circling the appropriate number or writing your response on the line provided.

**Are You?**
1. Asian, Asian American
2. African American
3. Latino, Hispanic, Mexican American
4. White, Caucasian
5. Other (please specify) 

**Martial Status:**
1. Single
2. Married
3. Divorced or Separated
4. Widowed
5. Other (please specify)

**Please indicate the highest degree you have achieved:**
1. Bachelor's Degree
2. Master's Degree
3. Doctoral Degree
4. All but Dissertation
5. Other (please specify)

**Number of children you have who are:**
- Less than 3 years old
- 3 to 6 years old
- 7 to 12 years old
- 13 to 18 years old
- Above 18 years old

**Your year of birth:**

**Professional and Personal Roles**

Please circle the response that best represents your opinion using the following scale.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
</tbody>
</table>

1. My work schedule often conflicts with my family life.
2. After work, I come home too tired to do some of the things I'd like to do.
3. Because my work is demanding, at times I am irritable at home.
4. On the job, I have so much work to do that it takes away from my personal life.
5. My family dislikes how often I am preoccupied with my work when I am home.
6. My work takes time that I'd like to spend with my family.
7. My job makes it difficult to be the kind of spouse or parent I'd like to be.

### Institutional Resources

To what extent are the following resources available at your institution? Please circle the appropriate number for each item below.

<table>
<thead>
<tr>
<th>Far Below Average</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Far Above Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Computer support
2. Research assistants
3. Travel funds
4. Library resources
5. Other necessary supplies
6. Other necessary facilities

### Social Contacts

The following questions relate to mentors and networks. A mentor is an individual who enhances career growth opportunities. Networks involve a system of buddies who exchange professional information and ideas voluntarily. Based on these descriptions, please indicate your response to the following items by circling the appropriate number.

<table>
<thead>
<tr>
<th>Not at All</th>
<th>A Little</th>
<th>Some</th>
<th>A Lot</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. To what extent do you perceive yourself as belonging to a professional network(s)?
2. To what extent do you keep in touch with your network(s)?
3. To what extent do you rely on your network(s) for your career advancement?
4. To what extent have you been able to find a mentor over the course of your work life?
5. To what extent has having a mentor enhanced your career success?
6. To what extent have your mentors been from within your organization?
7. To what extent have your mentors been from outside your organization?
About Your Job

Directions: Indicate your answer by circling the appropriate number or writing your response on the line provided.

What is your current academic rank?
1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other (please specify) ________________

What is your current tenure status?
1. Fully tenured
2. Non-tenured, tenure track position
3. Non-tenure track position
4. Other (please specify) ________________

Present salary, excluding summer school and overloads:
1. Less than $30,000
2. Between $30,000 and $39,999
3. Between $40,000 and $49,999
4. Between $50,000 and $59,999
5. Between $60,000 and $69,999
6. $70,000 or more

What estimated percent of time do you devote to:

____________ Research
____________ Teaching
____________ Service on Committees
____________ Advising Students
____________ Other (please specify) ________________

100% Total

Please make any other additional comments that you think are important for this survey.

Thank you very much for your assistance in this study.
If you have misplaced your return envelope, please send to:

University of North Texas
Center for Higher Education
P. O. Box 13857
Denton, TX 76203-6857
September 15, 1995

Dear <TITLE> <LAST_NAME>:

Here at the Center for Higher Education we currently have underway a national study of job satisfaction among women accounting educators. The study is being conducted by the Center in conjunction with Cynthia Vest's doctoral dissertation. And we need your cooperation in order to complete the study.

Only a small number of women accounting educators are being asked to participate in this study so your participation is very important. The questionnaire can be completed in approximately 30 minutes. Your responses will be kept in strict confidence and will be used only in combination with those of others in the sample. The information gained in this research will not be associated with you in any way. So please be candid.

Please use the enclosed postage-paid envelope to mail your completed questionnaire by Friday, September 29, 1995. In appreciation of your cooperation, we will be glad to send you a complimentary 1-page summary of your personality dimensions based on your preferences from the personality inventory. Just mark the appropriate line on the front page of the questionnaire to indicate your interests in receiving the report.

If you have any questions, please call or fax the numbers noted below. Please know that your assistance is greatly appreciated.

Sincerely,

D. Barry Lumsden  Cynthia Ann Vest
Director  Research Associate
(817) 565-4074  (817) 232-7704

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects.
APPENDIX C

POST CARD FOR FOLLOW-UP MAILING
Dear <TITLE> <LAST_NAME>:

You recently received a questionnaire regarding **Job Satisfaction Among Women Accounting Educators**. If you have already returned the questionnaire, *Thank You*.

If you have not had a chance to do so, please take a few minutes to complete and return the questionnaire in the postage-paid envelope supplied. Your response is important to us and will be kept in the strictest confidence.

Sincerely,

D. Barry Lumsden, Director
Center for Higher Education
APPENDIX D

COVER LETTER FOR FINAL MAILING
October 16, 1995

Dear [Name]:

We recently sent you a questionnaire regarding *Job Satisfaction of Women Accounting Educators*. Your response is very important to us, so we are making a final appeal for you to reply. Another questionnaire is enclosed in case you have misplaced the original one.

Only a small number of women accounting educators have been asked to participate in this study. Your responses will be kept in strict confidence and will be used only in combination with those of others in the sample. The information gained in this research will not be associated with you in any way. So please be candid.

Please use the enclosed postage-paid envelope to mail your completed questionnaire by Friday, October 27, 1995. In appreciation of your cooperation, we will be glad to send you a complimentary 1-page summary of your personality dimensions based on your preferences from the personality inventory. Just mark the appropriate line on the front page of the questionnaire to indicate your interests in receiving the report.

Your assistance is greatly appreciated. Without the cooperation of professionals such as you, the completion of our research will not be possible.

Sincerely,

D. Barry Lumsden
Director

Cynthia Ann Vest
Research Associate

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects.
APPENDIX E

COVER LETTER FOR PERSONALITY INVENTORY SUMMARY
November 27, 1995

Dear <TITLE> <LAST_NAME>: 

The Center for Higher Education would like to thank you for your response to our survey on *Job Satisfaction Among Women Accounting Educators*. Your cooperation resulted in a 66% response rate.

In appreciation of your cooperation, we have enclosed a complimentary 1-page summary of your personality dimensions. Your personal summary is based on your responses to the Personality Inventory included in the questionnaire you completed.

Again, a special *thanks* for participating in the study.

Sincerely,

D. Barry Lumsden          Cynthia Ann Vest
Director                  Research Associate

This project has been reviewed and approved by the UNT Committee for the Protection of Human Subjects.
APPENDIX F

PERSONALITY INVENTORY SUMMARY
Your

Personality Inventory

Summary

The Personality inventory measures five broad domains, or dimensions, of personality. The responses that you gave to the statements about your thoughts, feelings, and goals can be compared with those of other adults to give a description of your personality.

For each of the five domains, descriptions are given below for different ranges of scores. The descriptions that are checked provide descriptions of you, based on your responses to the inventory items.

The personality inventory measures differences among normal individuals. It is not a test of intelligence or ability, and it is not intended to diagnose problems of mental health or adjustment. It does, however, give you some idea about what makes you unique in your ways of thinking, feeling, and interacting with others.

This summary is intended to give you a general idea of how your personality might be described. It is not a detailed report. If you completed the inventory again, you might score somewhat differently. For most individuals, however, personality traits tend to be very stable in adulthood. Unless you experience major life changes or make deliberate efforts to change yourself, this summary should apply to you throughout your adult life.

Compared with the responses of other people, your responses suggest that you can be described as:

<table>
<thead>
<tr>
<th>Sensitive, emotional, and prone to experience feelings that are upsetting.</th>
<th>Generally calm and able to deal with stress, but you sometimes experience feelings of guilt, anger, or sadness.</th>
<th>Secure, hardy, and generally relaxed even under stressful conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraverted, outgoing, active, and high-spirited. You prefer to be around people most of the time.</td>
<td>Moderate in activity and enthusiasm. You enjoy the company of others but you also value privacy.</td>
<td>Introverted, reserved, and serious. You prefer to be alone or with a few close friends.</td>
</tr>
<tr>
<td>Open to new experiences. You have broad interests and are very imaginative.</td>
<td>Practical but willing to consider new ways of doing things. You seek a balance between the old and the new.</td>
<td>Down-to-earth, practical, traditional, and pretty much set in your ways.</td>
</tr>
<tr>
<td>Compassionate, good-natured, and eager to cooperate and avoid conflict.</td>
<td>Generally warm, trusting, and agreeable, but you can sometimes be stubborn and competitive.</td>
<td>Hardheaded, skeptical, proud, and competitive. You tend to express your anger directly.</td>
</tr>
<tr>
<td>Conscientious and well-organized. You have high standards and always strive to achieve your goals.</td>
<td>Dependable and moderately well-organized. You generally have clear goals but are able to set your work aside.</td>
<td>Easygoing, not very well-organized, and sometimes careless. You prefer not to make plans.</td>
</tr>
</tbody>
</table>
APPENDIX G

RESPONDENTS COMMENTS CATEGORIZED

BY TOPIC
<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-Workers</td>
<td>The reward for doing a good job is that you are asked to do more, while those who don't do well are rewarded with fewer responsibilities.</td>
</tr>
<tr>
<td></td>
<td>I found it difficult to make definitive judgments on the co-worker statements because some colleagues fall in one category while an equal number fall in the opposite category.</td>
</tr>
<tr>
<td></td>
<td>Some questions about co-workers are not accurate because the answer would really be yes and no because of differences. My co-workers run the gamut.</td>
</tr>
<tr>
<td></td>
<td>The portion on co-workers is hard to answer because some are wonderful while others not.</td>
</tr>
<tr>
<td>Equality</td>
<td>My university talks a mean game about women's rights and encouraging diversity. Unfortunately, they fail to act on it.</td>
</tr>
<tr>
<td></td>
<td>Equal treatment with male colleagues? No! This is my main dissatisfaction.</td>
</tr>
<tr>
<td>Mentoring</td>
<td>Mentor is a distinct notion from inspirationals. The later could be relevant in evaluating job satisfaction.</td>
</tr>
<tr>
<td>Networking</td>
<td>I worked for 12 years in this community before joining the faculty. I have rather extensive networks which are quite different than the normal faculty member. This can be a benefit, but it also means I know and associate with fewer academics around the country which can be a detriment.</td>
</tr>
<tr>
<td></td>
<td>I take each sabbatical to go to a major university to renew &quot;networking.&quot;</td>
</tr>
<tr>
<td>TOPIC</td>
<td>COMMENT</td>
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<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pay</td>
<td>While the salary is good, the relationship of the only woman full professor's salary to the men's is striking.</td>
</tr>
<tr>
<td></td>
<td>The merit pay system at this university does not work and actually discourages work.</td>
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<tr>
<td></td>
<td>Male professor with similar credentials make more money than I do.</td>
</tr>
<tr>
<td></td>
<td>My current salary is $6,000 less than any male counterpart in my area even though they have less teaching experience and no better academic credentials. This harbors lots of ill will.</td>
</tr>
<tr>
<td></td>
<td>Colleagues with PhD's, less service, fewer publications, and poor teacher evaluations make 30% more than I do even though several publish in the same journals.</td>
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<tr>
<td></td>
<td>I am a CPA and have an accounting practice. I could definitely not live on teaching salary.</td>
</tr>
<tr>
<td></td>
<td>It's really frustrating to hear a student comment on a job offer where they will make more money than their instructor in the 1st year of employment!</td>
</tr>
<tr>
<td></td>
<td>I am a CPA with 20 years in public accounting. I enjoy university teaching. While the pay is far less than I can earn in public accounting, the work load and stress level are also greatly reduced.</td>
</tr>
<tr>
<td></td>
<td>Pay is low, but if I have to work for a living I can't think of anything I'd rather do. My job is great!</td>
</tr>
<tr>
<td>Promotion</td>
<td>Being 1 of 10 tenured women faculty members in a college of 100+ is very discouraging. There is little opportunity to become chair of a department.</td>
</tr>
<tr>
<td></td>
<td>Promotions do not give credit for teaching ability. Teaching is something I love to do and happen to be very good at doing!</td>
</tr>
</tbody>
</table>
### TOPIC

**Tenure**
The pressure of the tenure clock is the only thing that I don't like about my job.

I think that a CPA/Master's with an excellent teaching record and plenty of outside work experience should be able to be placed on a tenure track position after a certain number of years. I do more work than many professors.

---

**Type of Institution**

It is very hard at a small school to discuss research, even current topics, with your colleagues from the liberal arts. They don't understand.

---

**Work**

In my position, the demands for time have increased every year to the point where I often feel discouraged that I can never get caught up. I lack any free time for thinking, hence I believe my creative approach to my job is limited.

I believe in what I do -- that it is important -- that I can make a difference.

Women do most of the difficult work (heavy undergrad, multiple and split prep courses each semester, nonpolicy making service) and must deliver the same research goals. In other words, women work twice as hard with five times more obstacles and are less likely to be rewarded for excellence in research and teaching.

I think one of the key differences between men and women professors is that women feel more of an obligation to do a good job in the classroom to the detriment of research.

I was so dissatisfied that I quit teaching in August, 1995. With rare exception, I hated the people I worked with. I might like teaching in a different discipline. In accounting I received no mentoring and little support or concern for my professional progress by my fellow faculty members.

I work during the summer at no pay on research and service activities.
TOPIC | COMMENT
--- | ---
Work | I have been Dean and Associate Vice President of Academic Affairs. I returned to the faculty by my own choice -- it is more enjoyable to teach.

You did not request information on job hours. I teach a lot of nights until 11:00 p.m., which is the only source of conflict between personal and professional life.

My family thinks I work all the time, which I almost do. I love my work and can't seem to give any of it up.

Too much time spent in meetings, not enough time for scholarship, development, and teaching.

The most frustrating part of my job is trying to find people when I need them. People are rarely in their offices.

I feel I should be compensated on an equal basis with the tenure track faculty for doing a comparable job. I teach more classes, have more advisees, have better teaching evaluations, do more service, and more research than a lot of the tenure track faculty and easily receive 1/2 the pay. Something is not fair about this system.

I am often stressed and tired. I am not around campus as much as others which can be limiting. I am looking forward to when my kids are in school full-time. Maybe my opportunities to get ahead will increase.

This 3/4 time non-tenure track position lets me balance work and family. Promotion is not really a part of the picture, but the stress level is practically non-existent -- quite a change from the Big 6!

Environment | The atmosphere in this department is extremely political. There are 3 groups, the old, the young, and 2 of us who do not belong to either.

My sexist, hostile, control freak department head has created a nightmare work environment. The time I have invested in working around him has cost me dearly in terms of mental and physical health.
<table>
<thead>
<tr>
<th>TOPIC</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>An old boy's network to the max! Women with ideas are not treated kindly.</td>
</tr>
<tr>
<td>Environment</td>
<td>I am the only woman in an all male business faculty. All other women have left because of the atmosphere here. It is very difficult.</td>
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<tr>
<td></td>
<td>The atmosphere for the most part is cooperative. A new administration that understands &quot;professional&quot; majors within the liberal arts setting has helped morale improve considerably.</td>
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<tr>
<td></td>
<td>The resources in departments are generally unknown to women and unfairly distributed when you are knowledgeable.</td>
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<tr>
<td></td>
<td>The college environment is extremely political. Unless you're in with the right people you might as well forget all of your research, credentials, etc.</td>
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<tr>
<td></td>
<td>Peers fail to view me as a peer because of my lack of a PhD. I have a master's and 12 years of excellent work experience. I think the academic community needs to become more open-minded with regard to what makes a &quot;good teacher.&quot;</td>
</tr>
<tr>
<td>Questionnaire</td>
<td>Cool stationery -- only questionnaire I've answered deliberately in 4 years.</td>
</tr>
<tr>
<td></td>
<td>Pretty stationery!</td>
</tr>
<tr>
<td></td>
<td>Some of the questions did not seem pertinent to higher education.</td>
</tr>
<tr>
<td></td>
<td>Great aesthetics for a survey to women.</td>
</tr>
<tr>
<td></td>
<td>This is the most beautiful survey I've ever seen. Would you get men to respond by making it pretty? Without surveying men what will you learn?</td>
</tr>
</tbody>
</table>
|              | This is the most visually appealing, professional looking survey I've ever completed. Way to go!
Questionnaire | This survey is well-designed. Good luck!

Attractive design made me complete this as opposed to the many other surveys I get weekly.

I didn't send this in the first time because of the topic. I hope this survey doesn't result in an article whining about women's place in society.

I don't think some of these questions are appropriate for academics. Good luck on you research!

Hope it gets published!

Nice stationery! I appreciate the dignity given to women by this small gesture.

Are you going to compare this group to other women and / or other female professionals? I'd love to see how we compare.
REFERENCES


*International Journal of Women's Studies, 1*, 179-189.


*Educational Research Quarterly, 10*, 36-44.


