Job Satisfaction and its Relationship to Organizational and Religious Commitment Among Workers at Northern Caribbean University

Donna Brown
Andrews University

Follow this and additional works at: https://digitalcommons.andrews.edu/dissertations

Part of the Educational Assessment, Evaluation, and Research Commons, Higher Education Commons, and the Human Resources Management Commons

Recommended Citation
Brown, Donna, "Job Satisfaction and its Relationship to Organizational and Religious Commitment Among Workers at Northern Caribbean University" (2005). Dissertations. 243.
https://digitalcommons.andrews.edu/dissertations/243

This Dissertation is brought to you for free and open access by the Graduate Research at Digital Commons @ Andrews University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons @ Andrews University. For more information, please contact repository@andrews.edu.
Thank you for your interest in the

Andrews University Digital Library
of Dissertations and Theses.

Please honor the copyright of this document by not duplicating or distributing additional copies in any form without the author’s express written permission. Thanks for your cooperation.
Andrews University
School of Education

JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL
AND RELIGIOUS COMMITMENT AMONG WORKERS AT
NORTHERN CARIBBEAN UNIVERSITY

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Donna Brown
June 2005
INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.
JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL AND RELIGIOUS COMMITMENT AMONG WORKERS AT NORTHERN CARIBBEAN UNIVERSITY

A Dissertation
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by

Donna Brown

APPROVAL BY THE COMMITTEE:

Chair: Hinsdale Bernard

Member: James R. Jeffery

Member: Jimmy Kijai

External: Athanase Rutebuka

Dean, School of Education
James R. Jeffery

Date approved: June 21, 2005
ABSTRACT

JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL AND RELIGIOUS COMMITMENT AMONG WORKERS AT NORTHERN CARIBBEAN UNIVERSITY

by

Donna Brown

Chair: Hinsdale Bernard
ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University
School of Education

Title: JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL AND RELIGIOUS COMMITMENT AMONG WORKERS AT NORTHERN CARIBBEAN UNIVERSITY

Name of researcher: Donna Brown

Name and degree of faculty chair: Hinsdale Bernard, Ph.D.

Date completed: June 2005

Problem

Recruiting teachers and motivating them to stay in their jobs present a challenge to educational institutions in Jamaica. Given the importance of workers’ satisfaction to the health of an organization and the link between job satisfaction and turnover rate, then an examination of job satisfaction at Northern Caribbean University (NCU) is a priority. Based on this background, the primary focus of this study was to investigate job satisfaction and its relationship to organizational and religious commitment among workers at NCU.
Method

This study utilized a quantitative, descriptive research design. A survey questionnaire was sent to all full-time administrators and sector managers, faculty, and staff members who were currently employed by the university at the time of the study. The questionnaire solicited information using (a) five demographic questions (occupational area, gender, age, educational level, and length of employment), (b) 15 items to measure professional satisfaction, (c) 10 items to estimate the level of organizational commitment, and (d) 7 items were used to assess intrinsic religious motivation. Responses were measured on a 5-point Likert-type scale. Data were statistically analyzed by using descriptive statistics, analysis of variance, and multiple regression analysis.

Results

This study revealed that NCU workers displayed neutral levels of satisfaction with their jobs. Overall, they were most satisfied with their responsibility, achievement, relations with peers and students, and work itself. The lowest level of satisfaction was found for organizational policy, administration, working conditions, and salary. The investigation revealed that overall job satisfaction and its intrinsic and extrinsic facets were influenced by demographic variables such as occupational area, gender, age, educational level, and length of employment. Organizational commitment was related to age and length of employment. Religious commitment was related to occupational area, age and educational level. Organizational commitment was the better predictor of job satisfaction.
Conclusion

The employees of NCU have a high level of religious and organizational commitment but only a neutral level of job satisfaction. This level of job satisfaction is affected by demographic and institutional factors, and by the organizational and religious commitment of the employees.
Dedicated to my dad, the late Rupert Roy Brown.
TABLE OF CONTENTS

LIST OF TABLES ............................................................................................................. vii
ACKNOWLEDGMENTS .................................................................................................. xi

Chapter

I. INTRODUCTION .............................................................................................. 1
   Background and Rationale ............................................................................... 1
   Religious Commitment .............................................................................. 6
   Context of the Study ............................................................................... 9
      West Indies Union ............................................................................... 9
      Local Universities ............................................................................ 10
   Statement of the Problem ....................................................................... 11
   Purpose of the Study ............................................................................. 13
   Conceptual Framework ....................................................................... 13
   Research Questions .............................................................................. 18
   Research Hypotheses .......................................................................... 18
   Basic Methodology ............................................................................ 21
   Significance of the Study .................................................................. 21
   Limitations and Delimitations ............................................................. 23
   Definition of Terms ............................................................................ 23
   Organization of the Study ................................................................... 26

II. REVIEW OF LITERATURE ........................................................................... 28
   Job Satisfaction .................................................................................... 29
      Definition ....................................................................................... 29
      Theoretical Framework .................................................................. 31
         Framework One: Content Theories ............................................ 31
            Maslow’s theory and job satisfaction .................................. 32
            Alderfer’s ERG theory ......................................................... 33
            Herzberg’s motivator-hygiene theory .................................. 34
            McClelland’s learned needs theory .................................... 36
         Framework Two: Process Theories ............................................. 37
         Framework Three: Situation Models ......................................... 38
IV. RESULTS .................................................................................................... 94
   Characteristics of the Subjects ............................................................... 94
   Measures of Reliability ........................................................................... 96
   Data Analysis of Research Questions ................................................... 96
   Testing the Null Hypotheses ................................................................. 108
   Major Findings of the Study ................................................................. 135

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS ...... 139
   Research Methodology ......................................................................... 139
   Summary of the Literature .................................................................... 140
   Results and Conclusions ...................................................................... 143
      Research Question 1 ........................................................................ 143
      Research Question 2 ........................................................................ 147
      Research Question 3 ........................................................................ 153
   Implications for the University ............................................................. 154
   Recommendations for Future Research .............................................. 159

Appendix

   A. NORTHERN CARIBBEAN UNIVERSITY
      EMPLOYEE SURVEY ........................................................................ 161
   B. LETTER OF APPROVAL FROM THE ANDREWS
      UNIVERSITY INSTITUTIONAL REVIEWS BOARD .......... 166
   C. LETTERS OF CORRESPONDENCE ........................................... 168

REFERENCE LIST ..................................................................................... 172

VITA ............................................................................................................. 198
LIST OF TABLES

1. Frequency and Percentage of Selected Characteristics of Workers at NCU .... 95
2. Measures of Reliability Scales for Job Satisfaction and Organizational and Religious Commitment................................................................. 97
3. Descriptive Statistics for Overall, Intrinsic, and Extrinsic Job Satisfaction for NCU Employees by Occupational Area ........................................ 98
4. Descriptive Statistics for Intrinsic Job Satisfaction Factors for NCU Employees by Occupational Area ............................................................... 99
5. Mean Scores for Extrinsic Job Satisfaction Factors for NCU Employees ...... 100
6. Mean Ranking for All 15 Job Satisfaction Factors for NCU Administrators/Sectors Managers ................................................................. 101
7. Mean Ranking for All 15 Job Satisfaction Factors for NCU Faculty ........... 102
8. Mean Ranking for All 15 Job Satisfaction Factors for NCU Staff ............... 103
9. Mean Ranking for All 15 Job Satisfaction Factors for NCU Workers by Occupational Area ................................................................. 104
10. Descriptive Statistics for Organizational Commitment for NCU Workers by Occupational Area ............................................................... 105
11. Descriptive Statistics for Religious Commitment for NCU Workers by Occupational Area ................................................................. 105
12. Descriptive Statistics for Age Groups of NCU Workers ............................ 106
13. Descriptive Statistics for Educational Level of NCU Workers ................... 107
14. Mean Scores for Length of Employment for NCU Workers .......................... 108
15. One-Way Analysis of Variance – Overall Job Satisfaction by Occupational Area .................................................................................................. 109
16. One-Way Analysis of Variance – Intrinsic Job Satisfaction by Occupational Area
17. Post-Hoc Analysis for Intrinsic Job Satisfaction by Occupational Area
18. One-Way Analysis of Variance – Extrinsic Job Satisfaction by Occupational Area
19. t-Test Results for Overall, Intrinsic, and Extrinsic Job Satisfaction Among Workers at NCU by Gender
20. One-Way Analysis of Variance – Overall Job Satisfaction by Age Group
21. Post-Hoc Analysis for Overall Job Satisfaction by Age Group
22. One-Way Analysis of Variance – Intrinsic Job Satisfaction by Age
23. Post-Hoc Analysis for Intrinsic Job Satisfaction by Age
24. One-Way Analysis of Variance – Extrinsic Job Satisfaction by Age
25. Post-Hoc Analysis for Extrinsic Job Satisfaction by Age
26. One-Way Analysis of Variance – Overall Job Satisfaction by Educational Level
27. Post-Hoc Analysis for Overall Job Satisfaction by Educational Level
28. One-Way Analysis of Variance – Intrinsic Job Satisfaction by Educational Level
29. Post-Hoc Analysis for Intrinsic Job Satisfaction by Educational Level
30. One-Way Analysis of Variance – Extrinsic Job Satisfaction by Educational Level
31. Post-Hoc Analysis for Extrinsic Job Satisfaction by Educational Level
32. One-Way Analysis of Variance – Overall Job Satisfaction by Length of Employment
33. One-Way Analysis of Variance – Extrinsic Job Satisfaction by Length of Employment
34. One-Way Analysis of Variance – Extrinsic Job Satisfaction by Length of Employment ..................................................................................................... 121

35. Post-Hoc Analysis for Extrinsic Job Satisfaction by Length of Employment ..................................................................................................... 122

36. One-Way Analysis of Variance – Organizational Commitment by Occupational Area ..................................................................................................... 122

37. t-Test Results for Organizational Commitment Among Workers at NCU by Gender ..................................................................................................... 123

38. One-Way Analysis of Variance – Organizational Commitment by Age ..................................................................................................... 124

39. Post-Hoc Analysis for Organizational Commitment by Age ..................................................................................................... 124

40. One-Way Analysis of Variance – Organizational Commitment by Educational Level ..................................................................................................... 125

41. One-Way Analysis of Variance – Organizational Commitment by Length of Employment ..................................................................................................... 125

42. Post-Hoc Analysis for Organizational Commitment by Length of Employment ..................................................................................................... 126

43. One-Way Analysis of Variance – Religious Commitment by Occupational Area ..................................................................................................... 127

44. Post-Hoc Analysis for Religious Commitment by Occupational Area ..................................................................................................... 127

45. t-Test Results for Religious Commitment Among Workers at NCU by Gender ..................................................................................................... 128

46. One-Way Analysis of Variance – Religious Commitment by Age ..................................................................................................... 128

47. Post-Hoc Analysis for Religious Commitment by Age ..................................................................................................... 129

48. One-Way Analysis of Variance – Religious Commitment by Educational Level ..................................................................................................... 130

49. Post-Hoc Analysis for Religious Commitment by Educational Level ..................................................................................................... 130

50. One-Way Analysis of Variance – Religious Commitment by Length of Employment ..................................................................................................... 131
51. Mean, Standard Deviations and Correlations Between Workers at NCU - Overall Satisfaction Score and Religious and Organizational Commitment Variables

52. Linear Regression Results for NCU Workers' Overall Satisfaction Scores and Commitment Variables

53. Mean, Standard Deviations and Correlations Between Workers at NCU - Intrinsic Satisfaction Score and Religious and Organizational Commitment Variables

54. Linear Regression Results for NCU Workers' Intrinsic Satisfaction Score and Commitment Variables

55. Mean, Standard Deviations, and Correlations Between Workers at NCU - Extrinsic Satisfaction Score and Religious and Organizational Commitment Variables

56. Linear Regression Results for NCU Workers' Extrinsic Satisfaction Score and Commitment Variables
ACKNOWLEDGMENTS

I am forever thankful to God for His awesome love and guidance that He so graciously lavished upon me throughout the preparation of this dissertation. This dissertation process has drawn me closer to Him and I will continue to sing His praises because, without Him, achieving this significant milestone in my life would not have been possible.

My sincere thanks are extended to everyone who contributed towards the successful completion of this dissertation. Although it is not possible to name everybody, I am very grateful for an endless list of people who have walked with me since the commencement of this journey. I would like to express my deepest appreciation to the hardworking members of my dissertation committee for their invaluable contribution in guiding me through this crucial experience.

I am forever grateful to Dr. Hinsdale Bernard, my dissertation chair for the “Christ-like” manner in which he guided me through this process. His patience, support, encouragement, and guidance served as the motivating force that inspired me with the urge to go on. I would also like to thank Drs. Jim Jeffery and Jimmy Kijai for their insightful observations, helpful suggestions, and guidance. The timely and efficient manner in which you all guided the process to completion will long be remembered.

This study could not have been possible without the cooperation of the administrators, faculty, and staff members of Northern Caribbean University. Their
cooperation and the invaluable information that they provided were a source of great help and motivation. A special thanks to Dr. Kenneth Morgan, Andel Bailey, Derrick Hewitt, Camille Mason, and Stacey Nicely for their moral support and assistance with this study.

I thank my prayer partners, Evadne Barrett, Grace Beckford, Michelle Brown, Lorretta Duare, Donna Frazer, Beverly Henry, Gloria Roberts, and Karen Watson, for their many prayers and words of inspiration.

To my past classmates, Dr. Christon Arthur and Dr. Marcel Sargeant, I thank you both for believing in me even when I doubted.

To my special friends, Edgar and Eunice Vegar, Heather Sherwood, Oma Strachan, and Enoch Walters, thanks for your help in guiding me through my first winter experience. I will forever remember your timely phone calls, your welcome visits, and words of encouragement.

Special thanks to Michelle Paris for her editorial work, and Bonnie Proctor, dissertation secretary, for her time and effort spent to make this study presentable.

Finally, I say a big thank-you to my family: To my mother, Delores Brown for her unconditional love and words of encouragement, and to my sisters (especially Marcia and her family), brothers, nieces, nephew, and my aunt Beverly Stewart, for their prayers and moral support. I will be forever grateful for the many acts of kindness that you displayed in helping to make this dream a reality.
CHAPTER 1

INTRODUCTION

Background and Rationale

Employee satisfaction and retention have always been important issues for both people who work in an organization and people who study them (Syptak, Marshall, & Wilmer, 1999). Wood (1976) asserts, “The health of an educational institution depends on the job satisfaction of its employees” (p. 58).

Several studies have been conducted to investigate the level of job satisfaction among employees within different types of organizations. For example, Cranny, Smith, and Stone (1992) estimated that more than 5,000 relevant job satisfaction studies have been published during the 20th century.

Why is there the strong interest in job satisfaction? Roznowski and Hullin (1992) believe that after an individual is hired, knowledge of his or her job satisfaction becomes the most important piece of data a manager or organizational psychologist can have. Robbins (1998) concluded that impressive evidence exists concerning the significance of job satisfaction. A satisfied workforce leads to higher productivity because of fewer disruptions such as absenteeism, departure of good employees, and incidences of destructive behavior.
Although extensive research has been done in this area, there are still some major controversies as to what are the real factors that contribute to workers’ satisfaction and dissatisfaction at the workplace. While findings have traditionally suggested that people are motivated by the intrinsic satisfaction they find in doing job-related tasks (Hackman & Oldman, 1980), other studies highlight the dominance of extrinsic rewards as important means for motivating employees (Butler, 1982; Gruenburg, 1980; Seybolt, 1976).

It was Frederick Herzberg (1957) who first introduced the idea that those things that contribute to worker satisfaction were separate and distinct from those things that cause dissatisfaction. He theorized that employee satisfaction has two dimensions, “hygiene factors and motivation” (p. 113). The hygiene factors included salary, company policies, and administrative as well as supervisory practices. They were seen as potential sources of dissatisfaction but not of a positive motivation. The motivators, on the other hand, create satisfaction by fulfilling individual needs for personal growth. They are issues such as achievement, recognition, the work itself, responsibility and advancement. This orientation is consistent with Maslow’s hierarchy of needs and bases of motivation. Both Maslow and Herzberg agree that once the hygiene areas are addressed, the motivators will promote job satisfaction and encourage production. Herzberg (1957) further stated that people work effectively when they are well treated physically and psychologically. He stated that

industry, as the dominating institution in our society, must recognize that if it is to use human beings effectively, it must treat them in terms of their complete nature rather than in terms of those characteristics that appear to be suitable to their
organization. Industry cannot progress by continuing to perpetuate a half-conceptual view of man. (p. 170)

Frataccia and Hennington (1982) believe that Herzberg’s Motivation-Hygiene theory is related to Maslow’s hierarchy of needs theory. The factors associated with the motivation component of this theory are related to self-actualization: achievement, recognition, work itself, advancement, and responsibility. The factors associated with the hygiene component involve security and social needs: interpersonal relationships and working conditions.

Unlike workers in the 70s and 80s who valued interesting work above everything else, the results of past studies (Karl & Sutton, 1998) suggest that today’s workers place the highest value on extrinsic factors, such as good salaries and job security. A short review of the history of work motivation revealed that pay was believed to be the most important factor of job satisfaction around the turn of the 19th century. Several decades later the Hawthorne Studies revealed a larger set of values in which quality of supervision replaced pay as the most instrumental factor (Mayo, 1933; Roethlisberger & Dickson, 1939). About a decade later security and advancement were identified as the top priorities (Jurgensen, 1947). The same survey concluded in 1975 that type of work followed by security and advancement were the most important factors (Jurgensen, 1978). Pay was ranked only average in both studies. A similar survey given to industrial workers in 1981 and 1986 ranked interesting work first, followed by appreciation of work and feeling of being “in” on things (Kovach, 1987).

Certainly the economic, social, technological, and political conditions of the 90s characterized by massive layoffs (Cameron, 1994) and increasing health-care costs (Samuelson, 1994) may have caused a deviation from Herzberg’s notion and resulted in
the perception that the most important job satisfaction factors are located within the extrinsic domain. This is amplified by Jennings (2000) who stated that at the turn of the 20th century, money lifestyle issues had become the primary motivators for individuals between 21 and 35. In this context, job factors of importance were flexible schedules, shorter commuting distance, interesting work culture, prestige, titles, and amenities, such as offices, in-house gyms, and day-care centers.

Organizational commitment, a closely related construct, appears to deserve equal attention in this context. A committed employee could be expected to work more independently; to make sound decisions on the organization’s behalf, even in an unfamiliar situation; and to go beyond formal job requirements (Schroeder, 2003). A committed employee is also assumed to be more productive, to be absent less often, and to be less likely to leave the company for another job (Young, 1998).

Linkages have become increasingly important in modern society. Mowday, Porter, and Steers (1982), pioneers in the field of employee-employer relationships, considered important social linkages to exist in the form of employee commitment to the organization. They maintained that the range and quality of these relationships lead not only to important consequences for the organization but also for the individual and for society as a whole. These consequences may include, on one hand, negative behaviors such as low productivity, turnover, absenteeism, tardiness, and theft; or the demonstration of positive behaviors such as high productivity, loyalty, punctuality, dedication, and commitment that promote the organization’s success (Newstorm & Davis, 1997). In essence, strong linkages normally manifest themselves in care for the well-being of
another entity which goes beyond a mere calculation of the expected benefits to be gained (Tyree, 1996).

According to Klein and Izzo (1996), organizations and workers today are in the midst of a commitment crisis. Simpson (1995) stated that in many organizations there exists a growing commitment gap between the expectations of employers and what workers are prepared to do. At the same time, employers seem to depend more than ever on committed employees since the costs for recruitment and training are higher than the efforts of retaining present employees.

A survey of graduate expectations by High Fliers Research showed that, of 10,102 employees questioned, 40% planned to spend less than 2 years with their first employer. Only 16% expected to stay for at least 5 years (Prickett, 1998). Ettorre (1997) stated that costs related to turnover of an employee could run upward of 100% of an individual’s annual salary if extensive recruiting, company-paid temporary housing, and relocation were involved. It was also stated that turnover means a loss of time, productivity, and efficiency. Wilkerson (1998) compared good employees with valuable customers. According to him, it costs more to replace them than to retain the ones you have.

Therefore, employers need to keep in touch with current employee values in order to design jobs, reward systems, and human resource polices that would result in maximum job satisfaction and organizational behavior (Schroeder, 2003). Jeffries (1997) stated that a fair salary, benefits, and the opportunity to advance are baseline expectations for today’s workers. Additionally, employees consistently cited a value-centered, collegial, creative, and responsive environment as factors that cause them to choose and remain with one organization rather than another. They wanted to know how their
contributions were valued, not just once a year at performance reviews, but also as work is performed and goals are met.

**Religious Commitment**

Commitment is defined in the Thesaurus as the state of being bound emotionally or intellectually to a course of action. Religious commitment, then, shows the extent to which the individual is bound emotionally or intellectually to a particular course of action because of the impact of his spiritual values. The effect of a person’s religious commitment on his/her performance in an institution is very important, for it can be one of the factors which determines the extent to which he/she is committed to the mission of the institution.

Northern Caribbean University is owned and operated by a religious organization, the Seventh-day Adventist Church. This religious denomination owns and operates many other universities and educational institutions. As such, it has a general philosophy of education which influences how its educational institutions are operated. The general philosophy of SDA Christian Education is documented in the official publications of the church in books such as “Education” and “Counsels to parents, teachers, and students” by E. G. White.

In order to work for and be effective in the Adventist school system, it is critical for educators to comprehend the dimensions of the philosophy of “true Christian education” and their implications on leadership (Kh illah, 1986, p. 41).

All SDA educational institutions are to have a core mission which guides organizational policies, plans, and endeavors. Successful schools are characterized as having an administration and faculty who affirm and support the core mission (Chubb &
Moe, 1988, 1990). The Constitution of the SDA church states that the purpose of the SDA church is “to teach all nations the everlasting gospel of our Lord and Savior Jesus Christ” (SDA Yearbook, 1995, p. 9). In order to ensure that its educational philosophy is followed, the SDA church has an accreditation body which periodically assesses the operation of its educational institutions. Those institutions, which meet the standards set by the church, are normally given accreditation as an indication that they are adhering to these standards.

Northern Caribbean University is fully accredited by the SDA church, indicating that the university is adhering to the educational philosophy of the church and has an acceptable level of performance. The university operates in conformity to the philosophy and religious practices of the church. Consequently, the employees of the university are required to be supportive of the educational philosophy of the church and to show their support by the way they perform their responsibilities. The operational policies and guidelines of NCU are influenced by the educational philosophy of the university, which is similar to that of the SDA church.

The NCU Faculty and Staff Handbook (2000) states the following philosophy and objectives of the university:

The university seeks to maintain Christian atmosphere in which students may develop fully their spiritual, mental and physical capacities. Through formal and informal means, within and without the classroom, the University provides for, and seeks to encourage the adoption of the highest moral and ethical standards and values, as held by the Seventh-day Adventist Church. (p. 6)

The NCU philosophy and objectives are also highlighted in its mission statement:

Northern Caribbean University, a Seventh-day Adventist institution, has as its mission, quality Christ-centered education achieved through academic excellence, social interaction, spiritual development, and a strong work ethic, thereby fitting
each student for committed professional service to country and to God. *(Faculty and Staff Handbook, 2000, p. 4)*

In order to achieve its mission, the university seeks to employ administrators, faculty, and staff members who will support its philosophy and objectives, and whose performance and conduct will enhance the accomplishment of its goals. The University handbook seeks to provide guidelines for the manner in which all employees throughout the university perform their functions. In the section addressed to administrators, the handbook states that they should “support constructively the stated philosophy, aims and objectives of the S.D.A. church for the successful operation of its schools at all levels” (p. 11).

Similarly, faculty members are required to “be good examples of the principles communicated by precept, recognizing that it is not always what a teacher says that counts, but how he/she lives out Christianity in his/her daily life” (p. 14).

Employees whose religious commitment makes them supportive of the aims and objectives of the university and the SDA church are more likely to willingly follow these guidelines than those who lack this commitment. Consequently, it is very important for the university to be aware of the level of religious commitment of its employees and the level to which this commitment may affect the performance of their functions.

Few research studies have directly examined the relationship between job satisfaction and religious commitment *(Oberholster & Taylor, 1999)*. Research suggests that there could be a relationship between an individual’s spiritual experience and his/her organizational commitment *(Trott, 1997)*. Gillespie *(1988)* proposed that because “religious experience touches the larger self, religious commitment is a product of a person’s encounter with God” (p. 48).
It is becoming evident that the commitment and linkages (e.g., social linkage) of workers are essential to the growth of institutions and other corporate entities (Mowday et al., 1982; Newstorm & Davis, 1997; Tyree, 1996). For example, the development of The West Indies Union of Seventh-day Adventists and, in particular, institutions such as Northern Caribbean University will be fostered or hindered by the degree of job satisfaction enjoyed by the employees.

**Context of the Study**

**West Indies Union**

The West Indies Union Conference of Seventh-day Adventists is comprised of the four English-speaking nations of the Caribbean, namely, the Bahamas Islands, Cayman Islands, the Turks and Caicos Islands, and Jamaica. The West Indies Union Conference is the headquarters of the Seventh-day Adventist church within this region and has as its subsidiary organizations, four conferences, two missions, and two institutions. These two institutions are Andrews Memorial Hospital, in Kingston, Jamaica, and Northern Caribbean University in Mandeville, Manchester. The West Indies Union territory, with a current church membership of just under 220,000 and a University with over 4,000 students, has an ongoing challenge of discovering which factors tend to have the most consistent and greatest impact on the development of organizational commitment among the workforce.
Local Universities

In Jamaica there are three universities, namely the University of the West Indies, the University of Technology, and Northern Caribbean University (NCU). Northern Caribbean University is owned, operated, and funded by the Seventh-day Adventist Church, while the government funds the other two universities. The University of the West Indies has a student enrollment of over 10,000 and an academic staff of 486. The University of Technology has a student enrollment of over 6,000 and a faculty of approximately 544 (Ministry of Education, Youth, and Culture, 2003, para. 9 & 10). Northern Caribbean University has a student enrollment of over 4,000 and a faculty of 156. It can be noted that Northern Caribbean University has the highest student-to-teacher ratio. Quite recently research has shown that there is a rapid rate of teacher turnover within the country at all levels of the educational system. During the period 2000 and 2002, there was a massive recruitment drive for teachers to work in the United Kingdom and the United States of America. Miller (2003) stated:

The education system has been losing not only younger blood, but also veteran teachers, for greener pastures. Two years ago, the New York City Board of Education (NYCBOE) went on a massive recruitment drive in Jamaica to get specialist teachers (with experience) in areas like mathematics and science, raking in more than 300. An additional 150 teachers were also recruited by agencies from the United Kingdom within the period. (p. A5)

This new prospect of moving to greener pastures had a “ripple effect” on the education system. Many educators blamed the Government of Jamaica for the poor working conditions that they were exposed to in the education system, while some felt that they were not adequately compensated.

Although Northern Caribbean University is not Government operated, this problem of high turnover rate appears to be affecting the University and is of concern to
the administration. According to Northern Caribbean University employment records, (Northern Caribbean University, 2003), there was a 1.76% employee turnover for the University employees in 1999 for both faculty and staff. It was during this period that West Indies College was given university status and its name was changed to Northern Caribbean University.

During the academic periods August 2000-July 2002 there was a 17.38% turnover for faculty and a 2.71% turnover for the staff. This showed a dramatic increase in the turnover rate for faculty, however, the turnover rate for staff was not significantly affected. According to the 2003 University of the West Indies employment records, there was a 2% employee turnover of the University employees in 1999. However, between the academic periods of August 2000-July 2002, there was a 5% turnover rate for the University.

It is evident that the rate of employee turnover at Northern Caribbean University is greater than that of the University of the West Indies during the period mentioned. Why was there such a significant increase in faculty turnover at NCU during this period? This is an issue that needs close examination because of the impact it can have on the performance of the University if allowed to continue over an extended period of time.

**Statement of the Problem**

Recruiting teachers and motivating them to stay on their jobs present a challenge to educational institutions in Jamaica. This problem is especially important to Northern Caribbean University in light of the fact that during the 2000-2002 academic periods there was a 17.38% turnover for faculty and 2.71% turnover for the staff. Given the importance of worker satisfaction to the health of an organization and the link between
job satisfaction and turnover rate, then an examination of job satisfaction at Northern Caribbean University becomes an important topic to research.

Although issues related to job satisfaction and organizational commitment among employees within different types of organizations have been researched extensively, relatively few of these studies involved faculty in higher education. Further, only a few studies have paid attention to intrinsic and extrinsic job satisfaction at private, religious institutions (Schroeder, 2003).

Northern Caribbean University is fully owned and operated by a religious denomination, the Seventh-day Adventist church. Consequently, the operational policies and practices of the university are in harmony with the educational philosophy of that church. The university encourages students to relate their academic pursuits to their Christian faith, and emphasizes the development of a sound Christian character (NCU Bulletin, 2004-2006). In order to carry out its objectives, the University requires employees who are supportive of its philosophy and who will promote it in their interactions with students and all others on the campus.

The educational philosophy and practices of the University are influenced by the religious beliefs of the SDA church. Therefore, it is important to determine the level of religious commitment of the employees of the University, as well as the extent to which this commitment is affecting their job performance. The University needs to know if the religious commitment of its employees affects their attitude towards their job functions, and the satisfaction they obtain from performing these functions.

The importance of job satisfaction to the health of an organization, has been well established (Wood, 1976). The fact that very few studies have been done to examine the
intrinsic and extrinsic job satisfaction and the organizational and religious commitment at private schools shows that there is a need for such a study. This study will examine the factors that are related to job satisfaction and organizational and religious commitment among the employees at Northern Caribbean University.

**Purpose of the Study**

The purpose of this study was to investigate the level of job satisfaction and its relationship to organizational and religious commitment among full-time workers of Northern Caribbean University. The study investigated whether there were significant differences in the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment as a function of such variables as: occupational area, age, gender, length of employment, and educational level. Further, the investigation studied the nature of the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational and religious commitment.

**Conceptual Framework**

Herzberg’s Motivation-Hygiene Theory was chosen for this study because it appeared more acceptable and more widely used than other studies reviewed (Alexander, 1985; Iredale, 1985; Schroeder, 2003; Srisawat, 1990; Thorn, 1985). Anuna (1997) posits that the Motivation-Hygiene Theory is preferred over the alternative theories because it had grown to become like a management tool, and had stimulated a lot of empirical and theoretical studies relevant to job satisfaction in organizations.

Frederick Herzberg’s two-factor theory of job satisfaction was developed in 1959. He conducted studies to determine which factors in an employee’s work environment
caused satisfaction or dissatisfaction. The studies included interviews in which employees were asked what pleased and displeased them about their work. Herzberg (1957) found that the factors causing job satisfaction (and presumably motivation) were different from those causing job dissatisfaction. He developed the Motivation-Hygiene theory to explain these results. Herzberg distinguished between intrinsic and extrinsic factors related to job satisfaction. He suggested that intrinsic factors were believed to increase job satisfaction, while extrinsic factors caused job dissatisfaction.

Herzberg (1957) called the ‘satisfiers’ motivators and the ‘dissatisfiers’ hygiene factors, using the term “hygiene” in the sense that they are considered maintenance factors, which are necessary, but by themselves do not provide satisfaction. Herzberg reasoned that because the factors causing satisfaction are different from those causing dissatisfaction, the two feelings could not simply be treated as opposite of one another. The opposite of dissatisfaction is no dissatisfaction.

According to Herzberg (1957), the top six factors of dissatisfaction were company policy, supervision, relationship with boss, work conditions, salary, and relationship with peers. In agreement with Herzberg’s theory, Merit (1995) found that employees were dissatisfied with poor working company policies and administration, poor supervision, low or unfair salary, poor working conditions, inadequate benefits, and lack of security.

After poor conditions have been corrected it was estimated that most employees would not quit their jobs. At the same time this was not seen as a guarantee for more productive employees. Giving workers significant raises did not usually produce long-term effects. Employees might work harder for a while, but then did not see money as an
effective satisfier because it did not lead to a desire to do a better job. However, lack of money was reasoned to be an effective dissatisfier, leading people to quit their jobs.

To motivate employees, it seemed necessary to supply one or more of Herzberg’s satisfiers. Those satisfiers, also known as motivators, included a sense of achievement, recognition, creative or challenging work, responsibility, advancement opportunities, and the possibility to develop and grow as a person and professional.

This theory indicates that management not only must provide hygiene factors to avoid employee dissatisfaction but also must provide factors intrinsic to work itself in order for employees to be satisfied with their jobs. Herzberg (1957) argued that job enrichment is required for intrinsic motivation and that it is a continuous management process. He strongly suggests that the job should have sufficient challenge to utilize the full ability of the employees. Employees who demonstrated increasing levels of ability should be given increasing levels of responsibility. If jobs cannot be designed to use an employee’s full ability, then the firm should consider automating the task or replacing the employee with one who has a lower level of skill. If a person cannot be fully utilized, then there will be a motivation problem.

Although there is certainly a chicken-and-egg debate over issues regarding the relationship between job satisfaction and organizational commitment, several researchers have made the case that job satisfaction is a predictor of organizational commitment (Dramstad, 2004; Ferris, 1983; Meixner & Bline, 1989; Porter, Steers, Mowday, & Boulian, 1974; Price, 1977; Rose, 1991; Williams & Hazer, 1986). Other studies have shown organizational commitment as a predictor of job satisfaction (Aranya & Ferris, 1983; Aranya, Lachman, & Amerinic, 1982; Bateman & Strasser, 1984; Lachman &
Aranya, 1986; McGregor, Killough, & Brown, 1989). Although these studies have proposed a different causal ordering between job satisfaction and organizational commitment, they all have found a significant, positive relationship between the variables. Correlations between job satisfaction and organizational commitment have been found in the range of .50 (Brooke, Russell, & Price, 1988; Hall & Schneider, 1972; Meyer & Allen, 1987; Mowday, Porter, & Steers, 1979). While some findings suggested that organizational commitment was more strongly associated with intrinsic rewards (Brief & Aldag, 1980), other findings suggested that extrinsic rewards were more important in predicting commitment (Angle & Perry, 1983; Loscocco, 1990). Therefore, the consideration of organizational commitment seems to be an important part when investigating job satisfaction (Schroeder, 2003). In this context, demographic variables, such as occupational area, age, gender, length of employment, and educational level, are worth investigating, as they showed inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1981; Blank, 1993; Iacqua & Schumacher, 1995; Morris & Sherman, 1981; Schroeder, 2003; Sheldon, 1971).

Religious belief has been described as one of the most potent influences in one’s life (Paloutzian & Ellison, 1982). It colors one’s attitudes to every event experienced, including how one relates to others. Consequently, a teacher’s basic Christian experience has been considered to be one of the most important criteria of an effective Christian educator (Moore, 1976).

Several studies have found that the importance of religion was a significant predictor of organizational commitment for lay Catholics (Ciriello, 1987; Mancuso, 2003; Tarr, 1992). According to a study by Ciriello (1987), it was revealed that teachers who
chose to teach in Catholic schools primarily for organizationally related reasons were more strongly attached than those who taught primarily for professional reasons, despite there being no difference in the level of satisfaction between the groups. Further, Cirello identified the importance of religion in personal life as the most important predictor of organizational commitment. Results of Mancuso’s (2003) study indicated that teachers in Catholic elementary schools chose to become teachers and remain in their careers because of viewing their careers as ministry, vocational call, as well as collegial and spiritual enterprise.

Rutebuka (1996) concluded that teachers in the Lake Union Conference of the Seventh-day Adventist (SDA) church were generally satisfied with their jobs, and chose to work for the SDA church because of their commitment to the church.

Rice (1990) reported on a survey that sought to discover why teachers chose to work in SDA schools. She found that over two-thirds saw teaching in an SDA school as God’s choice for their lives or they viewed it as a ministry. The study seemed to indicate that individuals have chosen to teach in SDA schools primarily for spiritual/religious reasons and that linkages might be expected between such teachers and their SDA education systems.

Schroeder (2003) concluded that religious commitment appeared as a significant predictor of organizational commitment for Andrews University employees. The study indicated that some of Andrews University employees saw their work at Andrews as partial fulfillment of their Christian mission.
Based on these foregoing considerations, it was hypothesized that employees with a high level of religious commitment may stay committed to a religious organization despite lower levels of satisfaction with job-related factors (e.g., salary).

**Research Questions**

Research Question 1: What are the levels of job satisfaction, organizational commitment, and religious commitment of the administrators, faculty, and staff at Northern Caribbean University?

Research Question 2: What are the relationships between job satisfaction, organizational commitment, religious commitment, and the following demographic characteristics: age, gender, length of employment, levels of education, and employment area?

Research Question 3: What is the nature of the relationships among job satisfaction (intrinsic and extrinsic), organizational commitment, and religious commitment?

**Research Hypotheses**

The corresponding research hypotheses are listed as follows:

Hypothesis 1. There is a significant difference in overall job satisfaction among NCU workers by occupational area.

Hypothesis 2. There is a significant difference in intrinsic job satisfaction among NCU workers by occupational area.

Hypothesis 3. There is a significant difference in extrinsic job satisfaction among NCU workers by occupational area.
Hypothesis 4. There is a significant difference in overall job satisfaction among NCU workers by gender.

Hypothesis 5. There is a significant difference in intrinsic job satisfaction among NCU workers by gender.

Hypothesis 6. There is a significant difference in extrinsic job satisfaction among NCU workers by gender.

Hypothesis 7. There is a significant difference in overall job satisfaction among NCU by age.

Hypothesis 8. There is a significant difference in intrinsic job satisfaction among NCU workers by age.

Hypothesis 9. There is a significant difference between extrinsic job satisfaction among NCU workers by age.

Hypothesis 10. There is a significant difference in overall job satisfaction among NCU workers by educational level.

Hypothesis 11. There is a significant difference in intrinsic job satisfaction among NCU workers by educational level.

Hypothesis 12. There is a significant difference in extrinsic job satisfaction among NCU workers by educational level.

Hypothesis 13. There is a significant difference in overall job satisfaction among NCU workers by length of employment.

Hypothesis 14. There is a significant difference in intrinsic job satisfaction among NCU workers by length of employment.
Hypothesis 15. There is a significant difference in extrinsic job satisfaction among NCU workers by length of employment.

Hypothesis 16. There is a significant difference in organizational commitment among NCU workers by occupational area.

Hypothesis 17. There is a significant relationship difference in organizational commitment among NCU workers by gender.

Hypothesis 18. There is a significant difference in organizational commitment among NCU workers by age.

Hypothesis 19. There is a significant difference in organizational commitment among NCU workers by level of education.

Hypothesis 20. There is a significant difference in organizational commitment among NCU workers by length of employment.

Hypothesis 21. There is a significant difference in religious commitment among NCU workers by occupational area.

Hypothesis 22. There is a significant difference in religious commitment among NCU workers by gender.

Hypothesis 23. There is a significant difference in religious commitment among NCU workers by age.

Hypothesis 24. There is a significant difference in religious commitment among NCU workers by level of education.

Hypothesis 25. There is a significant difference in religious commitment among NCU workers by length of employment.
Hypothesis 26: There is a significant multiple correlation between overall job satisfaction and a linear combination of organizational commitment and religious commitment among NCU workers.

Hypothesis 27: There is a significant multiple correlation between intrinsic job satisfaction and a linear combination of organizational commitment and religious commitment among NCU workers.

Hypothesis 28: There is a significant multiple correlation between extrinsic job satisfaction and a linear combination of organizational commitment and religious commitment among NCU workers.

Basic Methodology

This study utilized a quantitative descriptive research design. A survey questionnaire was sent to all full-time administrators, sector managers, faculty, and staff members who were currently employed by the University at the time of the study. The questionnaire solicited information using (a) five demographic questions (occupational area, gender, age, educational level, and length of employment), (b) 15 items to measure professional satisfaction, (c) 15 items to estimate the level of organizational commitment, and (d) 10 items were used to assess intrinsic religious motivation.

Significance of the Study

Past research has indicated that if employees receive what they value or want from their jobs, they experience job satisfaction; if they do not receive what they value or want, they experience dissatisfaction with their jobs (Mowday et al., 1982). There is also an association between job satisfaction and dissatisfaction with various approach and
avoidance tendencies with respect to the job. Satisfied employees, for example, are more apt to complete assignments, spend more time on the job, and initiate new projects (Bender, 1980). Dissatisfied employees are more likely to search for alternative jobs and to actually quit their positions (Mobley, 1982).

Despite the fact that several studies have been conducted to investigate the levels of job satisfaction and organizational commitment among employees within different types of organizations, relatively few of these studies involved faculty in higher education (Locke, Fitzpatrick, & White, 1983). Only a few studies have paid attention to intrinsic and extrinsic job satisfaction at private, religious institutions (Schroeder, 2003).

In a similar study the recommendation was made that future studies at private religious universities could benefit from further investigations of job satisfaction, organizational and religious commitment, and the relationship between these constructs (Schroeder, 2003). Currently, no study has been conducted in Jamaica on this topic, hence the need for pursuing this topic making this research appropriate.

Northern Caribbean University stands to benefit from this study as I believe that the results could provide some valuable insight into improving job satisfaction for employees and thus lower the turnover rate. The findings from this study should be of benefit to other organizations such as other universities and high schools, which are operated, by religious organization. These institutions should be able to improve their practices by implementing the recommendations, which are made. This should enable them to minimize the factors that have a negative impact on the level of job satisfaction of their employees.
Limitations and Delimitations

The scope of the population was the first delimitation of the study. The participants involved in the study were the full-time employees at Northern Caribbean University, excluding those from the preparatory school and high school.

The data for this study were gathered using a questionnaire. Research based on questionnaires depends on the voluntary cooperation of the participants. Participants can differ from non-participants, compromising the interpretation and generalizability of the results (Isaac & Michael, 1990). The measure of job satisfaction, organizational commitment, and religious commitment were limited by the nature of the Professional Satisfaction Scale (PSS), the Organizational Commitment Questionnaire (OCQ), and the Intrinsic Religious Motivation Scale (IRMS).

Second, I relied on the honest and candid responses of the participants assuming that their affiliation with the University will not cause any significant bias in their responses. The final limitation with this study is that the questionnaires were administered approximately 1 month after the Island of Jamaica was severely battered from the onslaught of Hurricane Ivan. The adverse psychological impact of the hurricane could have affected the participants' overall well-being and satisfaction.

Definition of Terms

The definitions for Motivator and Hygiene factors are drawn from Silver (1983) and are based on Herzberg’s (1957) categories of job-related factors leading to satisfaction and dissatisfaction with one’s work.

Job satisfaction: How the job is perceived and to what degree it enhances or fulfills the needs, expectations, or desires of study participants (Sardana, 1984).
Total job satisfaction: A person’s affective reactions to his/her total work role as measured by the Professional Satisfaction Scale (PSS).

Achievement: Completing a job; finding a solution to a problem; and seeing the results of one’s work.

Advancement: Change in status within the organization as a result of performance.

Dissatisfiers: Those variables in the work situation which lead to job dissatisfaction.

Growth: An increase in work-related skills (development) and/or job responsibility.

Hygiene: Dissatisfaction avoidance factors that are extrinsic to the job: company policy and administration, supervision, interpersonal relationships, salary, and working conditions.

Interpersonal relations with peers: Pleasant or unpleasant interactions with persons at the same level of the organizational hierarchy.

Interpersonal relations with supervisors: Pleasant or unpleasant interactions with superiors may or may not be directly relevant to task accomplishment.

Intrinsic job satisfaction, job satisfaction, satisfiers, and motivators: Terms interchangeably used for factors related to the content of the job causing intrinsic work motivation, including: achievement, advancement, growth, recognition, responsibility, and work itself.
Job security: Clear indications of the likelihood or unlikelihood of continuous employment, such as tenure, permanent contracts, budgetary stability, assurances or lack thereof of continued employment.

Organizational commitment: An attitudinal variable that concerns people’s attachment to their job and is important because it relates to behavior at work. For example, commitment is a precursor to turnover (Mathieu & Zajac, 1990).

Organizational policy and administration: The adequacy or inadequacy of university management, including clarity of communications, adequacy of resources, personal policies, fringe benefits.

Overall job satisfaction: A combination of cognitive and affective reactions to the differential perceptions of what an employee wants to receive from the job compared with what he or she actually receives (Cranny et al., 1992).

Recognition: An awareness of praise from superiors and peers for successful accomplishment at work.

Intrinsic religious commitment: A sincere commitment operating as the guiding motivation in an individual’s life (Allport & Ross, 1967). In contrast, extrinsic commitment is a more utilitarian approach in which church participation was used for selfish purposes (Kahoe, 1985, Watson, Morris, & Hood, 1989).

Responsibility: Autonomy in carrying out assignments; authority over others; and accountability for task accomplishments.

Salary: Wage and compensation factors, such as pay scales, adjustments, and reimbursements.
Status: Signs, symbols, or tokens of position and prestige, such as privileges, workspace and location, workspace décor, symbolic titles.

Supervision: Competence, fairness, and efficiency of superiors.

Work itself: The intrinsic nature of the job being performed for which there is financial remuneration.

Working conditions: The physical conditions of work, such as the amount of work, temperature control, ventilation, and adequate equipment and supplies.

Organization of the Study

This study is organized into five chapters. Chapter 1 presents an introduction, which looks at the background, rationale, and purpose of the study. The conceptual framework, which guided this study, was discussed, followed by the research questions, research hypotheses, significance of the study, and limitations.

Chapter 2 is a review of the literature intended to highlight the factors contributing to job satisfaction and its relationship to organization and religious commitment.

Chapter 3 presents the methodology of the study. The procedures for data collection, descriptions of the population, and statistical techniques used in analyzing the data are documented.

Chapter 4 presents the results of the data analysis as they relate to the research questions and hypotheses of the study.

Chapter 5 is devoted to a summarization of the study. It draws relevant conclusions, presents a discussion of the findings, and discusses their implications. Recommendations for further research are provided.
An appendix of all supporting documents and letters follows.

Finally, the Reference List, which contains the bibliographic information for the study, is provided.
CHAPTER II

REVIEW OF LITERATURE

The general purpose of this dissertation was to examine job satisfaction and its relationship to organizational and religious commitment among the full-time workers of Northern Caribbean University. However, due to the limited number of Jamaican resources found, this chapter focuses on studies done mostly in the United States of American and other developed countries. The primary goal of the literature review is to examine important information about the construct job satisfaction and its relationship to organizational and religious commitment. The following sub-areas are addressed in the chapter: (a) definition of job satisfaction, (b) theoretical framework of job satisfaction, (c) job satisfaction in educational settings, (d) job satisfaction and demographic variables, (e) job satisfaction and other factors, (f) definition of organizational commitment, (g) organizational commitment in educational settings, (h) organizational commitment and demographic variables, and (i) religious commitment.
Job Satisfaction

Definition

To grasp the meaning of a construct such as job satisfaction, it seems logical to look at how it is defined in the literature. The search for a universal definition of job satisfaction is not a difficult one; it is an impossible one (Green, 2000). Even though many researchers define job satisfaction, the definitions vary. The earliest systematic attempts to study job satisfaction dated back to the 1930s (Hoppock, 1935; Kornhauser & Greenberg, 1932; Mayo, 1945; Roethlisberger & Dickerson, 1939). The three definitions most commonly referred to among researchers are Hoppock’s, Locke’s, and Vroom’s. In the 30s, Hoppock’s (1935) response to the question ‘What is job satisfaction?’ was: “any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say, ‘I am satisfied with my job’” (p. 47). Locke’s (1976) answer to the same question in the 70s was: “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1300).

Vroom (1964), who used the terms “job satisfaction” and “job attitudes” interchangeably, defined job satisfaction as “affective orientations on the part of individuals toward work roles which they are presently occupying” (p. 99).

The recent interest in job satisfaction is focused primarily on its impact on employee commitment, absenteeism, and turnover (Blegen, 1993; Lucas, 1982; Mueller & Price, 1990; Price & Mueller, 1981, 1986; Steers & Rhodes, 1978). Porter et al. (1974) and Agho, Price, and Mueller (1992) have shown that job satisfaction can partially explain variations in employees’ identification and involvement in a particular
organization (commitment), and missing of scheduled work (absenteeism) and the
maintenance of membership in a particular work organization (turnover).

Even though the definitions vary, a commonality among them seems to be that job
satisfaction is a job-related emotional reaction. Also, though the importance of job
satisfaction has been questioned (Nicholson, Brown, & Chadwick-Jones, 1985), job
satisfaction remains the most studied concept in organizational research (Agho et al.,

Herzberg, Mausner, and Snyderman (1959) and Herzberg (1966) developed a
different perspective on the definition of job satisfaction. From their studies of the work
environment they proposed two classes of variables, one of which is involved in
producing job satisfaction and the other is associated with job dissatisfaction. These two
classes have been labeled at different times as satisfiers and dissatisfiers, motivation and
hygiene variables, content and process variables, and intrinsic and extrinsic variables.
Those categories falling under the definition of satisfiers are achievement, growth,
responsibility, the work itself, and recognition, while those considered to be dissatisfiers
are interpersonal relationships, policy and administration, supervision, salary, and
working conditions. Herzberg concluded that

the factors involved in producing job satisfaction were separate and distinct from
the factors that led to job dissatisfaction....Thus, the opposite of job satisfaction
would not be job dissatisfaction, but rather no job satisfaction; similarly, the
opposite of job dissatisfaction is no job dissatisfaction, not satisfaction with one’s
job. (Herzberg, 1966, pp. 75-76)

More recently, researchers defined job satisfaction as an overall evaluation of
one’s job, operationalized as a global construct as well as the sum of the various facets
(Feldman & Thompson, 1993; Nauman, 1992). Cranny et al. (1992) concluded that job
satisfaction is a combination of cognitive and affective reactions to the differential perceptions of what an employee wants to receive compared with what he or she actually receives.

From an employee’s standpoint, job satisfaction is a desirable outcome in itself. From an organizational and managerial standpoint, job satisfaction is important because of its impact on absenteeism (Dow & Taylor, 1985), turnover (Tett & Meyer, 1993), and pro-social “citizenship” behavior, which manifests itself in helping co-workers and customers, and being more cooperative (Bateman & Organ, 1983).

Theoretical Framework

A theoretical framework speaks to the various knowledge bases that undergird a topic and how a current study fits into the body of knowledge (Richards, 2002). The literature on job satisfaction reveals three theoretical frameworks regarding job satisfaction. Framework One is based on content theories of job satisfaction. Framework Two is grounded in process theories of job satisfaction. Framework Three is rooted in situational models of job satisfaction (Thompson & McNamara, 1997).

Framework One: Content Theories

Content theorists assume that fulfillment of needs and attainment of values can lead to job satisfaction (Locke, 1976). Examples are Maslow’s hierarchy of needs (Maslow, 1954), Herzberg’s two-factor theory (Herzberg et al., 1959), Alderfer’s ERG Theory (1972), and McClelland’s learned needs theory (1965).
Maslow’s theory and job satisfaction

According to Maslow’s (1954) view of individual needs, job satisfaction is said to exist when the job and its environment meet an individual’s needs. The hierarchy of needs focuses on five categories of needs arranged in ascending order of importance. The lowest-level needs are the physiological needs, and the highest-level needs are the self-actualization needs. Maslow’s needs stress the idea that, within the hierarchy, a person attempts to satisfy the more basic needs before directing behavior towards satisfying upper-level needs.

From lowest to highest, Maslow identifies five categories of needs (Maslow, 1954, 1968):

1. Basic physiological needs. This category includes basic survival needs such as air, food, water, and shelter.

2. Safety and security needs. Once survival needs are met, attention is turned to ensuring continued survival by protecting oneself against physical harm and deprivation.

3. Affection and social activity needs. This third level relates to people’s social and gregarious needs, not the quasi-physical needs of the first two levels. This level reflects people’s need for association or companionship, for belonging to groups, and for giving and receiving friendship, affection, and love.

4. Esteem and status. The need for self-respect or self-esteem results from awareness of one’s importance to others.

5. Self-actualization needs. This highest level of needs includes developing one’s potential. It is evidenced by the need to be creative and the need to have opportunities for self-expression and self-fulfillment.
Wahba and Bridwell (1976) did an extensive review of the research findings on the need hierarchy concept. The results of their review indicate that there was no clear evidence showing that human needs are classified into five categories, or that these categories are structured in a special hierarchy. Even though hardly any research evidence was discovered in support of the theory, it enjoys wide acceptance.

Alderfer’s ERG theory

Building on Maslow’s theoretical base, an improved theory was developed by Clayton Alderfer, who agreed with Maslow that individual needs are arranged in a hierarchy. In Alderfer’s view, however, the hierarchy of needs is more accurately conceptualized as having only three distinct categories, not five as Maslow had hypothesized (Rakich, Longest, & Darr, 1992, p. 503). The three categories are existence needs, relatedness needs, and growth needs; thus, the title of the ERG theory of motivation (Alderfer, 1972). Alderfer’s ERG theory is similar to Moslow’s hierarchy of needs. The theories differ, however, in an important respect: the manner in which needs predominate in influencing behavior. Alderfer’s three categories of human needs can be described as follows:

1. **Existence needs.** These include material and physical needs, needs that can be satisfied by such things as air, water, money, and working conditions.

2. **Relatedness needs.** These include all needs that involve other people, needs satisfied by meaningful social and interpersonal relationships. Relatedness needs include anger and hostility, as well as more positive needs such as friendship.

3. **Growth needs.** These include all needs involving creative efforts, needs satisfied by an individual through creative or productive contributions.
Herzberg's motivator-hygiene theory

The study of job satisfaction became more sophisticated with the introduction of Herzberg's motivator-hygiene theory. Herzberg and his associates (1959) conducted extensive interviews with over 200 accountants and engineers using the critical incident method of data collection. This method meant that employees were asked to remember two incidents related to their work that made them feel exceptionally good and satisfied or bad and dissatisfied. Responses were scored according to their closeness to one of the job satisfaction or dissatisfaction factors as identified by Herzberg (1966).

Interviewers analyzed the content by extracting incidents (those resulting in job satisfaction and those resulting in job dissatisfaction) from the material they received. The interview responses were content-analyzed with respect to both depth of feeling and the frequency with which each respondent mentioned their incidents. Of the 476 recorded sequences that were acceptable, 228 of these were in the high (satisfaction) sequences. From these 228 sequences, the data revealed 16 job-related factors.

These factors were separated into four parts: (a) achievement and recognition, (b) work itself, responsibility, and advancement, (c) salary, and (d) 10 infrequently mentioned factors. Five factors stood out in their ability to increase job satisfaction. Herzberg and his associates (1959) concluded that a relationship existed between positive events and certain factors of the job. He also believed a relationship existed between negative events and other factors of their work or workplace (p. 70).

The five positive events all focused directly on the job itself: (1) on doing the job; (2) on liking the job; (3) on success in doing the job; (4) on recognition for doing the job; and (5) on moving upward as an indication of professional growth. The other factors mentioned more frequently focused on the job situation. The factors that focused on the job correspond closely with the higher level needs in Maslow's Need Hierarchy.
while the factors focusing on the job situation are similar to Maslow’s lower level needs. (Herzberg et al., 1959, p. 50)

This theory focuses attention upon the work itself as a principal source of job satisfaction. To Herzberg, the concept of job satisfaction has two dimensions, namely intrinsic and extrinsic factors. Intrinsic factors are also known as motivators or satisfiers, and extrinsic factors as hygienes, dissatisfiers, or maintenance factors. The motivators relate to job content (work itself) and include achievement, recognition, work itself, responsibility, and advancement. The hygienes relate to job context (work environment) and relations, and working conditions. Motivators are related to job satisfaction when present. Hygienes are associated with job satisfaction when present, but not to dissatisfaction when absent. Hygienes are associated with job dissatisfaction when absent, but not with satisfaction when present.

Herzberg et al. (1959) asserted that the presence of a certain factor increases an individual’s job satisfaction while the absence of the same factor did not necessarily produce job dissatisfaction. That meant that individuals could be satisfied and dissatisfied simultaneously. Herzberg argued that only minimal job dissatisfaction occurred when motivators were absent, and hygiene factors led to only a minimal job satisfaction.

Herzberg’s two-factor theory suggests that jobs can be enriched to sustain or increase intrinsic job satisfaction among employees. Job enrichment provides the employee with an opportunity for psychological growth (Burton, 1994; Lacey, 1994). Herzberg, Mausner, Peterson, and Capwell (1987) identify seven principles useful for job enrichment:

1. Removing control while maintaining accountability
2. Increasing individual’s accountability for their work
3. Giving employees a complete and natural work unit
4. Granting employees additional authority in their tasks
5. Making periodic reports available to workers
6. Introducing new and more difficult tasks
7. Assigning specific or specialized tasks to certain individuals.

Before the emergence of the motivator-hygiene theory, only single scales had been used to measure job satisfaction. Scores on the high end of the scale reflected high levels of job satisfaction, whereas scores on the low end represented high dissatisfaction. Research based on the motivator-hygiene theory should apply different scales for job satisfaction and dissatisfaction because the opposite of job satisfaction is no job satisfaction and the opposite of job dissatisfaction is no dissatisfaction (Iacqua & Schumacher, 1995).

Overall, the explanatory power of Herzberg’s theory has been well documented; however, it was argued that its power might be a lack of an explicit of the theory (Derlin & Schneider, 1994; May & Decker, 1988). The two-factor theory was based on extensive empirical investigation, which received both widespread support and criticism (Maidani, 1991).

McClelland’s learned needs theory

Another important contribution to content theory was made by McClelland (1965). McClelland’s theory, called the learned or acquired needs theory, posits that people learn their needs through life experiences; they were not born with them. This theory builds on the much earlier work of Henry Murray (1938), who theorized that
people acquire an individual profile of needs by interaction with the environment. McClelland was also influenced by the work of John Atkinson. Both McClelland and Atkinson suggest that people have three sets of needs (Rakich et al., 1992, p. 507):

1. Need for Achievement: the need to excel, achieve in relation to standards, accomplish complex tasks, and resolve problems.

2. Need for Power: the need to control or influence how others behave and to exercise authority over others.

3. Need for Affiliation: the need to associate with others, to form and sustain friendly and close interpersonal relationships, and avoid conflict.

The common thread of the four content theories is the focus on what needs motivate human behavior. Each defines human needs differently, but each holds that employers motivate and satisfy employees by helping them identify and meet their needs in the workplace. The content theories provide a conceptual foundation for research intended to explain how individuals are motivated (Burton, 1994; Gibson, Ivancevich, & Donnelly, 1991; Lacey, 1994). This research led to the development of a number of process motivation theories.

Framework Two: Process Theories

The content theories focus on the needs and the incentives that cause behavior and are primarily concerned about which specific things motivate people (Herzberg et al., 1987; Ivancevich & Matteson, 1990). Process theorists focus on how individuals’ expectations and preferences for outcomes associated with their performance actually influence performance. They are concerned with answering the questions of how individual behavior is energized, directed, maintained, and stopped (Ivancevich &
Matteson, 1990). Vroom’s expectancy theory, Adams’s equity theory, Locke’s goal-setting theory, and Skinner’s reinforcement theory are the major models of processes by which motivation occurs (Gibson et al., 1991; Rakich et al., 1992). The conceptual framework of this study is aligned with the content theories of motivation, in particular, Herzberg’s two-factor theory. Therefore, the process theories are not discussed in any great detail.

**Framework Three: Situation Models**

Situational theorists assume that the interaction of variables such as task characteristics, organizational characteristics, and individual characteristics influences job satisfaction (Hoy & Miskel, 2001). Examples of models are the situational occurrences theory of job satisfaction (Quarstein, McAfee, & Glassman, 1992) and Glisson and Durick’s (1998) predictors of job satisfaction.

The situational occurrences theory of job satisfaction was proposed by Quarstein et al. (1992). The main components of the theory are situational characteristics and situational occurrences. Examples of situational characteristics are pay, promotional opportunities, working conditions, company policies, and supervision. Individuals tend to evaluate situational characteristics before they accept a job. Situational occurrences tend to be evaluated after accepting a job. Situational occurrences can be positive or negative. Positive occurrences include, for example, giving employees some time off because of exceptional work or placing a microwave in the workplace. Negative occurrences including, for example, confusing email messages, rude remarks from coworkers, and copiers which seem to break down a great deal. Quarstein et al. (1992) hypothesized that overall job satisfaction is a function of a combination of situational
characteristics and situational occurrences. The findings of their study supported the hypothesis. According to the researchers, a combination of situational characteristics and situational occurrences can be a greater predictor of overall job satisfaction than each factor by itself.

Motivation Through the Design of Work

Work redesign is becoming increasingly prominent as a strategy for attempting to improve simultaneously the productivity and quality of work experience of employees in contemporary organizations (Hackman & Oldham, 1975, 1976, 1980). By far the most influential theory relevant to work redesign has been the Herzberg two-factor theory of satisfaction and motivation (Herzberg et al., 1987).

In essence the theory proposes that the primary determinants of employees' satisfaction are factors intrinsic to the work that is done (i.e., recognition, achievement, responsibility, advancement, challenging work, personal growth in competence). These factors are called "motivators" because they are believed to be effective in motivating employees to superior effort and performance. Dissatisfaction, on the other hand, is seen as being caused by "hygiene factors" that are extrinsic to the work itself. Examples include company policies, supervisory practices, pay plans, and working conditions. The Herzberg theory specifies that a job will enhance work motivation and satisfaction only to the degree that "motivators" are designed into the work itself (Hackman & Oldham, 1975, 1976, 1980).
Criticisms of Herzberg’s Theory

Although Herzberg’s dual-factor theory has achieved a prominent place in the study of motivation and job satisfaction (Locke, 1976), it is not without its criticism. Early criticism of Herzberg’s theory pertained to a narrow or limited sample (Blank, 1993). Ewen (1964) indicated that only two professions, accountants and engineers, were represented in the original study. Brandt (1992) also expressed misgivings about Herzberg’s work as the result of the exclusion of females in early studies. One of these early studies was conducted by Halpern (1960). This study, designed to determine the relative contribution that motivator and hygiene factors make to overall job satisfaction, utilized a sample of 93 men who were undergoing vocational counseling. The high percentage of males in these early studies may have contributed to a theory expounding achievement and competitiveness rather than caring and nurturing relationships.

A second criticism of Herzberg’s theory is that it appeared to be method-bound. Much of the early research pertaining to this theory utilized the critical incident technique as a methodology. This method of data collection stems from Flanigan’s (1954) critical incidents technique. Using a semi-structured interview, study participants were asked to recall a time when they felt exceptionally good or exceptionally bad about their job. The criticism of this technique is that it does not produce empirical data, and the objectivity of the data may be questionable since it depends upon the skill and consistency of the interviewers (Ulmer, 1987). Ewen (1964) suggests that more than one method should have been used in the study to support the quality of the theory.

The third criticism attached to this theory was that Herzberg’s results, especially those factors identified as hygienes, suggest that ego defensiveness might have existed
among study participants (Wall, 1973). Workers may have attributed events involving success to themselves while attributing problems to someone else (i.e., supervisor, working conditions, organizational policy).

A fourth criticism directed at Herzberg's theory suggested that there was some overlapping of factors as satisfiers and dissatisfiers. This "blurring" of some factors has resulted in studies that have been inconclusive and sometimes contradictory (Young & Davis, 1983). Earlier studies in the field of education (Iannone, 1973; Schmidt, 1967; Sergiovanni, 1967) found general support for the dual-factor theory; however, an overlap or blurring across the motivation-hygiene boundary was found.

The fifth criticism concerning the dual-factor theory suggested that the motivation-hygiene value differed as a result of occupational area (Armstrong, 1971) or individual difference variables (Wanous, 1974). While the dual-factor theory has proven general applicability within educational settings (Young & Davis, 1983), the question of individual difference variables is one of significance. Herzberg's claim that the dual-factor theory is not dependent upon demographic variables appears to be only partially correct. Accounting to Gaziel (1986), job satisfaction was positively related to age and formal education. Organizational structure and institutional size were also found to affect satisfaction/dissatisfaction factors.

A final and significant criticism of Herzberg's theory deals with Herzberg's own ambiguity in interpreting study results (Gruneberg, 1979). Lack of coherent, explicit statement of theory has resulted in researchers interpreting Herzberg's premise in different ways. Depending upon which version of the theory was used for verifying results, studies could have been accepted or rejected (May & Decker, 1988). King (1970)
completed an intensive survey of the literature to determine how Herzberg’s theory was interpreted. King’s analysis identified the following five models of the Motivation-Hygiene Theory, which have been used to verify or reject study results:

Model I – All motivators combined contribute more to job satisfaction than to job dissatisfaction; all hygiene’s combined contribute more to job dissatisfaction than to job satisfaction.

Model II – All motivators combined contribute more to job satisfaction than do all hygiene combined, and conversely, all hygiene’s contribute more to job dissatisfaction than do motivators.

Model III – Each motivator contributes more to job satisfaction than to job dissatisfaction; each hygiene contributes more to dissatisfaction than to satisfaction.

Model IV – Each motivator is mentioned in good critical incidents more frequently than is any hygiene; each hygiene is mentioned in bad critical incidents more frequently than is any motivator.

Model V – Only motivators determine job satisfaction and only hygiene determines job dissatisfaction. (pp. 19-22)

Of these five models used to verify or reject the motivation-hygiene theory, Models I, II, and III were used by Herzberg (1966) to support his theory. An analysis of other studies utilizing Herzberg’s theory revealed that Models IV and V were too rigorous (May & Decker, 1988).

**General Support for Herzberg’s Theory**

Herzberg’s motivation-hygiene theory has been controversial since its inception in 1959. Critics of the dual-factor theory have attacked the foundation, methodology, and results of the theory. In responding to these critics, Herzberg (Herzberg et al., 1959) cited Aebi’s (1973) study, which reviewed results of 156 earlier studies designed to test
the motivation-hygiene theory. Of these studies, 115 gave full or partial support of the theory and 41 rejected the theory.


Leavitt (1996) concluded that high pay would not alleviate problems of low employee job satisfaction. Olanrewaju (2002) studied 189 business faculty members and found that such factors as achievement, recognition, work itself, and growth were related to job satisfaction, while salary, institutional policies, and practices, as well as working condition, contributed to job satisfaction.

These recent studies affirming the value of Herzberg’s theory, in spite of four decades of controversy, suggest the motivation-hygiene theory still remains a viable theory for studying or researching job satisfaction (Blank, 1993).

The wide appeal of Herzberg’s theory for practitioners is its focus on rejuvenating interest in job enrichment through identification of motivators (Minor, 1980). Even though research concerning Herzberg’s theory has brought varied results, it has proven that employees are motivated by certain factors. Perhaps Herzberg’s greatest accomplishment was calling attention to the fact that motivation factors can be identified. If educational administrators can discover what motivating factors influence their personnel, they will be in a better position to create a climate designed to promote greater job satisfaction (May & Decker, 1988).
Summary of Educational Research Studies

Since some researchers doubt the universal applicability of Herzberg’s dichotomous classification of job facets as satisfiers or dissatisfiers, Friesen, Holdaway, and Rice (1983) recommended that future studies focus on relatively homogenous occupational groups to test the validity of Herzberg’s theory for specific populations. Activities in an educational setting may be substantially different from activities in business and public administration; consequently, variations from Herzberg’s distribution of job facets as satisfiers or dissatisfiers could be expected. A review of the existing literature regarding Herzberg’s dual-factor theory as it pertains to college faculty and educational administrators follows.

With much of the research on job satisfaction of college faculty not being based on theory, Hill (1987) examined the issue of job satisfaction from the perspective of Herzberg’s theory. The utility of the theory for explaining faculty satisfaction and dissatisfaction was assessed using the data gathered from over 1,000 full-time faculty representing 20 colleges and universities in Pennsylvania. A Likert-type inventory was developed to probe motivators and hygiene factors for this population. The results of this study indicated that job satisfaction was derived from intrinsic or content factors to include teaching and other components associated with the job itself. The one exception to Herzberg’s satisfaction factors for this sample was the recognition dimension. Faculty obtained little satisfaction from recognition of scholarly achievement. Dissatisfaction was derived from extrinsic or contextual factors to include salary and fringe benefits, tenure, institutional policy, and administration. These results, indicating how job content

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
and context features operate in affecting the job satisfaction/dissatisfaction of these professionals, support Herzberg’s dual-factor theory (Blank, 1993).

Diener (1984) undertook a study to determine the level of overall job satisfaction and to identify chief job satisfiers and dissatisfiers for college faculty. Using Herzberg’s theory that job satisfaction stems from the work itself and dissatisfaction from the work environment, 277 faculty members were surveyed concerning their work through a questionnaire devised for this study.

One purpose of this study, testing the dual-factor theory, showed support for the concept of satisfaction as a derivative of one set of factors and dissatisfaction from another. The chief source of satisfaction for these respondents was achieving student growth followed by intellectual stimulation. Diener (1984) found a few exceptions to Herzberg’s theory in this study. Contrary to Herzberg’s classification of interpersonal relations and status as dissatisfiers, these college faculties identified them as satisfiers.

Factors chiefly responsible for dissatisfaction included working conditions (i.e., equipment, facilities, schedules), low salaries, and high amounts of administrative bureaucracy. As with Hill’s (1987) study, lack of recognition for faculty efforts resulted in another exception to Herzberg’s dichotomy. Recognition, though identified by Herzberg as a satisfier, was acknowledged by these faculties as a dissatisfier.

Abreu (1980) found a significant relationship between Herzberg’s intrinsic factors and the reaction of the faculty members of three doctoral-granting universities to times expressing job satisfaction. These factors were responsibility, work itself, achievement, advancement, and recognition. A significant relationship was also revealed between Herzberg’s extrinsic factors and the reaction of participants to items expressing job
dissatisfaction. The factors included: salary, job security, possibility of growth, institutional policy, working conditions, interpersonal relations, status, technical supervision, and personal life.

Nussel, Rusche, and Wiersma (1988) studied a representative sample of 426 college educators from public and private institutions. The research was conducted to gain insight into how professors of education perceived their level of job satisfaction and dissatisfaction with teaching in colleges of education. Again a Likert-type scale was developed using Herzberg's theory to test the satisfaction/dissatisfaction dichotomy for this population. The result of this study supported the two-factor theory. High levels of satisfaction were found with work itself, including many tasks directly associated with the challenge of being an educator and working with students. Low scores associated with dissatisfaction were tied to work environment conditions to include salary and administration. In agreement with previous findings (Friesen et al., 1983; Gaziel, 1986), the one exception to Herzberg's model was that teacher educators saw their relationship with peers or colleagues as a satisfier rather than a dissatisfier. In assessing the overall level of job satisfaction, men also had a significantly higher satisfaction score than women, and tenured professors were higher than non-tenured.

In a review of research on teacher satisfaction, Latham (1998) concluded that intrinsic rewards play a greater role in teacher motivation and job satisfaction than extrinsic rewards. Latham further stated that job satisfaction could improve teaching and help retain teachers.

In contrast, Ashton (1989) found in his study of middle-school principals that pay was a significant predictor of job satisfaction. Sudsawasd (1980) studied Thai faculty
members and concluded that policy and administration, and salary were the major
sources of job satisfaction. The relevant sources of job dissatisfaction in his study were
in the area of achievement, growth, interpersonal relations, recognition, responsibility,
work itself, and working conditions.

Kenyan educators identified job security, no alternatives, holidays, sense of
building the nation, chance to continue learning, and love of job itself as the most
satisfying factors in their current positions. In contrast, poor pay, poor promotion
methods, lack of recognition, and no chance for advancement were found to contribute
most to job dissatisfaction (Karugu, 1980).

Silver (1987) conducted three experiments among 78 teachers, four principals,
and 10 departmental heads. These subjects were unfamiliar with Herzberg’s theory.
They completed three sets of questionnaires on factors that associated with motivation
and hygiene. The results indicated that the factors associated with satisfaction were
different and unrelated from those associated with dissatisfaction, and the findings were
consistent with Herzberg’s motivation and hygiene theory.

Truell, Price, and Joyner (1998) determined that their study’s participants, full-
time and part-time occupational-technical faculty, were satisfied with their jobs.
Comparing satisfaction levels of 10 satisfaction/dissatisfaction factors, which were based
on Herzberg’s motivation-hygiene theory, part-timers experienced significantly higher
satisfaction levels in the areas of policy and administration, responsibility, supervision,
and working conditions. Of the four statistically significant different factors, supervision
was the only one that might have been of practical significance. Approximately 9.79% of
variance in supervision could be explained by the status of full-time versus part-time.
Work itself reflected the highest level of satisfaction for both part-time and full-time faculty.

Murray and Murray (1998) measured the propensity to leave an institution, level of job satisfaction, and perception of role conflict and ambiguity among 2-year college division chairs. Furthermore, they investigated the impact of job satisfaction and role conflict and ambiguity on propensity to leave. High levels of job satisfaction and role ambiguity, a medium of role conflict, and a low level of propensity to leave were identified. The researchers reported these findings to be “somewhat paradoxical” (p. 54) because of the existing evidence of negative relationships between the two role perceptions, ambiguity and conflict, and propensity to leave. The community college chairpersons were most satisfied with the work itself and least satisfied with salary.

McBride, Munday, and Tunnel (1992) examined the effects of 10 job satisfactions, role ambiguity, and role conflict on community college faculty’s propensity to leave. They discovered that satisfaction levels of growth opportunities, salary, work, policy and administration, and supervision decreased; turnover intent, an attitude not widely represented, increased. Propensity to leave increased as role conflict increased. Work itself reflected the highest satisfaction level and salary the lowest.

Cohen (1974) followed Herzberg’s example by using the critical incident method to ask 222 community college instructors from 12 colleges to relate aspects of their work that led them to feel satisfied and aspects that led them toward feelings of dissatisfaction. More than two-thirds of the group indicated that they gained satisfaction from student learning or from interaction with students, and nearly two-thirds related administrative,
collegial, and/or organizational difficulties as leading to dissatisfaction. The study supported Herzberg’s two-factor theory.

Schroeder (2003) studied Andrews University employees, and concluded that, overall, Andrews employees were most satisfied with their relations with students, followed by relations with peers, and then work itself. However, they were least satisfied with their salaries, followed by organizational policy and administration, and then advancement.

Brokke (2001) found in her study that administrators were not happy with their company’s policy and administration; they were also displeased with their supervision and working conditions. However, they found significant fulfillment from the motivation factors of achievement and advancement.

Studies of university faculty have shown a decline in overall job satisfaction after the 1950s and 60s. While Robinson, Athanasious, and Head (1969) reported mean satisfaction scores of over 4 on a 5-point scale before 1970, later studies show only means below 4 and sometimes below 3 regarding overall job satisfaction on the same scale (Gannon et al., 1980; McNeece, 1981; Schroeder, 2003; Willi & Stecklein, 1982).

Job aspects most frequently perceived with low satisfaction included pay, administration, resources, and working conditions (Everett & Entrekin, 1980; Gannon et al., 1980). Other studies, however, have questioned the importance of extrinsic rewards such as pay and promotion as motivators for effective teaching (Bess, 1977; McKeachie, 1982). Despite the mentioned sources of low satisfaction, most investigations believe that university professors are relatively satisfied with their work. This applies especially...
to educators’ autonomy and their relationships with students (McKeachie, 1982; Robinson et al., 1969; Willie & Stecklein, 1982).

Although a number of studies have been conducted regarding the job satisfaction of administrators and teachers, some researchers are uncertain as to what factors contribute to an individual’s job satisfaction (Candler, Yarbrough, & Sparkman, 1988). This lack of clarity may be attributed to researchers’ inattention to focusing on roles and contexts in which they exist. Conley, Bacharach, and Bauer (1989) as well as Schulz and Teddlie (1989) suggested the need to broaden the parameters that define job satisfaction. Researchers must look beyond general determinants of job satisfaction and focus on specific subgroups of educators to understand the determinants of their satisfaction and dissatisfaction (Schroeder, 2003).

Job Satisfaction and Personal Work-Related Characteristics

Originally job satisfaction was studied as a predictor of behaviors such as performance, absenteeism, and turnover. More recently the interest has shifted toward identifying factors that influence or predict job satisfaction. Personal and work-related characteristics can influence job satisfaction (Locke, 1976; Spector, 1997).

Age

Mixed evidence exists in the literature concerning the relationship between age and job satisfaction. Herzberg et al. (1987) was among the first to report the U-shaped relationship between age and job satisfaction. Based on an extensive review, Herzberg and colleagues suggested that while morale is high among young workers, it tends to go down during the first few years of employment. The low point is reached when workers
are in their middle and late 20s or early 30s. After this period, satisfaction steadily climbs with age.

Handyside (1961) investigated the relationship between age and job satisfaction using data on the overall satisfaction of 1,000 British men and women, and his findings supported the U-shaped relationship.

Hullin and Smith (1965) examined the worker satisfaction at organizational levels and tested Herzberg and his colleagues’ U-shaped hypothesis. His findings showed that the linear model best explains the effect of age on job satisfaction. According to Hullin and Smith, the positive relationship was due to the individual’s ability to better adjust his expectations to do what the job environment provides. They further stated that the longer an individual has been in a particular environment, the more accurately he can predict and avoid frustrations. Also, the closer the workers’ expectations are to the returns received, the higher the satisfaction level.

Saleh and Otis (1964) proposed a positive and linear function between age and job satisfaction until the pre-retirement period, during which job satisfaction significantly declines. They attributed the increasing level of job satisfaction to the general adjustment to life, and the decreasing level of job satisfaction to a decline in health and an obstruction of channels for self-actualization and psychological growth.

Khillah (1986) saw age differences in the degree of job satisfaction regarding different factors contributing to satisfaction. Teachers who were most satisfied with their jobs were in their 50s or above, followed by teachers between 41 and 49 years of age. Increased overall job satisfaction through age was also reported for both males (Gibson & Klein, 1971; Hullin & Smith, 1965) and females (Hunt & Saul, 1975).
In a more recent research study Hickson and Oshagbami (1999) examined the effect of age on the satisfaction of academicians with teaching and research separately. Their results surprisingly indicated that age has quite a different effect on academic teaching staff from academic research staff. The results for teaching satisfaction indicated that job satisfaction decreases with age but at a decreasing rate. On the other hand, the results for research satisfaction indicated positive linear relationship between age and job satisfaction.

Cockburn (1998) found that younger and older teachers had higher levels of job satisfaction than their colleagues in the intermediate group. Oswald and Warr (1996) concluded in their study that a U-shape in all measures of job satisfaction was similar across the sexes.

Schroeder (2003) found that employees who were older than 50 years of age had significantly higher levels of overall and extrinsic job satisfaction than their counterparts in the other three age groups (20-30 years, 31-40 years, and 41-50 years). Dramstad (2004) found that the relationship between job satisfaction and age was significant among Seventh-day Adventist teachers in Norway. The findings from his study showed that job satisfaction increased with age.

Contrary to these findings, Muchinsky (1978) found older employees to be less satisfied than their younger counterparts. Liacqua and Schumacher (1995) did not find a significant correlation between job satisfaction and age, and Blank (1993) reported no significant difference between age groups and their levels of job satisfaction and dissatisfaction.
Spector (1997) suggested two reasons why job satisfaction might increase with age. One, better benefits such as pension, for example, and rewards and pay, for example, could increase satisfaction. Two, Spector stated that "people adapt to the job by adjusting their expectations to be more realistic, so they are happier with less as they get older" (p. 26).

Education

A review of job satisfaction studies that included education as a variable indicated the relationship between education and job satisfaction can be negative or positive. Carrell and Elbert (1974), for example, reported negative direct effects of education on job satisfaction. They concluded that younger workers, who have a higher level of formal education, may be dissatisfied with performing the routine tasks required in most jobs. DeSantis and Durst (1996) compared job satisfaction among public- and private-sector employees. They identified many similarities between the two groups, but one of the clear differences concerned the education variable. The expected negative relationship between education and overall job satisfaction was much stronger for the private-sector employees than for the public-sector employees. DeSantis and Durst offered as a possible explanation that the private-sector individuals might be employed in unchallenging positions and might be experiencing larger gaps between expectations and realities.

Quinn and Baldi de Mandilovitch (1980) analyzed data from 11 studies of American workers. Based on this analysis, they documented a positive relationship between the workers' educational level and overall job satisfaction. The attainment of a college degree resulted in the largest increase in overall job satisfaction.
Iliacqua and Schumacher (1995) concluded in their study that there was no significant relationship between job satisfaction and level of education.

On the contrary, Niehoff's study (1995) revealed a significant correlation between education and overall job satisfaction. Blank (1993) found that employees holding a doctoral degree were most satisfied with their jobs. No significant difference was found regarding the level of job satisfaction between employees with a B.A. and a M.A. degree. In addition, Schroeder (2003) found that overall job satisfaction was related to educational level.

Gender

Research investigating the relationship between gender and job satisfaction uncovered three possibilities. First, females are more satisfied than males (i.e., Hoppock, 1935). Second, males are more satisfied than females (i.e., Hullin & Smith, 1964; Locke et al., 1983). Third, no difference exists between males and females with respect to job satisfaction (i.e., D'Arcy, Syrotuik, & Siddique, 1984; Golding, Resnick, & Crosky, 1983; Iliacqua & Schumacher, 1995).

Gruneberg (1979) presented several reasons for the inconsistent results of the investigations concerning the relationship between gender and job satisfaction. Males and females might occupy different job levels in the same organization. Their promotion prospects might vary, as might pay and the level of need satisfaction within the same job. Women might perceive stronger social satisfaction in a position that requires few skills and offers limited promotion opportunities than men do and thus might experience greater job satisfaction than men.
Studies by Mottaz (1987) concluded that, generally, levels of overall satisfaction and the determinants of work satisfaction were similar for males and females regardless of occupational level. After a review of research by Herzberg et al. (1987), Sausner and York (1978) concluded that “differences in job satisfaction between men and women are thought to have been an artifact of variables other than gender” (p. 537).

Greenhaus, Parasuraman, and Wormley (1990) found no significant gender differences in their study, even though the distribution of jobs was not the same in their sample for both genders. Males were more likely to have managerial/professional jobs and females were more likely to have clerical jobs.

Haynes (1983) and Arthur (1987) found that males were more satisfied with their jobs than females. However, other studies concluded that males were more satisfied over time compared to their female counterparts (Quinn et al., 1971; Quinn & Shepard, 1974). This tendency was also found for male faculty (Gannon et al., 1980, McNeese, 1981; Perry, 1977; Smith & Plant, 1982).

On the contrary, a study of 2,202 teachers by Ma and MacMillan (1999) showed that female teachers were more satisfied with their work as teachers than their male colleagues. Iacqua and Schumacher (1995) did not obtain a significant relationship between job satisfaction and gender. Likewise, Hullin and Smith (1964), Sausner and York (1978), Quinn, Staines, and McCullough (1974), and Smith and Plant (1982) did not find a significant gender difference in job satisfaction.

Smith, Smits, and Hoy (1998) considered the issue of gender-related differences in job satisfaction for employees in small businesses. When the research team initially did not find differences in job satisfaction of men and women, they continued their
investigation of the gender-related differences in job satisfaction considering the gender of the small-business owner. The results then indicated a significant difference. The most satisfied females were employed in female-owned and -managed companies, with up to 25 employees. The most satisfied men were employed in male-owned and -managed companies, with 50 or more employees.

Studies regarding the role of intrinsic vs. extrinsic factors in job satisfaction and gender have shown inconsistent results. While Blank (1993) as well as Schroeder (2003) found no significant gender difference revealed, when distinguished between intrinsic and extrinsic job satisfaction, McNeel (1984) concluded that females were more intrinsically satisfied than males. This finding was also supported by Hill (1983). Hill suggested that gender differences exist in the degree of job satisfaction in higher education but co-vary with extrinsic job factors, such as single-gender dominance on faculty of departments and institutions, academic rank, and academic degree.

**Occupational Area**

Critics of the two-factor theory have suggested that job satisfaction/dissatisfaction values differ as a result of occupational area and individual differences (Armstrong, 1971; Wanous, 1974). Arthur (1987) showed a significant difference between room service and other service personnel regarding their job satisfaction structure. Additionally, significant differences in overall, intrinsic, and extrinsic job satisfaction were found by Sompong (1990) between pastors, educators, and nurses. Sompong’s study revealed that nurses had the highest level of job satisfaction.
Mixed evidence exists in the literature regarding the job satisfaction of administrators. While some researchers suggested that administrators had higher levels of extrinsic job satisfaction than other occupational groups (Niehoff, 1995; Schroeder, 2003), a study by Blank (1993) found that administrators and staff showed lower levels of dissatisfaction with the extrinsic aspects of their jobs when compared to other professional groups.

Olasiji’s study (1983) of faculty and administrators in a Nigerian university revealed that the leading factors for job satisfaction were not the same for faculty and administration. No significant difference was found regarding the hygiene factors between the two groups.

Sudsawasd (1980) concluded that faculty members should be recognized as generally more satisfied in their positions than those in the industrial sector. Derlin and Schneider (1994) found significant differences between the factorial structures of job satisfaction within the groups of teachers and principals. It was concluded that, based on role and context, job satisfaction is perceived differently by educators.

**Tenure**

Studies regarding the relationship between tenure, defined as length of service, and job satisfaction have shown inconsistent results. It is possible that an increase in job tenure can be associated with a decrease in job satisfaction (DeSantis & Durst, 1996). It is also possible, as evidence provided by Begeian, Ferris, and Kacmear (1992) has shown, that tenure and job satisfaction are positively related.

Khillah (1986) found that Seventh-day Adventist teachers with no previous experience displayed the highest level of job satisfaction. The teachers experienced their
lowest job satisfaction between 1 and 3 years of their professional career with it constantly rising from the 4th year on.

A positive relationship between job satisfaction and length of employment was also supported by a study by Avi-Itzhak (1988). Additionally, Niehoff (1995) found a positive correlation between employment length of service and job satisfaction for university employees. However, a study done by Schroeder (2003) did not show significant differences in the levels of overall, intrinsic, and extrinsic job based on length of employment for university employees.

**Job Satisfaction and Other Factors**

Most theories of turnover view it as the result of employee job dissatisfaction (Bluedorn, 1982; Mobley, Griffeth, Hand, & Meglino, 1979). People who dislike their jobs will try to find alternative employment. Studies have been reasonably consistent in showing a correlation between job satisfaction and turnover (Crampton & Wagner, 1994; Hullin, Roznowski, & Hachiya, 1985).

Evidence relating high turnover to high job dissatisfaction is strong. For example, studies of nurses and managers confirmed that both intended and actual turnover could be attributed to dissatisfaction with various aspects of the job (Bretz, Boudreau, & Judge, 1994; Lee, Mitchell, Wise, & Fireman, 1996). A study of 234 nurses, medical assistants, and laboratory technicians found that employees who were dissatisfied with jobs but high in general life satisfaction were the most likely to quit (Judge, 1993).

Babin and Boles (1996) found a significant positive relationship between job satisfaction and job involvement. The findings are in general agreement with Kirmeyer
and Thung-Rung (1987) and Csikszentmihalyi (1990). Kopleman, Brief, and Guzzo (1990) suggested a positive relationship between perception of supervisory support and job satisfaction. The findings were supported by Babin and Boles in 1996.

Darden, Hampton, and Howell (1989) found that job performance was a direct antecedent of job satisfaction. Other studies supported a performance-satisfaction causal ordering, with performance expected to have a moderate, positive effect on satisfaction (Laffaldano & Muchinsky, 1985; Michaels, Day, & Joachimsthaler, 1987). Babin and Boles (1996) also showed support for a significant positive relationship between job satisfaction and performance. Jacobs and Solomon (1977) found that satisfaction and performance are more strongly related when performance leads to rewards.

Pincus (1986) revealed a positive relationship between communication and job performance; but the communication-satisfaction link was stronger, particularly in supervisor communication, climate, and personal feedback. King, Lahiff, and Hatfield (1988) reported a consistently clear and positive relationship between an employee’s perceptions of communications and his or her job satisfaction. The findings were also supported by Pettit, Goris, and Vaught (1997) and Orpen (1997).

Geyer and Daly’s (1998) study of 172 relocated workers revealed that job satisfaction was negatively correlated with relocation consequences. Commuting time after relocation was a more powerful predictor of satisfaction than was distance of move.

A study done by Dennis (1998) found a strong positive correlation between empowerment and job satisfaction. Bettencourt and Brown (1997) found that the
perceptions of fairness of job supervision, pay and promotion rules, and supervisor administration were a significant predictor of job satisfaction.

Most empirical research has shown a strong link between meaning and job satisfaction (Hackman & Oldham, 1980; Thomas & Tymon, 1994). An important precondition of work satisfaction is the degree to which an individual finds work personally meaningful (Herzberg, 1966). In contrast, low levels of meaning have been linked to apathy at work and lower levels of work satisfaction (Thomas & Velthouse, 1990).

While only indirect support has been found linking competence (self-efficacy) with satisfaction, it makes intuitive sense that those who feel more competent about their work are likely to feel more satisfied about their work (Schroeder, 2003). Self-efficacy has been argued to enhance intrinsic interest, due to satisfaction from previous successes and feelings of personal causation (Gist, 1987). Similarly, Harackiewicz, Sansone, and Manderlink (1985) found feelings of competence to be related to intrinsic motivation. In this context, a longitudinal study by Johnson and Johnson (2000) showed that perceived overqualification had a negative effect on job satisfaction.

Self-determination was considered a key component of intrinsic motivation, which, in turn, is a critical determinant of job satisfaction (Deci & Ryan, 1985). Individuals who had more autonomy on the job were likely to experience intrinsic rewards from work (Thomas & Velthouse, 1990). Some researchers have proposed self-determination as a psychological need. According to the proponents of his view, meeting the need for self-determination results in work satisfaction (Conger & Kanungo, 1988; Greenberger, Strasser, Cummings, & Dunham, 1989).
Ashforth (1989) found that a lack of opportunity to have an impact on the organization was negatively related to work satisfaction. Thomas and Tymon's (1994) results showed that impact was strongly related to enhanced work satisfaction and reduced stress.

Organizational Commitment

Definition

Organizational commitment of workers is not a new concept in the study of organizational behavior as the literature reveals that this topic was examined as early as 1938 (Barnard). However, when one considers the literature on this topic, it becomes apparent that little consensus exists with respect to the meaning of the term (Meyer & Allen, 1991; Morrow, 1993; Mowday et al., 1982). As Guest (1991) concluded, “commitment is a difficult and rather elusive concept” (p. 117), and in a recent review of the literature, Anglia (2000) concludes that there is a lack of consistency leading to the confusion.

One of the earliest attempts to develop a typology of commitment was made by Etzioni (1961). He distinguished among three forms of responses for organizational directiveness for participation: moral, cumulative, and alienative involvement. Moral involvement meant a positive and intense orientation toward the organization that is based on the internalization of the organization’s goals, values, and norms. Cumulative involvement meant a less intense relationship with the organization and is largely based on the exchange of relationship that exists between members and the organization. Alienative involvement represents a negative orientation toward the organization, which is usually found in situations where individual behavior is severely constrained.
In a somewhat different vein, Kanter (1968) has argued that different types of commitment result from the different behavioral regulations imposed on workers by the organization. She defines organizational commitment as the willingness of workers to devote energy and loyalty to an organization. She further suggested three different forms of commitment: continuance, cohesion, and control commitment. Continuance commitment meant a worker's dedication to the survival of the organization. Cohesion commitment meant an attachment to social relationships in an organization brought on by such techniques as public renunciation of previous social ties or by engaging in ceremonies that enhance group cohesion. Control commitment was suggested as a member's attachment to the norms of the organization that shape behavior in desired directions.

Mowday et al. (1982) and Tett and Meyer (1993) defined commitment as the relative strength of an individual's identification with and involvement in a particular organization. It is characterized by three factors: (a) a belief in and acceptance of the organization's goals and values, (b) a strong desire to maintain membership in the organization, and (c) a willingness to exert considerable effort on behalf of the organization.

Sheldon (1971) defined organizational commitment as an attitude or an orientation toward the organization that links or attaches the identity of the person to the organization. Organizational commitment was explained by Hrebiniak and Alutto (1972) as a structural phenomenon that occurs as a result of individual-organization transactions and alterations in side bets or investments over time.
Porter et al. (1974) defined organizational commitment as the relative strength of an individual’s identification with and involvement in a particular organization. It was characterized by at least three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization.

Salancik (1977) writes,

Commitment comes about when an individual is bound to his acts. Though the word bound is somewhat clumsy, what we mean by it is that the individual has identified himself with a particular behavior. Three characteristics bind an individual to his acts and hence commit him. They are the visibility, the irrevocability, and the volitionality of the behavior. By manipulating these three characteristics, an individual can be made to be more or less committed to his acts and their implication. (p. 64)

Mowday et al. (1982) developed their definition of commitment based upon a review of 10 different studies of commitment. Their view was that employee-organization commitment was based upon understanding the different linkages between employees and organizations. From a study of these linkages, Mowday et al. (1979) developed a definition of organizational commitment which included both attitudinal and behavioral commitment. Attitudinal organizational commitment was defined as “a strong belief in and acceptance of the organization’s goals and values; a willingness to exert considerable effort on behalf of the organization; and a strong desire to maintain membership in the organization” (p. 24). Behavioral organizational commitment meant that a person is bound to the organization only by peripheral factors such as pension plans and seniority, which would not continue if the employee quit. Mowday et al. suggested that the mentioned two forms of organizational commitment were closely related and represent different points along the same continuum. From these two types of individual

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
commitment, Mowday and his colleagues have developed the following definition of organizational commitment (Mowday et al., 1982):

Organizational commitment is the relative strength of an individual’s identification with and involvement in a particular organization. Conceptually, it can be characterized by three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization. (p. 27)

More recent research has shown that a three-component model of organizational commitment was developed, described as follows (Dunham, Grube, & Castaneda, 1994; Meyer & Allen, 1991): (a) affective commitment, which has recently been identified as the most studied form of employee-organization commitment (DeLoria, 2001; Morrow, 1993; Ozag, 2001), is defined as: “the employee’s emotional attachment to, identification with, and involvement in the organization”; (b) continuance commitment, an employee is locked into an organization only by peripheral factors; and (c) normative commitment, an employee’s obligation to stay because of benefits or specific training received.

Meyer, Allen, and Smith (1993) concluded that employees with a strong affective commitment remain with the organization because they want to, those with a strong (behavioral) commitment remain because they need to, and those with a strong normative commitment remain because they feel they ought to do so.

Mueller and Wallace (1992) differentiated in the sociological literature between two dominant conceptualizations of organizational commitment: loyalty and intent to stay. Loyalty was described as an affective response to and identification with an organization based on a sense of duty and responsibility (Buchanan, 1974; Cook & Wall, 1980; Farrell & Rusbult, 1981; Kalleberg & Berg, 1987; Mowday et al., 1982). This conceptualization of organizational commitment was reported to dominate the
management, organizational behavior, occupational psychology, and sociological literature (Mueller & Wallace, 1992). Positive and rewarding features of work were expected to increase loyalty, which in turn reduce the likelihood of leaving.

In addition, loyalty became stabilized with tenure, which partly explained the negative relationship typically found between tenure and turnover (Price, 1977). Intent to stay was described as effectively neutral and emphasized an employee's intention to remain a member of the organization (Halaby, 1986; Halaby & Weakliem, 1989). This concept was closely related to an economical weighting of the costs of leaving versus staying. Intent to stay was also found to stabilize with tenure. It was viewed as an intervening response to the structural conditions of work, as well as conditions of work elsewhere or no work at all (Bluedorn, 1982; Halaby, 1986; Lee & Mowday, 1987; Mobley, 1982). Researchers who included both forms of organizational commitment in their models argued that loyalty preceded intent to stay in the causal ordering (Mowday et al., 1982; Mueller & Price, 1990; Price & Mueller, 1986).

Among the three distinct approaches suggested by Varona (1996) in defining organizational commitment are: exchange, psychological, and attribution approach. The exchange approach showed commitment as an outcome of inducement or contribution transactions between the organization and member. The psychological approach defined commitment as an attitude or an orientation toward the organization that links or attaches the identity of the person to the organization. The three main components of this orientation consisted of: an identification with the goals and values of the organization; a high involvement in its work activities; and a strong desire to maintain membership in the organization (Porter et al., 1974; Steers, 1977). The attributions approach (Reichers,
1985) defined commitment as a binding of the individual to behavioral acts that occurs when individuals attribute an attitude of commitment to themselves after engaging in behaviors that are volitional, explicit, and irrevocable.

Aon Consulting (1998) defined organizational commitment using the following three perspectives: (a) teamwork behavior, (b) willingness to recommend an employer and its products and services, and (c) intention to continue working for a current employer.

Organizational Commitment in Educational Settings

In educational settings, a number of institutional factors have been found to correspond with faculty commitment. Harshbarger (1989), for example, concluded that faculty-university value congruence was one of the principal factors affecting faculty commitment. Other studies (Allen, 1992; Graham, 1996; Kawakubo, 1988) have reported that communication satisfaction, a sense of autonomy, and an internal locus of control seem to contribute toward the organizational commitment of faculty, while external control is apparently a negative factor. These findings are congruent with those from non-educational settings (Dale, 1997; Fiedler, 1993; Gunter, 1997; Potvin, 1992).

Ciriello (1987) found that commitment is a binding force for one's loyalty, identification, and involvement with an educational institution. Brantley (1993) has suggested that organizational commitment is a valuable component in educational institutions. In general agreement, Firestone and Pennell (1993) point out that the difficulty in inspecting and controlling the work of teachers, as well as disagreements regarding expected outcomes, makes commitment crucial in educational institutions.
Oberholster and Taylor (1999) further suggested that there appears to be a direct link between organizational commitment and educational success. In elementary schools, Hatton (1997) found a strong relationship between teacher commitment and student success; and at the tertiary level.

Organizational Commitment and Demographic Variables

Age and Length of Service

Personal demographics play a role in organizational commitment (Oberholster & Taylor, 1999). Age and length of service appear to have a positive relationship with organizational commitment (Rivers, 1994; Salancik, 1977). Support has been found for a positive relationship between organizational commitment and age for different occupational groups, including: lower-level employees in business settings (Angel & Perry, 1981), newspaper transportation employees (Fukami & Larson, 1984), medical teams in psychiatric care (Hrebinjak, 1974), non-faculty staff in a major university (Morris & Sherman, 1981), scientists working in laboratories (Sheldon, 1971), and federal employees (Stevens, Beyer, & Trice, 1978). Ettorre (1997) noted that a turnover of employees with tenure of 15 and more years was very rare.

Schroeder (2003) found out that Andrews University employees between the ages of 20-30 were significantly less committed to the organization than their counterparts in the higher age groups.

Blackhurst, Brandt, and Kalinowski (1998) reported a significant interaction effect between position title, years in current position, and highest degree earned on organizational commitment during the first 5 years of their employment, while women
directors and associate directors in student affairs indicated the highest organizational commitment after 5 years in their positions.

**Educational Level**

Although findings are at times inconsistent in the literature, it appears that there are significant relationships between organizational commitment and educational level achieved, as well as with employment status (Mottaz, 1986; Salancik, 1977). Steers (1977) concluded in his study that it might be more difficult for an organization to provide sufficient rewards to retain higher educated employees. More highly educated people were expected to be less committed to an organization and more committed to a profession or trade. These findings were supported by a study of Morris and Sherman (1981). Less educated employees showed higher levels of organizational commitment than their higher educated counterparts.

Blackhurst et al. (1998) showed a significant interaction effect for position title and highest degree earned on organizational commitment. Possessing a doctorate was associated with higher levels of organizational commitment for women in student affairs positions, compared to lowest levels of organizational commitment for women who held a doctorate in associate and assistant student affairs position.

Schroeder (2003) in his study found that employees holding a doctoral degree were significantly more committed to the organization than employees with a bachelor, associate, or professional degree.
Gender

A review of the literature reveals that gender evidences a fairly consistent relationship to organizational commitment (Mowday et al., 1982), with women as a group being more committed than men. Angel and Perry (1981) found that women with business professions were more committed to their organizations than their male colleagues. These findings were supported by a previous study of private-sector managers by Grusky (1966). Females also showed higher levels of organizational commitment in studies by Hrebiniak and Alluto (1972), Mathieu and Zajac (1990), as well as Lincoln and Kalleberg (1990). However, Schroeder (2003) did not find significant gender differences in organizational commitment.

Organizational Commitment and Overall Job Satisfaction

Previous research shows that satisfaction and commitment lead to specific behavioral outcomes Eccles (2003). The concept of employee commitment to organizations has received much attention in the research literature as both managers and organization analysts seek ways to increase employee retention and performance. Steers (1977) found commitment to be strongly related to intent and desire to remain and moderately related to attendance and turnover. Highly satisfied and committed employees should have a strong desire and intent to remain with the organization, thus influencing retention and turnover (Porter et al., 1974), high performance standards, and low tardiness records. In addition, Price and Mueller (1981) found that job satisfaction influences turnover negatively (i.e., the higher the job satisfaction, the lower the turnover). Therefore, employees who are highly committed to the goals of the
organization, such as NCU employees, would be expected to be satisfied with the policies and should be more likely to have a desire to continue working for the University.

**Religious Commitment**

**Definition**

A review of the literature strongly suggests that there appears to be diverse views on the definition of religious commitment (Gartner, Larson, & Allen, 1991; Gorsuch, 1990). Asa (1984) defined religious commitment as the giving of intellectual, emotional, and spiritual assent to a set of beliefs and behaviors. Kanter (1972) suggested religious commitment is the link between the individual and the larger social group.

King (1967) found six different scales to measure religion. These dimensions included: creedal assent, devotionalism, congregational involvement (attendance, activity, and final support), religious knowledge, orientation (growth and extrinsicness), and salience (behavior and cognition).

Butman (1990) suggested a developmental approach of religiosity over the life-span. Religious faith and experience were seen as constantly changing and remaining the same in other aspects at the same time. Butman distinguished between: observance religiousness (identification with a religious system), intrinsic religiousness (self-giving devotion to religious causes and ideals), and autonomous religiousness (individualized commitment to faith independent of institutional structures).

Allport (1966) developed one of the most well-known and researched typologies related to intrinsic/extrinsic religious motivation. According to his theory, intrinsic religious commitment was defined as a sincere commitment operating as the guiding motivation in an individual’s life (Allport & Ross, 1967). In contrast, extrinsic
commitment was seen as a more utilitarian approach in which church participation was used for selfish purposes (Kahoe, 1985; Watson et al., 1989).

Cornwall and Albrecht (1986) recognized the importance of distinguishing between cognitive, affective, and behavioral aspects when measuring religiosity. These three categories included: religious beliefs and orthodoxy (cognitive); feelings towards religious beings, objects, or institutions (affective); and church attendance, frequency of prayer, and financial contributions (behavioral).

Butman (1990) suggested a developmental approach of religiosity over the lifespan. Religious faith and experience were seen as constantly changing and remaining the same in other aspects at the same time. Butman distinguished between: observance religiousness (identification with a religious system), intrinsic religiousness (self-giving devotion to religious causes and ideals), and autonomous religiousness (individualized commitment to faith independent of institutional structures).

Van Wicklin (1990) distinguished between three different approaches measuring religious commitment. The first approach was concerned with the nature of religiosity including cognitive, affective, and behavioral components (Cornwall & Albrecht, 1986; Glock, 1962). The second concept was characterized as being developmental in nature, and included Butman’s (1990) view of religiosity and Fowler’s stages of faith development. The third orientation focused on an overall approach to religion rather than on an analysis of its components (e.g., knowledge, beliefs, and ritual). This approach included Allport’s (1966) intrinsic/extrinsic dimensions of religious commitment.
Difficulties in Measuring Religious Commitment

Basinger (1990) found that ambiguous religious language was used to measure religious commitment. Certain terms were found to have different meanings in different contexts. He further criticized the tendency to measure the cognitive, affective, and behavioral aspects of religious commitment separately. It was argued that the different facets of religious commitment were often strongly related and, therefore, needed to be viewed and measured as a whole.

Basinger (1990) pointed especially to limitations when attempting to measure the affective aspects of participants' religiosity. He suggests that the fact that nobody can fully understand the individual experience of a human being makes it difficult for researchers to be certain that similar levels of religiosity are measured, analyzed, and compared.

Gartner et al. (1991) criticized the fact that religious commitment has been dominantly measured through questionnaires. He concluded that the best religious predictors of mental health were not religious questionnaires, but real-life behavior. The study of religiosity in real-life situations was also suggested by Bolvin, Donkin, and Darling (1990).

Allport's Intrinsic/Extrinsic Framework

The literature reveals that although many other scales have been developed (e.g., the Religious Maturity Scale, the Spiritual Well-Being Scale, the Religious Status Interview, the Spiritual Well-Being Questionnaire), Allport's intrinsic/extrinsic framework has been the dominant paradigm for measuring religion and religious commitment for the last three decades (Kirkpatrick & Hood, 1990; Schroeder, 2003).
Hood (1985) states that the psychology of religion has not been successful in abandoning or transcending Allport's typology. Donahue (1985) stated that more than 70 published research studies from 1979 to 1985 have used this theoretical framework to address the relationship between religion, personality, and behavior.

According to Allport (1966), the intrinsic/extrinsic concept helped to distinguish churchgoers whose type of membership supported and served nonreligious and other ends from those for whom religion was an end in itself. Extrinsically, religiously motivated people were pictured as using religion, while their intrinsically motivated counterparts were described as living religion (Allport & Ross, 1967).

Intrinsic religious commitment was also described as a sincere commitment operating as the guiding motivation in an individual's life. Faith was regarded as supreme value, a striving toward the unification of being, and the transcendence of all self-centered needs (Allport, 1966). The intrinsically motivated person has been associated with self-actualization, empathy, less personal distress and depression, less anxiety, and better relative mental health (Baker & Gorsuch, 1982; Watson et al., 1989). On the other hand, extrinsically motivated people were seen as more discriminatory and prejudiced (Feagin, 1964; McFarland, 1989).

Job Satisfaction Organizational and Religious Commitment

A review of the literature shows that relatively few studies have investigated the relationship between job satisfaction and organizational and religious commitment. Tarr (1992) found in his study of 940 full-time teachers in Boston Catholic elementary and secondary schools that the importance of religion and lengths of organizational tenure were significant predictors of organizational commitment for lay Catholics. He
concluded that both length of tenure in Catholic schools and the importance of religion are hallmarks of an organizationally committed Catholic laity.

Results of Mancuso’s study (2003) indicated that teachers in Catholic elementary schools chose to become teachers and remain in their careers because of viewing their careers as ministry, a vocational call, or as a collegial and spiritual enterprise. Salary and benefits were not reported to play a significant role in affecting the choice of, and perseverance in, the teaching profession.

Results of Ciriello’s study (1987) indicated that teachers who chose to teach in Catholic schools primarily for organizationally related reasons were more strongly attached than those who taught primarily for professional reasons, despite there being no difference in the level of satisfaction between the groups.

Rutebuka (1996) concluded that teachers in the Lake Union Conference of the Seventh-day Adventist church were generally satisfied with their jobs, and chose to work for the SDA church because of their commitment to the church.

Rice (1990) reported on a survey that sought to discover why teachers chose to work in Seventh-day Adventist schools. She found that over two-thirds either saw teaching in an SDA school as God’s choice for their lives or they viewed it as a ministry. The study indicated that individuals have chosen to teach in SDA schools primarily for spiritual/religious reasons and that linkages might be expected between such teachers and their educational system.

Schroeder (2003) concluded that religious commitment appeared as a significant predictor of organizational commitment for Andrews University employees. The study
indicated that some of Andrews University employees saw their work at Andrews as partial fulfillment of their Christian mission.

Results of Dramstad's study (2004) indicated that SDA teachers tend to experience a greater level of job satisfaction and organizational commitment than do public school teachers in Norway. According to the literature, this was partly attributed to a greater focus on common values among SDA school teachers, which forms the foundation of these schools.

**Summary of the Chapter**

This chapter presented a review of the literature with the expressed intent of providing important information about the construct of job satisfaction and its relationship to organizational and religious commitment.

The search for a universal definition of job satisfaction in not difficult; it is an impossible one (Green, 2000). Even though the definitions vary, a commonality among them seems to be that job satisfaction is a job-related emotional reaction. Also though the importance of job satisfaction has been questioned (Nicholson et al., 1985), job satisfaction remains the most studied concept in organizational research.

From an employee's standpoint, job satisfaction is a desirable outcome itself. From an organizational and managerial standpoint, job satisfaction is important because of its impact on absenteeism (Dow & Taylor, 1985), turnover (Tett & Meyer, 1993), and pro-social "citizenship" behavior, which manifests itself in helping coworkers and customers, and being more cooperative (Bateman & Organ, 1983).

Although Frederick Herzberg's two-factor theory and its 15 factors of job satisfaction have received some amount of criticism within the literature (Derlin &
Schneider, 1994; Maidani, 1991; May & Decker, 1988), a significant number of studies have shown that Herzberg’s motivation-hygiene theory still remains a viable theory for studying or researching job satisfaction (Blank, 1993; Bowen & Radhakrishna, 1991; Friesen et al., 1983; Gaziel, 1986; Herzberg et al., 1987; Hill, 1987; Nussel et al., 1988; Olanrewaju, 2002; Schroeder, 2003).

Herzberg et al. (1959) asserted that the concept of job satisfaction had two dimensions, namely intrinsic and extrinsic factors. The intrinsic factors relate to job content (work itself) and include achievement, recognition, work itself, responsibility, and advancement. The extrinsic factors relate to job context (work environment) and relations, and working conditions.

Organizational commitment of workers is not a new concept in the study of organizational behavior as the literature reveals that this topic was examined as early as 1938 (Barnard). However, when one considers the literature on this topic, it becomes apparent that little consensus exists with respect to the meaning of the term (Meyer & Allen, 1991; Morrow, 1993; Mowday et al., 1982). The most relevant definition of organizational commitment was found by Mowday et al. (1982). They defined commitment as the relative strength of an individual’s identification with and involvement in a particular organization. According to their investigation, organizational commitment was characterized by three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization.
More recent research has shown that a three-component model of organizational commitment was developed and described as follows: affective or attitudinal commitment, behavioral or continuance commitment, and normative commitment (Dunham et al., 1994; Meyer & Allen, 1991; Meyer, Allen, & Smith, 1993).

Although there is certainly a chicken-and-egg debate over issues regarding the relationship between job satisfaction and organizational commitment, several researchers have made the case that job satisfaction is a predictor of organizational commitment (Dramstad, 2004; Eccles, 2003; Meixner & Bline, 1989; Porter et al., 1974; Price, 1977; Rose, 1991; Williams & Hazer, 1986).

The literature also reveals that demographic variables, such as occupational area, gender, age, educational level, and length of employment, have shown inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1983; Blank, 1993; Dramstad, 2004; Iiacqua & Schumacher, 1995; Morris & Sherman, 1981; Schroeder, 2003; Sheldon, 1971).

Allport’s intrinsic/extrinsic framework has been the dominant paradigm for measuring religions and religious commitment for the last three decades (Kirkpatrick & Hood, 1990; Schroeder, 2003). Allport (1966) suggests that the intrinsic/extrinsic concepts help to distinguish churchgoers whose type of membership supports and serves nonreligious and other ends from those for whom religion is an end in itself. Extrinsically religious motivated people were pictured as using religion, while their intrinsically motivated fellow counterparts were described as living religion (Allport & Ross, 1967).
Several studies have found that the importance of religion was a significant predictor of organizational commitment for lay Catholics (Ciriello, 1987; Mancuso, 2003; Tarr, 1992). In agreement with these findings, studies in Seventh-day Adventist institutions (Rice, 1990; Rutebuka, 1996; Schroeder, 2003, Dramstad, 2004) concluded that teachers were generally satisfied with their jobs and chose to work for the SDA church because of their commitment to the Adventist organization.
CHAPTER III

RESEARCH METHODOLOGY

Introduction

The purpose of this study was to investigate the level of job satisfaction and its relationship to organizational and religious commitment among full-time workers of Northern Caribbean University. A comprehensive description of the research methodology can be found in this chapter in the following order: first, the research design which clearly indicated the research approach and the reason why should an approach was selected; second, the population and sample, which outlined the sources and number of participants that were used for the study; third, the three instruments and demographic questions used in the study are explained along with validity and reliability information detailed for each instrument, followed by step-by-step procedures for the implementation of the research design; and, fourth, the null hypotheses and the data analysis are discussed.

Research Design

This study utilized a quantitative descriptive research design. A survey questionnaire was sent to all full-time administrators and sector managers, faculty, and staff members who were currently employed by the University at the time of the study. The questionnaire solicited information using (a) five demographic questions...
(occupational area, age, gender, educational level, and length of employment), (b) 15 items to measure professional satisfaction, (c) 15 items to estimate the level of organizational commitment, and (d) 10 items were used to assess intrinsic religious commitment.

**Population and Sample**

**Population**

The target population for this study was all full time employees at Northern Caribbean University during the period of September to December 2004. Although this study was conducted in Jamaica, it is my belief the findings from this study could be generalized to employees in similar organizations in the Caribbean.

**Sample**

The primary subjects for this study were all full-time administrators and sector managers, faculty, and staff who were currently employed by the Northern Caribbean University during the time of this study (September to December 2004). Part-time workers and workers from the preparatory and high schools were not included in this study. According to information provided by the Department of Human Resources, Northern Caribbean University employed 524 employees at the time of the study of which 377 were full-time University workers. Due to the relatively low number of full-time University employees, all of the full-time employees were selected for the study. Hence no sampling procedure was done. Fifty-one of the 377 full-time employees were administrators and sector managers, 126 were full-time faculty members, and 200 were staff members. The group of 51 administrators and sector managers consisted of the
president, 5 vice-presidents, 6 deans, 13 chairs, and 26 sector managers. The group of staff workers included secretarial and accounting personnel, plant services, custodial services, and grounds and security workers.

Instrumentation

A modification of the survey instruments used by Schroeder (2003) was used for this study. This modified instrument became necessary because of the different contexts of the two studies. The instrument was divided into four sections.

Section 1 solicited demographic information. Section 2 solicited information on the level of job satisfaction. Section 3 measured the level of organizational commitment, and Section 4 measured the level of religious commitment. The sections are discussed below.

Measurement of Job Satisfaction

The Professional Satisfaction Scale (PSS) was developed by William Blank (1993) to obtain participants’ perceptions of specific factors that are related to job satisfaction or dissatisfaction. The instrument included 15 items representative of Herzberg’s original description of six factors related to job satisfaction (motivators) and nine factors related to job dissatisfaction (hygienes) (Herzberg et al., 1959). The six items relating to job satisfaction addressed issues related to: achievement, recognition, work itself, responsibility, advancement, and growth. The nine items relating to job dissatisfaction included: organizational policy and administration; supervision; interpersonal relations with superiors, peers, and students; working conditions; salary; status; and job security. The use of a Likert-type format to measure job satisfaction was
an attempt to respond to major criticism of Herzberg’s theory. Since Herzberg theoretically conceptualized job satisfaction and dissatisfaction to be operating on a dual continua which were independent of each other, Blank (1993) developed a dual continua scale for his study. Using Herzberg’s motivation-hygiene factor terms and definitions (Silver, 1983), respondents were asked to rate each of the 15 factors on either a satisfaction or dissatisfaction scale ranging from 1 (slightly satisfied/dissatisfied) to 4 (highly satisfied/dissatisfied).

For his study, Schroeder (2003) decided to change the dual continua scale into a single Likert-type scale ranging from 1 (highly dissatisfied) to 5 (highly satisfied). Median choices included: 2 (dissatisfied), 3 (neutral), and 4 (satisfied). Schroeder (2003) felt that these adjustments had to be applied in order to obtain a clearer overall job satisfaction score, and to provide the participants with the choice of a neutral response. Additionally, he stated that the 5-point Likert scale provided the respondents with a familiar response format in order to make the participation more attractive and to increase the response rate.

For the purpose of this study I decided to adopt the same format used by Schroeder (2003).

Reliability and Validity

Blank (1993) examined the reliability of the instrument using data from a pilot study along with data from the full study. The professionals from the two different colleges reported a reliability coefficient (alpha) of .90. A later study, using 115 employees from three different universities, reported a reliability of .83. These correlations indicated a high degree of internal consistency.
Since the Professional Satisfaction scale items are identical to the motivator-hygiene factors used in Herzberg's original study and numerous follow-up studies, this instrument possesses a high degree of content validity (Bowen & Radhakrishna, 1991; Cryer & Elton, 1990; Friesen et al., 1983; Gaziel, 1986; Herzberg et al., 1987; Nussel et al., 1988; Olanrewaju, 2002).

Measurement of Organizational Commitment

Section 3 sought information on the levels of organizational commitment of the Northern Caribbean University full-time employees using the Organizational Commitment Questionnaire (OCQ). The OCQ was developed by Mowday et al. (1974). According to Morris and Sherman (1981), the Organizational Commitment Questionnaire was the only measurement of organizational commitment that had substantial documentation related to behavioral outcomes, reliability, and validity. Responses to the 15 commitment items were measured on a 5-point Likert-scale ranging from 1 (strongly disagree) to 5 (strongly agree). For example, item 20 asked participants to circle the degree of his/her agreement with the following statement, “I am proud to tell others that I am a part of this university.” Item 29 asked participants to circle the degree of his/her agreement with the following statement, “For me this is the best of all possible organizations for which to work.”

Reliability and Validity

The empirical characteristics of the OCQ, an instrument developed by Porter and his colleagues in 1974 are based on a series of studies among 2,563 employees in nine divergent organizations (Mowday et al., 1979). Satisfactorily test-retest reliabilities $r=
.53, .63, .75 over 2-, 3-, and 4-month periods; \( r = .72 \) over a 2-month period; and \( r = .62 \) over a 3-month period; and internal consistency reliabilities from .82 to .93, with a median of .90 (Cronbach, 1951), were found. Smith, Kendall, and Hulin (1969) reported test-retest reliabilities for the JDI ranging from .45 to .75. These results compared favorably with most attitude measures (Smith et al., 1969) and the reliability coefficients reported in previous studies (Alutto, Krebiniak, & Alonzo, 1973; Mowday et al., 1979). Mowday et al. (1979) reported test-retest reliability coefficients ranging from .53 to .75 for the OCQ.

A convergent validity study was conducted by comparing OCQ and the Sources of Organizational Attachment (SOA) scale. The latter is a 12-item measure of an individual's desire to remain with or leave an organization. Correlations with a single construct (i.e., “intent to leave”) varied from -.31 to -.63 (Price & Mueller, 1986).

Discriminant validity was noted by Brief and Aldag (1977) ranging from .01 to .68 with a median correlation of .41. Lodahl and Kejner's (1965) measures ranged from \( r = .30 \) to \( r = .56 \), and Steers and Braunstein's (1976) measures of \( r = .39 \) to \( r = .40 \) emerged from the instrument. It was assessed by examining the relationships between commitment and satisfaction with one's career with emphasis on specific aspects of the job and work environment. The OCQ was generally found to be more highly related to measures of similar attitude as opposed to different attitudes. The relationships between satisfaction and commitment were low enough to question whether both were measuring the same attitude.
Given the wide use of OCQ in research and the findings of the researchers mentioned herein, the OCQ appears to be a reliable and valid instrument for the purpose of this research.

Measurement of Religious Commitment

The Intrinsic Religious Motivation Scale (IRMS) was used to measure the extent of religious commitment of the workers of Northern Caribbean University. Hoge’s (1972) Intrinsic Religious Motivation Scale (IRMS) is an adaptation of Allport and Ross’s (1967) Intrinsic/Extrinsic Motivation Scale. It is an attempt to provide greater specificity in conceptualization and measurement of motivation.

Responses to the 10 religious commitment items were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) with median choices 2 (disagree), 3 (neutral), and 4 (agree). Seven of the 10 items dealt with intrinsic religious motivation. For example, item 35 asked the participants to circle his/her degree of agreement with the following statement: “My faith sometimes restricts my actions.”

Reliability and Validity

From the 30 items in Hoge’s (1972) final validation study, a 10-item scale, emerged with the highest validity, reliability, item-to-item correlations, and item-to-scale correlations. All 10 items correlated with the minister’s judgment at 0.585. As predicted, the scale also correlated with ministers’ judgments beyond the 0.03 significance level whenever tested and beyond the 0.015 level in at least one validation study. The dangers of post-hoc item selection were virtually eliminated since all 10 items in the new scale were successful over two validation studies.
The scale’s reliability was acceptable. The average was .901. Twenty-two of “item to item” were larger than 0.50. The persons judged by the minister to be intrinsic had a mean scale score of 1.51 and SD of 0.44, while those judged to be extrinsic had a mean of 2.42 and SD of 0.79 at the 0.001 level of significance. Unfortunately, only three of the extrinsic items tested proved to be usable. Researchers concerned about the response-set problem were advised by the researcher to delete item 11 from the scale. After this change the Kuder-Richardson correlation coefficient was reported at .902 and predictive validity was .582 (as cited in Schroeder, 2003).

**Demographic Data**

The major purpose of these data was to identify any significant differences that might exist among demographic variables and job satisfaction or job dissatisfaction, organizational commitment and religious commitment. A review of the literature shows that the following demographic variables were commonly used in previous job satisfaction/dissatisfaction studies, organizational and religious commitment studies within the field of education, and were deemed to be relevant for this study: (a) occupational Area, (b) gender, (c) education level, (d) age, and (e) length of employment.

Studying differences among demographic variables addressed another criticism of Herzberg’s theory. Although Herzberg suggested that the dual-factor theory is not dependent upon demographic variables, critics of this theory suggest that motivation-hygiene values differ as a result of occupational area and individual difference (Armstrong, 1971; Wanous, 1974).
Procedure and Permission

This study centered on job satisfaction and its relationship to organizational and religious commitment among full-time workers at Northern Caribbean University. The authorization for this study was sought from the President of the Northern Caribbean University and permission was granted from the Andrews University Institutional Review Board to conduct this study.

Data Collection

A list of all the full-time workers at Northern Caribbean University was collected from the Human Resource Department. A questionnaire package was prepared for each worker. Each questionnaire package contained a cover letter which described the nature of the research, a copy of the questionnaire, and a self-addressed envelope. Workers were assured of anonymity and confidentiality. This was done by asking the respondents not to write their names on the instrument and to return the completed questionnaire in the self-addressed envelope that was provided. The initial distribution was launched on Tuesday, 19th October 2004. The cover note indicated that the questionnaires should be returned within 2 weeks’ time.

By the 19th of November 2004, the response rate had reached over 60%. I felt that there was no need to send out a written reminder due to the fact that more than half of the subjects had responded. However, telephone calls were made to the various offices thanking those subjects who had returned their questionnaires and in the interim encouraging those who still had questionnaires to complete them. By the 20th of December 2004, a total of 270 questionnaires came back. Seven of the surveys had to be discarded because of insufficient demographic data provided and more than three
quarters of the questions were not answered. Therefore, these 7 were subtracted from the 270. As a result only 263 questionnaires out of the 377 that were prepared were used in this study, thus making a response rate of 69.7%.

Research Questions and Hypotheses

Research Question 1: What are the levels of job satisfaction, organizational commitment, and religious commitment of the administrators, sector managers, faculty, and staff at Northern Caribbean University?

Research question 1 will be answered with descriptive statistics.

Job satisfaction is broken down into overall, intrinsic, and extrinsic satisfaction. Therefore there are 25 null hypotheses associated with research question 2.

Research Question 2: What are the relationships between job satisfaction, organizational commitment, religious commitment, and the following demographic characteristics: age, gender, length of employment, levels of education, and employment area?

The following null hypotheses were tested.

Hypothesis 1. There is no difference in overall job satisfaction among workers at NCU by occupational area.

Hypothesis 2. There is no difference in intrinsic job satisfaction among workers at NCU by occupational area.

Hypothesis 3. There is no difference in extrinsic job satisfaction among workers at NCU by occupational area.

Hypothesis 4. There is no difference in overall job satisfaction among workers at NCU by gender.
Hypothesis 5. There is no difference in intrinsic job satisfaction among workers at NCU by gender.

Hypothesis 6. There is no difference in extrinsic job satisfaction among workers at NCU by gender.

Hypothesis 7. There is no difference in overall job satisfaction among workers at NCU by age.

Hypothesis 8. There is no difference in intrinsic job satisfaction among workers at NCU by age.

Hypothesis 9. There is no difference in extrinsic job satisfaction among workers at NCU by age.

Hypothesis 10. There is no difference in overall job satisfaction among workers at NCU by educational level.

Hypothesis 11. There is no difference in intrinsic job satisfaction among workers at NCU by educational level.

Hypothesis 12. There is no difference in extrinsic job satisfaction among workers at NCU by educational level.

Hypothesis 13. There is no difference in overall job satisfaction among workers at NCU by length of employment.

Hypothesis 14. There is no difference in intrinsic job satisfaction among workers at NCU by length of employment.

Hypothesis 15. There is no difference in extrinsic job satisfaction among workers at NCU by length of employment.
Hypothesis 16. There is no difference in organizational commitment among workers at NCU by occupational area.

Hypothesis 17. There is no difference in organizational commitment among workers at NCU by gender.

Hypothesis 18. There is no difference in organizational commitment among workers at NCU by age.

Hypothesis 19. There is no difference in organizational commitment among workers at NCU by education level.

Hypothesis 20. There is no difference in organizational commitment among workers at NCU by length of employment.

Hypothesis 21. There is no difference in religious commitment among workers at NCU by occupational area.

Hypothesis 22. There is no difference in religious commitment among workers at NCU by gender.

Hypothesis 23. There is no difference in religious commitment among workers at NCU by age.

Hypothesis 24. There is no difference in religious commitment among workers at NCU by levels of education.

Hypothesis 25. There is no difference in religious commitment among workers at NCU by length of employment.

Research Question 3 asked: What is the nature of the relationships among job satisfaction (intrinsic and extrinsic), organizational commitment, and religious commitment?
Hypothesis 26: There is no multiple correlation between overall job satisfaction and a linear combination of organizational commitment and religious commitment.

Hypothesis 27: There is no multiple correlation between intrinsic job satisfaction and a linear combination of organizational commitment and religious commitment.

Hypothesis 28: There is no multiple correlation between extrinsic job satisfaction and a linear combination of organizational commitment and religious commitment.

Data Analysis

The general purpose of this study was to identify the levels of job satisfaction and their relationship to organizational and religious commitment among full-time workers of Northern Caribbean University. The SPSS statistical package was used to analyze the data. The major variables for this study were (a) job satisfaction, (b) organizational commitment, and (c) religious commitment.

Data collected through the Professional Satisfaction Scale, the Organizational Commitment Questionnaire, the Intrinsic Religious Motivation Scale, and the demographic analysis were coded as follows: Overall job satisfaction on the PSS was computed by adding the responses for all 15 job satisfaction factors ranging from 1 (very dissatisfied) to 5 (very satisfied) and calculating the mean. Intrinsic satisfaction scores were obtained by adding the six job satisfactions according to Herzberg’s two-factor theory (achievement, advancement, recognition, growth, responsibility, work itself), and calculating the mean. The scores for extrinsic job satisfaction were calculated by the sum of nine job dissatisfaction factors according to Herzberg (relations with peers, relations with students, relations with superiors, job security, organizational policy and...
administration, salary, status, supervision, and working condition), and then computing the mean.

The OCQ scores were coded in a similar manner to the overall job satisfaction scores of the PSS. Response values ranging from 1 (strongly disagree) to 5 (strongly agree) were added. Items 3, 7, 9, 11, 12, and 15 were reverse (negative) items. These items were scored with 1 (strongly agree) to 5 (strongly disagree).

The IRMS scores were coded in a similar manner as that described for the OCQ with response values ranging from 1 (strongly disagree) to 5 (strongly agree). Three of the items were also reversed items and needed to be scored with 1 (strongly agree) to 5 (strongly disagree).

The demographic variable, occupational area, was subdivided into three groups with 1 (administrators and sector managers), 2 (faculty), and 3 (staff). Gender was divided into 1 (male) and 2 (females). Age was sub-divided into eight different categories: 1 (20 years –under), 2 (21-25 years), 3 (26-30 years), 4 (31-35 years), 5 (36-40 years), 6 (41-45 years), 7 (46-50 years), 8 (51 years and more). Educational level was coded into six different categories: 1 (primary level), 2 (secondary level), 3 (certificate), 4 (B.A., professional, or associate degree), 5 (master’s degree) and 6 (doctoral degree). Length of employment at Northern Caribbean University was coded into nine different categories: 1 (0-4 years), 2 (5-10 years), 3 (11-14 years), 4 (15-20 years), 5 (21-25 years), 6 (26-30 years), 7 (31-35 years), 8 (36-40 years), and 9 (41 years and more).

This study used descriptive statistics, analysis of variance, and multiple regression for data analysis. Research question 1 was analyzed by using descriptive statistics. Numbers, mean scores, and standard deviations were listed for all Northern Caribbean
University workers, administrators and sector managers, faculty, and staff as they appeared for overall job satisfaction, intrinsic job satisfaction, extrinsic job satisfaction, and each of Herzberg's 15 job satisfaction factors (e.g., achievement, status, working condition, relation with peers, etc.).

Research question 2 was analyzed by using one-way analysis of variance using Statistical Package for the Social Science (SPSS) Version 10. One-way analysis of variance was employed to test for differences between levels of (a) overall job satisfaction, (b) intrinsic job satisfaction, (c) extrinsic job satisfaction, (d) organizational commitment, and (e) religious commitment as they related to participants' demographic characteristics, such as occupational area, gender, educational level, age, and length of employment. A Student Newman Keul's and Games-Howell test of multiple comparisons was then completed as a post-hoc test to determine which pairs of variables within each demographic category contributed to significant $F$ values.

Multiple Regression Analysis was used for research question 3. Multiple Regression Analysis was used to determine the nature of the relationship between job satisfaction (intrinsic and extrinsic) and organizational commitment and religious commitment.

**Summary**

This chapter presented the research methodology and described the type of research, the population surveyed, the research design, and the research instruments used. The research procedures were also described, and the statistical analysis to test the null hypotheses was indicated.
CHAPTER IV

RESULTS

The purpose of this study was to investigate the level of job satisfaction and its relationship to organizational and religious commitment among full-time workers of Northern Caribbean University (NCU). The study investigated whether significant relationships existed between the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment and religious commitment, and the following demographic variables: (a) occupational area, (b) gender, (c) age, (d) educational level, and (e) length of employment. Further, the investigation studied the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational and religious commitment.

Characteristics of the Subjects

A total of 263 workers at Northern Caribbean University participated in this study, representing a response rate of 69.7%. Table 1 summarizes the demographic characteristics of these workers. More than half (57.0%) of the occupational group were staff, with a little less than half (46.8%) of the respondents being female. Almost a third
Table 1

*Frequency and Percentage of Selected Characteristics of Workers at NCU (N = 263)*

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupational Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrators &amp; Sector Managers</td>
<td>36</td>
<td>13.7</td>
</tr>
<tr>
<td>Faculty</td>
<td>77</td>
<td>29.3</td>
</tr>
<tr>
<td>Staff</td>
<td>150</td>
<td>57.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>95</td>
<td>36.1</td>
</tr>
<tr>
<td>Female</td>
<td>123</td>
<td>46.8</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 &amp; under</td>
<td>27</td>
<td>10.3</td>
</tr>
<tr>
<td>26-35</td>
<td>85</td>
<td>32.3</td>
</tr>
<tr>
<td>36-45</td>
<td>76</td>
<td>28.9</td>
</tr>
<tr>
<td>46 &amp; over</td>
<td>74</td>
<td>28.1</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>16</td>
<td>6.1</td>
</tr>
<tr>
<td>Secondary</td>
<td>27</td>
<td>10.3</td>
</tr>
<tr>
<td>Certificate</td>
<td>21</td>
<td>8.0</td>
</tr>
<tr>
<td>Bachelor’s, Professional, or Associate</td>
<td>97</td>
<td>36.9</td>
</tr>
<tr>
<td>Master’s</td>
<td>76</td>
<td>28.9</td>
</tr>
<tr>
<td>Doctoral</td>
<td>23</td>
<td>8.7</td>
</tr>
<tr>
<td><strong>Years Working at Northern Caribbean University</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4 years</td>
<td>140</td>
<td>53.2</td>
</tr>
<tr>
<td>5-10 years</td>
<td>69</td>
<td>26.2</td>
</tr>
<tr>
<td>11-14 years</td>
<td>12</td>
<td>4.6</td>
</tr>
<tr>
<td>15-25 years</td>
<td>26</td>
<td>9.9</td>
</tr>
<tr>
<td>26 years and more</td>
<td>16</td>
<td>6.1</td>
</tr>
</tbody>
</table>

(32.3%) of the respondents were between the ages of 26 to 35, and a little more than a third (36.9%) of these workers had a bachelor’s, professional, or associate degrees.

More than half (53.2%) of the respondents have been working at NCU between 0-4 years.
Measures of Reliability

When preliminary item analysis was performed on the 15-item Professional Satisfaction Scale (PSS), 15-item Organizational Commitment Questionnaire (OCQ), and the 10-item Religious Motivation Scale (IRMS) using Cronbach’s alpha, the reliability for the IRMS was below 0.70. The criteria were set to exclude all items with less than a 0.3 item total correlation as recommended by Nunnaly and Bernstein (1994) in order to obtain the required level of reliability (see Table 2).

An alpha coefficient of 0.85 was obtained when the following items were removed from the Organizational Commitment Questionnaire: Item 18, I feel little loyalty to this university; Item 19, I would accept almost any type of job assignments in order to keep working for this university; Item 24, It would take little change in my present circumstances to cause me to leave this university; Item 28, I really care about the fate of this university.

An alpha coefficient of 0.70 was obtained when the following items were removed from the Religious Motivation Scale: Item 35, My faith sometimes restricts my actions; Item 38, I try hard to carry my religion over into my other dealings in life; Item 39, Although I believe in my religion, I feel there are many more important things in life.

Data Analysis of Research Questions

Research Question 1: What are the levels of job satisfaction, organizational commitment, and religious commitment of full-time workers at Northern Caribbean University?
Table 2

*Measures of Reliability Scales for Job Satisfaction and Organizational and Religious Commitment (N = 263)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Original Scale</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>0.878</td>
</tr>
<tr>
<td>Intrinsic Job Satisfaction</td>
<td>0.763</td>
</tr>
<tr>
<td>Extrinsic Job Satisfaction</td>
<td>0.814</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.829</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.655</td>
</tr>
</tbody>
</table>

<sup>a</sup> Items 18, 19, 24, 28 deleted.
<sup>b</sup> Items 35, 38, 39 deleted.

For the purpose of interpreting the data in this study, the following criteria were set to indicate the level of job satisfaction, organizational commitment, and religious commitment according to the range of means: Dissatisfied (<2.50), Neutral (2.51-3.50), Satisfied (3.5-4.50), and Very Satisfied (4.51-5.00).

Table 3 presents the overall, intrinsic, and extrinsic job satisfaction of NCU workers by occupational area, where administrators/sector managers had the highest mean for overall job satisfaction ($M = 3.55, SD = 0.65$), intrinsic job satisfaction ($M = 3.75, SD = 0.59$), and extrinsic job satisfaction ($M = 3.41, SD = 0.74$). The staff appeared to be least satisfied with overall job satisfaction ($M = 3.28, SD = 0.62$), intrinsic job satisfaction ($M = 3.28, SD = 0.67$), and extrinsic job satisfaction ($M = 3.21, SD = 3.65$). Results for overall, intrinsic, and extrinsic job satisfaction factors for NCU workers were
in the neutral category ($M = 3.36$, $SD = 0.64$); however, only the administrators/sector managers indicated a satisfied level of intrinsic job satisfaction ($M = 3.75$, $SD = 0.59$).

### Table 3

*Descriptive Statistics for Overall, Intrinsic, and Extrinsic Job Satisfaction for NCU Workers by Occupational Area* ($N = 263$)

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Overall Job Satisfaction</th>
<th>Intrinsic Job Satisfaction</th>
<th>Extrinsic Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N$ $M$ $SD$</td>
<td>$N$ $M$ $SD$</td>
<td>$N$ $M$ $SD$</td>
</tr>
<tr>
<td>All Employees</td>
<td>263 3.36 0.64</td>
<td>263 3.45 0.67</td>
<td>263 3.29 0.67</td>
</tr>
<tr>
<td>Administrator/Sector Managers</td>
<td>36 3.55 0.65</td>
<td>36 3.75 0.59</td>
<td>36 3.41 0.74</td>
</tr>
<tr>
<td>Faculty</td>
<td>77 3.41 0.63</td>
<td>77 3.46 0.68</td>
<td>77 3.38 0.66</td>
</tr>
<tr>
<td>Staff</td>
<td>149 3.28 0.62</td>
<td>149 3.28 0.67</td>
<td>149 3.21 0.65</td>
</tr>
</tbody>
</table>

Table 4 presents the intrinsic job satisfaction variables of NCU employees by occupational area, where the factor showing the highest mean by all employees was responsibility ($M = 3.75$, $SD = 1.09$), indicating that they were satisfied. The intrinsic job satisfaction factor showing the highest mean by administrators/sector managers was work itself ($M = 4.11$, $SD = 0.66$), indicating that they were satisfied, while the highest mean by faculty was responsibility ($M = 3.86$, $SD = 0.91$), indicating that they were satisfied. The intrinsic job satisfaction factor showing the highest mean by staff was achievement ($M = 3.72$, $SD = 0.98$), indicating they were satisfied.

Table 5 presents the extrinsic job satisfaction variables of NCU employees by occupational area, where the factor showing the highest mean by employees was relations...
Table 4

Descriptive Statistics for Intrinsic Job Satisfaction Factors for NCU Employees by Occupational Area (N = 263)

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Achievement</th>
<th>Advancement</th>
<th>Growth</th>
<th>Recognition</th>
<th>Responsibility</th>
<th>Work Itself</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>All Employees</td>
<td>259</td>
<td>3.72</td>
<td>0.94</td>
<td>259</td>
<td>3.26</td>
<td>1.12</td>
</tr>
<tr>
<td>Admin/Sector Managers</td>
<td>35</td>
<td>4.00</td>
<td>0.76</td>
<td>36</td>
<td>3.83</td>
<td>1.00</td>
</tr>
<tr>
<td>Faculty</td>
<td>76</td>
<td>3.60</td>
<td>0.92</td>
<td>77</td>
<td>3.12</td>
<td>1.05</td>
</tr>
<tr>
<td>Staff</td>
<td>147</td>
<td>3.72</td>
<td>0.98</td>
<td>145</td>
<td>3.17</td>
<td>1.14</td>
</tr>
</tbody>
</table>
with students ($M = 4.05, SD = 0.87$) indicating that they were satisfied. The extrinsic job satisfaction factor showing the highest mean by administrators/sector managers was relations with students ($M = 4.27, SD = 0.77$) indicating that they were satisfied.

Similarly the extrinsic job satisfaction factor showing the highest mean for faculty ($M = 4.23, SD = 0.65$) and staff ($M = 3.89, SD = 0.96$) was relations with students, indicating that they were also satisfied.

Table 5

*Mean Scores for Extrinsic Job Satisfaction Factors for NCU Employees (N=263)*

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Relations With Peers</th>
<th>Relations With Students</th>
<th>Relations With Superiors</th>
<th>Job Security</th>
<th>Organizational Policy &amp; Adm.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$N$</td>
<td>$M$</td>
</tr>
<tr>
<td>All Employees</td>
<td>261</td>
<td>3.72</td>
<td>1.04</td>
<td>260</td>
<td>4.05</td>
</tr>
<tr>
<td>Admin/Sector</td>
<td>36</td>
<td>4.02</td>
<td>0.94</td>
<td>36</td>
<td>4.27</td>
</tr>
<tr>
<td>Managers</td>
<td>77</td>
<td>3.83</td>
<td>1.01</td>
<td>76</td>
<td>4.23</td>
</tr>
<tr>
<td>Faculty</td>
<td>147</td>
<td>3.59</td>
<td>1.07</td>
<td>147</td>
<td>3.89</td>
</tr>
<tr>
<td>Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Salary</th>
<th>Status</th>
<th>Supervision</th>
<th>Working Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$N$</td>
</tr>
<tr>
<td>All Employees</td>
<td>260</td>
<td>2.92</td>
<td>1.11</td>
<td>255</td>
</tr>
<tr>
<td>Admin/Sector</td>
<td>36</td>
<td>3.11</td>
<td>1.21</td>
<td>36</td>
</tr>
<tr>
<td>Managers</td>
<td>76</td>
<td>3.01</td>
<td>1.11</td>
<td>75</td>
</tr>
<tr>
<td>Faculty</td>
<td>147</td>
<td>2.83</td>
<td>1.08</td>
<td>143</td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Table 6 presents the mean ranking for all the satisfaction factors for administrators/sector managers of NCU, where relationship with students was ranked number 1 \((M = 4.27, \ SD = 0.77)\) indicating that they were satisfied with the relations with students, and they were least satisfied with organizational policy and administration \((M = 2.69, \ SD = 1.06)\).

Table 6

Mean Ranking for All 15 Job Satisfaction Factors for NCU Administrators/Sector Managers \((N = 36)\)

<table>
<thead>
<tr>
<th>Job Satisfaction Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations With Students</td>
<td>4.27</td>
<td>0.77</td>
<td>1</td>
</tr>
<tr>
<td>Work Itself</td>
<td>4.11</td>
<td>0.66</td>
<td>2</td>
</tr>
<tr>
<td>Relations With Peers</td>
<td>4.02</td>
<td>0.94</td>
<td>3</td>
</tr>
<tr>
<td>Achievement</td>
<td>4.00</td>
<td>0.76</td>
<td>4</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.88</td>
<td>0.88</td>
<td>5</td>
</tr>
<tr>
<td>Advancement</td>
<td>3.83</td>
<td>1.00</td>
<td>6</td>
</tr>
<tr>
<td>Growth</td>
<td>3.66</td>
<td>1.01</td>
<td>7</td>
</tr>
<tr>
<td>Job Security</td>
<td>3.47</td>
<td>1.25</td>
<td>8</td>
</tr>
<tr>
<td>Relations With Supervisors</td>
<td>3.41</td>
<td>1.15</td>
<td>9</td>
</tr>
<tr>
<td>Status</td>
<td>3.36</td>
<td>1.09</td>
<td>10</td>
</tr>
<tr>
<td>Supervision</td>
<td>3.36</td>
<td>1.09</td>
<td>11</td>
</tr>
<tr>
<td>Salary</td>
<td>3.11</td>
<td>1.21</td>
<td>12</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>3.05</td>
<td>1.01</td>
<td>13</td>
</tr>
<tr>
<td>Recognition</td>
<td>3.02</td>
<td>1.13</td>
<td>14</td>
</tr>
<tr>
<td>Organizational Policy &amp; Administration</td>
<td>2.69</td>
<td>1.06</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 7 presents the mean ranking for all the satisfaction factors for faculty at NCU, where relationship with students was ranked number 1 \((M = 4.23, \ SD = 0.65)\), indicating they were satisfied with their relationship with students, and they were least satisfied with working conditions \((M = 2.82, \ SD = 1.22)\).
Table 7

*Mean Ranking for All 15 Job Satisfaction Factors for NCU Faculty (N=77)*

<table>
<thead>
<tr>
<th>Job Satisfaction Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations With Students</td>
<td>4.23</td>
<td>0.65</td>
<td>1</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.86</td>
<td>0.91</td>
<td>2</td>
</tr>
<tr>
<td>Relations With Peers</td>
<td>3.83</td>
<td>1.00</td>
<td>3</td>
</tr>
<tr>
<td>Work Itself</td>
<td>3.77</td>
<td>1.07</td>
<td>4</td>
</tr>
<tr>
<td>Relations With Supervisors</td>
<td>3.63</td>
<td>0.93</td>
<td>5</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.60</td>
<td>0.92</td>
<td>6</td>
</tr>
<tr>
<td>Job Security</td>
<td>3.47</td>
<td>1.19</td>
<td>7</td>
</tr>
<tr>
<td>Supervision</td>
<td>3.50</td>
<td>1.07</td>
<td>8</td>
</tr>
<tr>
<td>Recognition</td>
<td>3.23</td>
<td>1.03</td>
<td>9</td>
</tr>
<tr>
<td>Growth</td>
<td>3.18</td>
<td>1.02</td>
<td>10</td>
</tr>
<tr>
<td>Advancement</td>
<td>3.12</td>
<td>1.05</td>
<td>11</td>
</tr>
<tr>
<td>Status</td>
<td>3.01</td>
<td>1.13</td>
<td>12</td>
</tr>
<tr>
<td>Salary</td>
<td>3.01</td>
<td>1.11</td>
<td>13</td>
</tr>
<tr>
<td>Organizational Policy &amp; Administration</td>
<td>2.93</td>
<td>1.06</td>
<td>14</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>2.82</td>
<td>1.22</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 8 presents the mean ranking for all the job satisfaction factors for the staff at NCU, where relationship with students was ranked number 1 ($M = 3.89$, $SD = 0.96$), indicating they were satisfied with their relationship with the students, and they were least satisfied with organizational policy and administration ($M = 2.71$, $SD = 1.04$).

Table 9 presents the mean ranking for all the satisfaction factors for workers at NCU by occupational area, where relationship with students was ranked number 1 ($M = 4.05$, $SD = 0.87$) by all employees, and each occupational area ranked this factor as number 1, indicating they were satisfied with the relationship with students. All the occupational areas, with the exception of faculty, indicated that responsibility, achievement, relationship with peers, and work itself were the next four important
satisfaction factors. The faculty included relationship with supervisors as an important satisfactory factor, but not achievement.

Table 8

Mean Ranking for All 15 Job Satisfaction Factors for NCU Staff \((N = 150)\)

<table>
<thead>
<tr>
<th>Job Satisfaction Factor</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations With Students</td>
<td>3.89</td>
<td>0.96</td>
<td>1</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.77</td>
<td>0.98</td>
<td>2</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.66</td>
<td>0.88</td>
<td>3</td>
</tr>
<tr>
<td>Relations With Peers</td>
<td>3.59</td>
<td>1.07</td>
<td>4</td>
</tr>
<tr>
<td>Work Itself</td>
<td>3.54</td>
<td>0.84</td>
<td>5</td>
</tr>
<tr>
<td>Relations With Supervisors</td>
<td>3.53</td>
<td>1.03</td>
<td>6</td>
</tr>
<tr>
<td>Supervision</td>
<td>3.26</td>
<td>1.18</td>
<td>7</td>
</tr>
<tr>
<td>Job Security</td>
<td>3.26</td>
<td>1.09</td>
<td>8</td>
</tr>
<tr>
<td>Growth</td>
<td>3.19</td>
<td>1.08</td>
<td>9</td>
</tr>
<tr>
<td>Advancement</td>
<td>3.17</td>
<td>1.14</td>
<td>10</td>
</tr>
<tr>
<td>Status</td>
<td>2.93</td>
<td>0.95</td>
<td>11</td>
</tr>
<tr>
<td>Recognition</td>
<td>2.87</td>
<td>1.10</td>
<td>12</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>2.86</td>
<td>1.15</td>
<td>13</td>
</tr>
<tr>
<td>Salary</td>
<td>2.83</td>
<td>1.08</td>
<td>14</td>
</tr>
<tr>
<td>Organizational Policy &amp; Administration</td>
<td>2.71</td>
<td>1.04</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 10 presents the descriptive statistics for organization commitment among NCU workers by occupational area, where for each category the employees indicated a high level of organizational commitment with administrators/sector managers showing the highest mean \((M = 3.93, SD = 0.61)\).

Table 11 presents the descriptive statistics for religious commitment among NCU workers by occupational area, where for each category the employees indicated a very high level of religious commitment, with administrators/sector managers showing the highest mean \((M = 4.78, SD = 0.31)\).
Table 9

Mean Ranking for All 15 Job Satisfaction Factors for NCU Workers by Occupational Area (N = 263)

<table>
<thead>
<tr>
<th>Job Satisfaction Factor</th>
<th>All Employees</th>
<th>Administration &amp; Sector Manager</th>
<th>Faculty</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Rank</td>
<td>Mean Rank</td>
<td>Mean Rank</td>
<td>Mean Rank</td>
</tr>
<tr>
<td>Relations With Students</td>
<td>4.05 1</td>
<td>4.27 1</td>
<td>4.23 1</td>
<td>3.89 1</td>
</tr>
<tr>
<td>Responsibility</td>
<td>3.75 2</td>
<td>3.88 5</td>
<td>3.86 2</td>
<td>3.66 3</td>
</tr>
<tr>
<td>Achievement</td>
<td>3.72 3</td>
<td>4.00 4</td>
<td>3.60 6</td>
<td>3.77 2</td>
</tr>
<tr>
<td>Relations With Peers</td>
<td>3.72 4</td>
<td>4.02 3</td>
<td>3.83 3</td>
<td>3.59 4</td>
</tr>
<tr>
<td>Work Itself</td>
<td>3.69 5</td>
<td>4.11 2</td>
<td>3.77 4</td>
<td>3.54 5</td>
</tr>
<tr>
<td>Relations With Supervisors</td>
<td>3.54 6</td>
<td>3.41 9</td>
<td>3.63 5</td>
<td>3.53 6</td>
</tr>
<tr>
<td>Supervision</td>
<td>3.34 7</td>
<td>3.36 11</td>
<td>3.50 7</td>
<td>3.26 7</td>
</tr>
<tr>
<td>Job Security</td>
<td>3.32 8</td>
<td>3.47 8</td>
<td>3.35 8</td>
<td>3.26 8</td>
</tr>
<tr>
<td>Advancement</td>
<td>3.26 9</td>
<td>3.83 6</td>
<td>3.12 11</td>
<td>3.17 10</td>
</tr>
<tr>
<td>Growth</td>
<td>3.25 10</td>
<td>3.66 7</td>
<td>3.18 10</td>
<td>3.19 9</td>
</tr>
<tr>
<td>Status</td>
<td>3.02 11</td>
<td>3.36 10</td>
<td>3.01 12</td>
<td>2.93 11</td>
</tr>
<tr>
<td>Recognition</td>
<td>3.00 12</td>
<td>3.02 14</td>
<td>3.23 9</td>
<td>2.87 12</td>
</tr>
<tr>
<td>Salary</td>
<td>2.92 13</td>
<td>3.11 12</td>
<td>3.01 13</td>
<td>2.83 14</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>2.88 14</td>
<td>3.05 13</td>
<td>2.82 15</td>
<td>2.86 13</td>
</tr>
<tr>
<td>Organizational Policy &amp; Administration</td>
<td>2.78 15</td>
<td>2.69 15</td>
<td>2.93 14</td>
<td>2.71 15</td>
</tr>
</tbody>
</table>
Table 10

Descriptive Statistics for Organizational Commitment for NCU Workers by Occupational Area (N = 263)

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Organizational Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Administrators/Sector Managers</td>
<td>36</td>
</tr>
<tr>
<td>Faculty</td>
<td>77</td>
</tr>
<tr>
<td>Staff</td>
<td>150</td>
</tr>
<tr>
<td>All Employees</td>
<td>263</td>
</tr>
</tbody>
</table>

Table 11

Descriptive Statistics for Religious Commitment for NCU Workers by Occupational Area (N = 263)

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Religious Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Administrators/Sector Managers</td>
<td>36</td>
</tr>
<tr>
<td>Faculty</td>
<td>77</td>
</tr>
<tr>
<td>Staff</td>
<td>145</td>
</tr>
<tr>
<td>All Employees</td>
<td>258</td>
</tr>
</tbody>
</table>

Table 12 presents the age groups for workers at Northern Caribbean University by satisfaction and commitment variables, where the 46-year-and-over group had the highest mean for all of the following variables: (a) overall job satisfaction ($M = 3.53, SD = 0.65$); (b) intrinsic job satisfaction ($M = 3.62, SD = 0.72$), indicating that they were satisfied; (c) extrinsic job satisfaction ($M = 3.45, SD = 0.66$), indicating they were neutral; (d) organizational commitment ($M = 3.91, SD = 0.68$), indicating that they were very committed; and (e) religious commitment ($M = 4.71, SD = 0.43$), indicating a very high level of religious commitment.
Table 12

Descriptive Statistics for Age Groups of NCU Workers ($N = 262$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>&lt;26 ($n=27$)</th>
<th>26-35 ($n=85$)</th>
<th>36-45 ($n=76$)</th>
<th>46 and Over ($n=74$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Job Satisfaction</td>
<td>M 3.46, SD 0.57</td>
<td>M 3.17, SD 0.64</td>
<td>M 3.36, SD 0.59</td>
<td>M 3.53, SD 0.65</td>
</tr>
<tr>
<td>Intrinsic Job Satisfaction</td>
<td>M 3.56, SD 0.54</td>
<td>M 3.24, SD 0.67</td>
<td>M 4.47, SD 0.62</td>
<td>M 3.62, SD 0.72</td>
</tr>
<tr>
<td>Extrinsic Job Satisfaction</td>
<td>M 3.38, SD 0.67</td>
<td>M 3.12, SD 0.68</td>
<td>M 3.29, SD 0.65</td>
<td>M 3.45, SD 0.66</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>M 3.89, SD 0.57</td>
<td>M 3.64, SD 0.65</td>
<td>M 3.70, SD 0.73</td>
<td>M 3.91, SD 0.68</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>M 4.24, SD 0.65</td>
<td>M 4.40, SD 0.46</td>
<td>M 4.53, SD 0.50</td>
<td>M 4.71, SD 0.43</td>
</tr>
</tbody>
</table>

Table 13 presents the educational levels for workers at Northern Caribbean University by satisfaction and commitment variables, where workers with a doctoral degree had the highest mean for overall job satisfaction ($M = 3.54, SD = 0.58$); intrinsic job satisfaction ($M = 3.68, SD = 0.62$), indicating that they were satisfied; and extrinsic job satisfaction ($M = 3.45, SD = 0.63$), indicating that they were neutral. Workers with a certificate had the highest mean for organizational commitment ($M = 3.85, SD = 0.71$), indicating a high level of commitment, while workers with a master’s degree had the highest mean for religious commitment ($M = 4.60, SD = 0.43$), indicating a very high level of religious commitment.
Table 13

Descriptive Statistics for Educational Level of NCU Workers (N = 260)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Primary (n=16)</th>
<th>High School (n=27)</th>
<th>Certificate (n=21)</th>
<th>B.A. or Associates (n=97)</th>
<th>Master’s (n=76)</th>
<th>Doctoral (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>3.29</td>
<td>0.70</td>
<td>2.91</td>
<td>0.69</td>
<td>3.35</td>
<td>0.66</td>
</tr>
<tr>
<td>Intrinsic Job Satisfaction</td>
<td>3.27</td>
<td>0.74</td>
<td>3.07</td>
<td>0.73</td>
<td>3.48</td>
<td>0.70</td>
</tr>
<tr>
<td>Extrinsic Job Satisfaction</td>
<td>3.19</td>
<td>0.63</td>
<td>2.81</td>
<td>0.75</td>
<td>3.26</td>
<td>0.70</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>3.82</td>
<td>0.65</td>
<td>3.64</td>
<td>0.71</td>
<td>3.85</td>
<td>0.71</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>4.50</td>
<td>0.53</td>
<td>4.12</td>
<td>0.57</td>
<td>4.51</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Table 14 presents the length of employments for workers at Northern Caribbean University by satisfaction and commitment variables, where the 26-year-and-over group had the highest mean for overall job satisfaction ($M = 3.64, SD = 0.76$); intrinsic job satisfaction ($M = 3.78, SD = 0.80$), indicating that they were satisfied; organizational commitment ($M = 4.13, SD = 0.61$) and religious commitment ($M = 4.66, SD = 0.51$), indicating that they were very committed. Workers with tenure between 11-14 years had the highest mean for extrinsic job satisfaction ($M = 3.69, SD = 0.58$), indicating that they were satisfied.
Table 14

Mean Scores for Length of Employment for NCU Workers (N= 263)

<table>
<thead>
<tr>
<th>Variables</th>
<th>0-4 yrs. (n=140)</th>
<th>5-10 yrs. (n=69)</th>
<th>11-14 yrs. (n=12)</th>
<th>15-25 yrs. (n=26)</th>
<th>26 yrs.+ (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M    SD</td>
<td>M    SD</td>
<td>M    SD</td>
<td>M    SD</td>
<td>M    SD</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>3.32 0.61</td>
<td>3.26 0.68</td>
<td>3.65 0.54</td>
<td>3.52 0.52</td>
<td>3.64 0.76</td>
</tr>
<tr>
<td>Intrinsic Job Satisfaction</td>
<td>3.41 0.62</td>
<td>3.38 0.74</td>
<td>3.58 0.66</td>
<td>3.61 0.62</td>
<td>3.78 0.80</td>
</tr>
<tr>
<td>Extrinsic Job Satisfaction</td>
<td>3.27 0.67</td>
<td>3.15 0.68</td>
<td>3.69 0.58</td>
<td>3.46 0.49</td>
<td>3.55 0.79</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>3.69 0.68</td>
<td>3.67 0.71</td>
<td>3.88 0.53</td>
<td>4.01 0.54</td>
<td>4.13 0.61</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>4.46 0.52</td>
<td>4.56 0.45</td>
<td>4.48 0.46</td>
<td>4.65 0.43</td>
<td>4.66 0.51</td>
</tr>
</tbody>
</table>

Testing the Null Hypotheses

Research Question 2: What are the relationships between (a) overall, (b) intrinsic, (c) extrinsic job satisfaction, (d) organizational commitment, (e) religious commitment and the following demographic characteristics: (a) occupational area, (b) gender, (c) age, (d) educational level, and (e) length of employment?

The following null hypotheses were tested:

Null Hypothesis 1: There is no difference in overall job satisfaction among workers at NCU by occupational area.

Table 15 shows the analysis of variance results for overall job satisfaction among workers at NCU by occupational area. The ANOVA test indicated that the null hypothesis was retained ($F_{(2,259)}=3.007; p=0.51$). Therefore, there is no significant
difference in overall job satisfaction among the three occupational areas of Northern Caribbean University workers.

Table 15

One Way Analysis of Variance – Overall Job Satisfaction by Occupational Area

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.434</td>
<td>2</td>
<td>1.217</td>
<td>3.007</td>
<td>0.51</td>
</tr>
<tr>
<td>Within Groups</td>
<td>104.828</td>
<td>259</td>
<td>0.405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>107.262</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 2: There is no difference in intrinsic job satisfaction among workers at NCU by occupational area.

Table 16 shows the analysis of variance results for intrinsic job satisfaction among workers at NCU by occupational area. The ANOVA test indicated that the null hypothesis was rejected ($F(2,259) = 4.795; p = 0.009$). Therefore, there is a significant difference in intrinsic job satisfaction among the three occupational areas. When post-hoc comparison using Student-Newman Keuls (see Table 17) was done, employees who were administrators and sector managers ($M = 3.55, SD = 0.65$) had a significantly higher level of intrinsic job satisfaction than employees who were staff ($M = 3.28, SD = 0.62$).

However, no statistically significant difference was found between faculty ($M = 3.41, SD = 0.63$) and staff.
Table 16

One-Way Analysis of Variance – Intrinsic Job Satisfaction by Occupational Area

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.270</td>
<td>2</td>
<td>2.135</td>
<td>4.759</td>
<td>.009**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>115.314</td>
<td>259</td>
<td>0.445</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.584</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<0.01.

Null Hypothesis 3: There is no difference in extrinsic job satisfaction among workers at NCU by occupational area.

Table 18 shows the analysis of variance results for extrinsic job satisfaction among workers at NCU by occupational area. The ANOVA test indicated that the null hypothesis was retained ($F_{(2,258)}=2.341; p=.098$). Therefore, there is no significant difference in extrinsic job satisfaction among workers at NCU by occupational area.

Table 17

Post-Hoc Analysis for Intrinsic Job Satisfaction by Occupational Area

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Administrator/ Sector Managers</th>
<th>Faculty</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator/ Sector Managers</td>
<td>36</td>
<td>3.55</td>
<td>0.65</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Faculty</td>
<td>77</td>
<td>3.41</td>
<td>0.63</td>
<td>NS</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Staff</td>
<td>149</td>
<td>3.28</td>
<td>0.62</td>
<td>*</td>
<td>NS</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. An * indicates significance. NS means not significant.
Table 18

One-Way Analysis of Variance – Extrinsic Job Satisfaction by Occupational Area

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.111</td>
<td>2</td>
<td>1.056</td>
<td>2.341</td>
<td>.098</td>
</tr>
<tr>
<td>Within Groups</td>
<td>116.350</td>
<td>258</td>
<td>0.451</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.461</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 4: There is no difference in overall job satisfaction by gender among workers at NCU.

Table 19 shows the t-test results for overall job satisfaction by gender among workers at NCU. The t-test indicated no significant difference between male and female on overall job satisfaction ($t=1.77, p = 0.078$). Thus the null hypothesis was retained.

Null Hypothesis 5: There is no difference in intrinsic job satisfaction among NCU workers by gender.

Table 19 shows the t-test results for intrinsic job satisfaction by gender among workers at NCU. The t-test indicated significant differences ($t=2.21, p=0.028$) between males and females in intrinsic job satisfaction. Male workers ($M=3.56, SD=0.68$) had significantly higher levels of intrinsic job satisfaction than female employers ($M=3.36, SD=0.64$). Thus, the null hypothesis was rejected.

Null Hypothesis 6: There is no difference in extrinsic job satisfaction among NCU workers by gender.

Table 19 shows the t-test results for extrinsic job satisfaction by gender among workers at NCU. The t-test indicated no significant difference between females and males on extrinsic job satisfaction ($t=1.31, p = .197$). The null hypothesis was retained.
Table 19

\textit{t-Test Results for Overall, Intrinsic, and Extrinsic Job Satisfaction Among Workers at NCU by Gender}

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male ((N=95))</th>
<th>Female ((N=122))</th>
<th>(df)</th>
<th>(t)</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>3.44 (SD=0.68)</td>
<td>3.28 (SD=0.60)</td>
<td>215</td>
<td>1.77</td>
<td>0.078</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>3.56 (SD=0.68)</td>
<td>3.36 (SD=0.64)</td>
<td>215</td>
<td>2.21</td>
<td>0.028</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3.35 (SD=0.73)</td>
<td>3.32 (SD=0.73)</td>
<td>215</td>
<td>1.31</td>
<td>0.197</td>
</tr>
</tbody>
</table>

Null Hypothesis 7: There is no difference in overall job satisfaction among workers at NCU by age groups.

Table 20 shows the analysis of variance results for overall job satisfaction among workers at NCU by age groups. The ANOVA test indicated that the null hypothesis was rejected \((F_{(3,257)}=4.74; p=.003)\). Therefore there is a significant difference in overall job satisfaction among the four different age groups. When post-hoc comparison using Student-Newman Keuls was done (Table 21), employees who were 46 years and older \((M=3.53, SD=0.65)\) had a significantly higher level of overall job satisfaction than workers between ages 26 and 35 \((M=3.17, SD=0.64)\). But no significant difference existed between workers in any of the other groups.

Null Hypothesis 8: There is no difference in intrinsic job satisfaction among workers at NCU by age groups.

Table 22 shows the analysis of variance results for intrinsic job satisfaction among workers at NCU by age groups. The ANOVA test indicated that the null hypothesis was rejected \((F_{(3,257)}=4.74; p=.003)\). Therefore, there is a significant
Table 20

*One-Way Analysis of Variance – Overall Job Satisfaction by Age Group*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.638</td>
<td>3</td>
<td>1.879</td>
<td>4.745</td>
<td>.003**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>101.794</td>
<td>257</td>
<td>0.396</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>107.433</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<0.01 level.

Table 21

*Post-Hoc Analysis for Overall Job Satisfaction by Age Group*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>25 yrs. and under</th>
<th>26-35 yrs.</th>
<th>36-45 yrs.</th>
<th>46 yrs. and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 yrs and under</td>
<td>27</td>
<td>3.46</td>
<td>0.57</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>26-35 yrs.</td>
<td>85</td>
<td>3.17</td>
<td>0.64</td>
<td>NS</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>36-45 yrs.</td>
<td>76</td>
<td>3.36</td>
<td>0.59</td>
<td>NS</td>
<td>NS</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>46 yrs. and older</td>
<td>73</td>
<td>3.53</td>
<td>0.65</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. An * indicates significance. NS means not significant.*

difference in intrinsic job satisfaction among the four age groups. When post-hoc multiple comparison using Student-Newman Keuls was done (Table 23), employees who were under 26 years \(M = 3.56, SD = .54\) and 46 years and older \(M = 3.58, SD = .70\) had a significantly higher level of intrinsic job satisfaction than those who were between 26 and 35 years old \(M = 3.23, SD = .67\). But no significant difference existed between workers in any of the other groups.
Table 22

One-Way Analysis of Variance – Intrinsic Job Satisfaction by Age

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.270</td>
<td>3</td>
<td>1.090</td>
<td>4.742</td>
<td>.003**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>113.267</td>
<td>257</td>
<td>0.441</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.537</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Significant at p<.01 level.

Table 23

Post-Hoc Analysis for Intrinsic Job Satisfaction by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>25 yrs. and under</th>
<th>26-35 yrs</th>
<th>36-45 yrs</th>
<th>46 yrs and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 yrs. and under</td>
<td>27</td>
<td>3.56</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26-35 yrs.</td>
<td>84</td>
<td>3.23</td>
<td>.67</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-45 yrs.</td>
<td>76</td>
<td>3.47</td>
<td>.62</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46 yrs. and older</td>
<td>71</td>
<td>3.58</td>
<td>.70</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

Note. An * indicates significance. NS means not significant.

Null Hypothesis 9: There is no difference in extrinsic job satisfaction among workers at NCU by age groups.

Table 24 shows the analysis of variance results for extrinsic job satisfaction among workers at NCU workers by age groups. The ANOVA test indicated that the null hypothesis was rejected ($F_{(3, 256)} = 3.558; p = .015$). Therefore, there is a significant difference in extrinsic job satisfaction among the four age groups. When post-hoc comparison using Student-Newman Keuls was done (Table 25), employees who were 46
years and older ($M = 3.45, SD = 0.66$) had a significantly higher level of extrinsic job satisfaction than their younger colleagues 26-35 years old ($M = 3.12, SD = 0.68$). But no significant difference existed between workers in any of the other groups.

Table 24

*One-Way Analysis of Variance – Extrinsic Job Satisfaction by Age*

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.751</td>
<td>3</td>
<td>1.584</td>
<td>3.558</td>
<td>.015*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>113.938</td>
<td>256</td>
<td>0.445</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.689</td>
<td>259</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05 level.

Table 25

*Post-Hoc Analysis for Extrinsic Job Satisfaction by Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>25 yrs. and under</th>
<th>26-35 yrs.</th>
<th>36-45 yrs.</th>
<th>46 yrs. and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 yrs. and under</td>
<td>27</td>
<td>3.38</td>
<td>0.67</td>
<td>–</td>
<td>–</td>
<td>NS</td>
<td>–</td>
</tr>
<tr>
<td>26-35 yrs.</td>
<td>85</td>
<td>3.12</td>
<td>0.68</td>
<td>NS</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>36-45 yrs</td>
<td>76</td>
<td>3.29</td>
<td>0.65</td>
<td>NS</td>
<td>NS</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>46 yrs. and older</td>
<td>72</td>
<td>3.45</td>
<td>0.66</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. An * indicates significance. NS means not significant.*

Null Hypothesis 10: There is no difference in overall job satisfaction among workers at NCU by educational level.
Table 26 shows the analysis of variance results for overall job satisfaction among workers at NCU by educational level. The ANOVA test indicated that the null hypothesis was rejected \((F(5,254) = 3.377; p = .006)\). Therefore, there is a significant difference in overall job satisfaction among the six educational levels. When post-hoc comparison using Student-Newman Keuls was done (see Table 27), workers with a doctoral degree \((M = 3.54, SD = 0.58)\), master’s degree \((M = 3.43, SD = 0.61)\), bachelor/professional/associate degree \((M = 3.38, SD = 0.59)\), a certificate \((M = 3.35, SD = 0.66)\) and primary level \((M = 3.29, SD = 0.70)\) had higher levels of overall job satisfaction than those with just a high-school certificate \((M = 2.91, SD = 0.69)\). But no significant difference existed between workers in any of the other groups.

Table 26

*One-Way Analysis of Variance – Overall Job Satisfaction by Educational Level*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>(F)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>6.590</td>
<td>5</td>
<td>1.318</td>
<td>3.377</td>
<td>.006*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>99.143</td>
<td>254</td>
<td>.390</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>105.733</td>
<td>259</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \(p<.05\) level.

Null Hypothesis 11: There is no difference in intrinsic job satisfaction among workers at NCU by educational level.

Table 28 shows the analysis of variance results for intrinsic job satisfaction among workers at NCU by educational level. The ANOVA test indicated that the null hypothesis was rejected \((F(5,254) = 2.806; p=.017)\). Therefore, there is a significant
difference in intrinsic job satisfaction among the six educational levels. When a post-hoc comparison using Student-Newman Keuls was done (see Table 29), workers with a doctoral degree ($M = 3.68, SD = 0.62$) had higher levels of intrinsic job satisfaction than those with just a high-school certificate ($M = 3.07, SD = 0.73$). But no significant difference existed between workers in any of the other groups.

Table 27

**Post-Hoc Analysis for Overall Job Satisfaction by Educational Level**

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>P</th>
<th>H</th>
<th>C</th>
<th>BA</th>
<th>M</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>16</td>
<td>3.29</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>27</td>
<td>2.91</td>
<td>0.69</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>21</td>
<td>3.35</td>
<td>0.66</td>
<td>NS</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA. Prof. or Associates</td>
<td>97</td>
<td>3.38</td>
<td>0.59</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>76</td>
<td>3.43</td>
<td>0.61</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>NS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral</td>
<td>23</td>
<td>3.54</td>
<td>0.58</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* P=Primary; H=High School; C=Certificate; BA=Bachelor, Professional or Associates; M=Master's; D=Doctoral.

*Significant difference (.05). NS means not significant.

Table 28

**One-Way Analysis of Variance – Intrinsic Job Satisfaction by Educational Level**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>6.130</td>
<td>5</td>
<td>1.226</td>
<td>2.806</td>
<td>0.017**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>110.968</td>
<td>254</td>
<td>0.437</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>117.098</td>
<td>259</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01 level.
Null Hypothesis 12: There is no difference in extrinsic job satisfaction among workers of NCU by educational level.

Table 30 shows the analysis of variance results for extrinsic job satisfaction among workers at NCU by educational level. The ANOVA test indicated that the null hypothesis was rejected ($F(5, 253) = 3.526; p = .004$). Therefore, there is a significant difference in extrinsic job satisfaction among the six educational levels. When a post-hoc comparison using Student-Newman Keuls was done (see Table 31), workers with a doctoral degree ($M = 3.45$, $SD = 0.62$), master's degree ($M = 3.36$, $SD = 0.64$), bachelor/professional/associate degree ($M = 3.34$, $SD = 0.63$), a certificate ($M = 3.36$, $SD = 0.70$), and primary level ($M = 3.19$, $SD = 0.63$) had higher levels of extrinsic job satisfaction.
satisfaction than those with just a high-school certificate \( (M = 2.81, SD = 0.75) \). But no significant difference existed between workers in any of the other groups.

Null Hypothesis 13: There is no difference in overall job satisfaction among workers at NCU by length of employment.

Table 32 shows the analysis of variance results for overall job satisfaction among workers at NCU by length of employment. The ANOVA test indicated that the null hypothesis was retained \( (F(4, 257) = 2.340; p = .056) \). Therefore, there is no significant difference in overall job satisfaction among workers at NCU by length of employment.

Table 30

One-Way Analysis of Variance – Extrinsic Job Satisfaction by Educational Level

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>7.645</td>
<td>5</td>
<td>1.529</td>
<td>3.526</td>
<td>0.004*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>109.694</td>
<td>253</td>
<td>.434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>128.345</td>
<td>258</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05 level.

**p < .01 level.

Null Hypothesis 14: There is no difference in intrinsic job satisfaction among workers of NCU by length of employment.

Table 33 shows the analysis of variance results for overall job satisfaction by NCU workers. The ANOVA test indicated that the null hypothesis was retained \( (F(4, 257) = 2.910; p = .150) \). Therefore, there is no significant difference in intrinsic job satisfaction among the five employment categories of Northern Caribbean University workers.
Table 31

*Post-Hoc Analysis for Extrinsic Job Satisfaction by Educational Level*

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>P</th>
<th>H</th>
<th>C</th>
<th>BA</th>
<th>M</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>15</td>
<td>3.19</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>27</td>
<td>2.81</td>
<td>0.75</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>21</td>
<td>3.26</td>
<td>0.70</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA, Prof. or</td>
<td>97</td>
<td>3.34</td>
<td>0.63</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associates</td>
<td>76</td>
<td>3.36</td>
<td>0.64</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>23</td>
<td>3.45</td>
<td>0.62</td>
<td>NS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* P=Primary; H=High School; C=Certificate; BA=Bachelor, Professional or Associates; M=Master’s; D=Doctoral.
*Significant difference (.05). NS means not significant.

Table 32

*One-Way Analysis of Variance – Overall Job Satisfaction by Length of Employment*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3.769</td>
<td>4</td>
<td>0.942</td>
<td>2.340</td>
<td>.056</td>
</tr>
<tr>
<td>Within Groups</td>
<td>103.502</td>
<td>257</td>
<td>0.403</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>107.271</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 33

*One-Way Analysis of Variance – Intrinsic Job Satisfaction by Length of Employment*

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3.080</td>
<td>4</td>
<td>0.770</td>
<td>2.910</td>
<td>0.150</td>
</tr>
<tr>
<td>Within Groups</td>
<td>116.264</td>
<td>257</td>
<td>0.452</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119.344</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Null Hypothesis 15: There is no difference in extrinsic job satisfaction among NCU workers by length of employment.

Table 34 shows the analysis of variance results for extrinsic job satisfaction among NCU workers by length of employment. The ANOVA test indicated that the null hypothesis was rejected ($F_{(4,256)} = 2.910; \ p = .022$). Therefore, there is a significant difference in extrinsic job satisfaction among the employment categories. When a post-hoc comparison using Student-Newman Keuls was done (see Table 35), workers with 11-14 years tenure at NCU ($M = 3.69, SD = 0.58$) had significantly higher extrinsic job satisfaction than those between 5-10 years of tenure ($M = 3.15, SD = 0.68$). But no significant difference existed between workers in any of the other groups.

Table 34

One-Way Analysis of Variance – Extrinsic Job Satisfaction by Length of Employment

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.158</td>
<td>4</td>
<td>1.290</td>
<td>2.910</td>
<td>0.022*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>133.450</td>
<td>256</td>
<td>0.443</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>118.609</td>
<td>260</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05 level.

Null Hypothesis 16: There is no difference in organizational commitment among workers at NCU by occupational area.

Table 36 shows the analysis of variance results for organizational commitment among workers at NCU by occupational area. The ANOVA test indicated that the null hypothesis was retained ($F_{(2,259)} = 3.007; \ p = .051$). Therefore, there is no significant
difference between organizational commitments by occupational area among workers at NCU.

Table 35

Post-Hoc Analysis for Extrinsic Job Satisfaction by Length of Employment

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>0-4 yrs.</th>
<th>5-10 yrs.</th>
<th>11-14 yrs.</th>
<th>15-25 yrs.</th>
<th>Above 26 yrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 yrs.</td>
<td>140</td>
<td>3.27</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 yrs.</td>
<td>68</td>
<td>3.15</td>
<td>0.68</td>
<td>NS</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-14 yrs.</td>
<td>12</td>
<td>3.69</td>
<td>0.58</td>
<td>NS</td>
<td>*</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-25 yrs.</td>
<td>25</td>
<td>3.46</td>
<td>0.49</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>–</td>
</tr>
<tr>
<td>Above 26 yrs.</td>
<td>16</td>
<td>3.55</td>
<td>0.79</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 36

One-Way Analysis of Variance – Organizational Commitment by Occupational Area

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2.434</td>
<td>2</td>
<td>1.217</td>
<td>3.007</td>
<td>0.051</td>
</tr>
<tr>
<td>Within Groups</td>
<td>104.828</td>
<td>259</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>107.260</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 17: There is no difference between organizational commitment among workers at NCU by gender.

Table 37 presents the t-test results for organizational commitment among workers at NCU by gender. The t-test indicated no significant difference between females and
males on organizational commitment ($t=1.25, p = .211$). The null hypothesis was retained.

Table 37

<table>
<thead>
<tr>
<th>Organizational Commitment</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$df$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>95</td>
<td>3.84</td>
<td>0.63</td>
<td>216</td>
<td>1.25</td>
<td>0.211</td>
</tr>
<tr>
<td>Female</td>
<td>123</td>
<td>3.37</td>
<td>0.69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 18: There is no difference in organizational commitment among the workers at NCU by age groups.

Table 38 shows the analysis of variance results for organizational commitment among the workers at NCU by age groups. The ANOVA test indicated that the null hypothesis was rejected ($F_{(3,258)}=2.671; p=.048$). Therefore, there is a significant difference in organizational commitment among the workers at NCU by age groups. When a post-hoc comparison using Games-Howell was done (see Table 39), those workers 46 years and older ($M = 3.91, SD = 0.68$) had significantly higher levels of organizational commitment than the workers between 26-35 years ($M = 3.64, SD = 0.65$), but no significant difference existed between workers in any of the other groups.

Null Hypothesis 19: There is no significant difference in organizational commitment by educational level among workers at NCU.
Table 38

*One-Way Analysis of Variance – Organizational Commitment by Age*

<table>
<thead>
<tr>
<th>Sources</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3.703</td>
<td>3</td>
<td>1.234</td>
<td>2.671</td>
<td>0.048*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>119.233</td>
<td>258</td>
<td>0.462</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>122.936</td>
<td>261</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05 level.

Table 39

*Post-Hoc Analysis for Organizational Commitment by Age Group*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>25 yrs. and under</th>
<th>26-35 yrs.</th>
<th>36-45 yrs.</th>
<th>46 yrs. and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 yrs. and under</td>
<td>27</td>
<td>3.89</td>
<td>0.57</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>26-35 yrs.</td>
<td>85</td>
<td>3.64</td>
<td>0.65</td>
<td>NS</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>36-45 yrs. and above</td>
<td>76</td>
<td>3.70</td>
<td>0.73</td>
<td>NS</td>
<td>NS</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>46 yrs. and above</td>
<td>72</td>
<td>3.91</td>
<td>0.68</td>
<td>NS</td>
<td>*</td>
<td>NS</td>
<td>–</td>
</tr>
</tbody>
</table>

*Note. An * indicates significance. NS means not significant.*

Table 40 shows the analysis of variance results for organizational commitment among workers at NCU by educational levels. The ANOVA test indicated that the null hypothesis was retained ($F_{(5,254)} = .338; p = .890$). Therefore there is no significant difference in organizational commitment among the educational level of Northern Caribbean University workers.
Null Hypothesis 20: There is no significant difference in organizational commitment among workers at NCU by length of employment.

Table 41 shows the analysis of variance results for organizational commitment among workers at NCU by length of employment. The ANOVA test indicated the null hypothesis was rejected ($F_{(4,258)} = 3.67; p = .006$). There is a significant difference in organizational commitment among the employment categories. When a post-hoc comparison using Games-Howell was done (see Table 42), employees working between 15-25 years at the institution ($M = 4.10, SD = 0.54$) indicated a higher level of organizational commitment than employees who had worked between 5-10 years ($M = 3.67, SD = 0.71$) and 0-4 years ($M = 3.69, SD = 0.68$) at the institution.
Null Hypothesis 21: There is no significant difference in religious commitment among workers at NCU by occupational area.

Table 43 shows the analysis of variance results for religious commitment among workers at NCU by occupational area. The ANOVA test indicated that the null hypothesis was rejected \( F(2,253) = 8.193; p = .001 \). Therefore there is a significant

difference in religious commitment among the occupational groups. When a post-hoc comparison using Student-Newman Keuls was done (see Table 44), administrators and sectors managers had a higher level of religious commitment \( (M = 4.78, SD = 0.31) \) than staff workers \( (M = 4.42, SD = 0.50) \). However, no statistically significant difference was found between faculty \( (M = 4.55, SD = 0.54) \) and staff \( (M = 4.42, SD = 0.50) \).

Null Hypothesis 22: There is no difference in religious commitment among workers at NCU by gender.
Table 43

One-Way Analysis of Variance – Religious Commitment by Occupational Area

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.00</td>
<td>2</td>
<td>2.00</td>
<td>8.193</td>
<td>0.001***</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.76</td>
<td>253</td>
<td>0.244</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.76</td>
<td>255</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p<.001 level.

Table 44

Post-Hoc Analysis for Religious Commitment by Occupational Area

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Administrator/</th>
<th>Sector Managers</th>
<th>Faculty</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator/ Sector Managers</td>
<td>36</td>
<td>4.78</td>
<td>0.31</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Faculty</td>
<td>77</td>
<td>4.55</td>
<td>0.54</td>
<td>NS</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Staff</td>
<td>145</td>
<td>4.42</td>
<td>0.50</td>
<td>*</td>
<td>NS</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Note. An* indicates significance at p<.05. NS means not significant.

Table 45 presents the t-test results for religious commitment among workers at NCU by gender. The t-test indicated no significant difference between females and males on religious commitment (t = -1.84, p = 0.067). Thus the null hypothesis was retained.
Table 45

_t-Test Results for Religious Commitment Among Workers at NCU by Gender_

<table>
<thead>
<tr>
<th>Religious Commitment</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>92</td>
<td>4.42</td>
<td>0.56</td>
<td>211</td>
<td>-1.84</td>
<td>0.067</td>
</tr>
<tr>
<td>Female</td>
<td>121</td>
<td>4.55</td>
<td>0.46</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis 23: There is no significant difference in religious commitment among the workers at NCU by age groups.

Table 46 shows the analysis of variance results for religious commitment among the workers at NCU by age groups. The ANOVA test indicated that the null hypothesis was rejected ($F_{(3,253)}=8.036; p=.000$). Therefore there is a significant difference in religious commitment among the four age groups. When a post hoc comparison using Student-Newman Keuls was done (see Table 47), employees who were 46 years and older ($M = 4.71, SD = 0.43$) had a higher level of religious commitment in comparison to their younger colleagues between the ages of 26 and 35 ($M = 4.40, SD = 0.46$) and those less than 25 years of age ($M = 4.24, SD = 0.65$). But no significant difference was found between workers in any of the other groups.

Table 46

_One-Way Analysis of Variance – Religious Commitment by Age Group_

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>5.758</td>
<td>3</td>
<td>1.919</td>
<td>8.036</td>
<td>.000***</td>
</tr>
<tr>
<td>Within Groups</td>
<td>60.422</td>
<td>253</td>
<td>0.239</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>66.179</td>
<td>256</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p<.001 level.
Null Hypothesis 24: There is no difference in religious commitment among workers at NCU by educational level.

Table 48 shows the analysis of variance results for religious commitment among workers at NCU by educational levels. The ANOVA test indicated that the null hypothesis was rejected \( F(5,249) = 3.65, p = .003 \). Therefore, there is a significant difference in religious commitment among the six educational levels. When a post-hoc comparison using Student-Newman Keuls was done, workers with a doctoral degree \((M=4.51, SD=0.62)\), master's degree \((M=4.59, SD=0.49)\), bachelor/professional/associate degree \((M = 4.55, SD = 0.43)\), a certificate \((M = 4.51, SD = 0.49)\), and primary level \((M = 4.50, SD = 0.53)\) had higher levels of religious commitment than those with just a high-school certificate \((M = 4.12, SD = 0.57)\). But no significant difference existed between workers in any of the other groups.
Table 48

*One-Way Analysis of Variance – Religious Commitment by Educational Level*

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>4.489</td>
<td>5</td>
<td>0.898</td>
<td>3.653</td>
<td>0.003**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.200</td>
<td>249</td>
<td>0.246</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65.689</td>
<td>254</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p<.01 level.

Table 49

*Post-Hoc Analysis for Religious Commitment by Educational Level*

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>P</th>
<th>H</th>
<th>C</th>
<th>BA</th>
<th>M</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>15</td>
<td>4.50</td>
<td>0.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>26</td>
<td>4.12</td>
<td>0.57</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate</td>
<td>18</td>
<td>4.51</td>
<td>0.49</td>
<td>NS</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA. Prof. or</td>
<td>97</td>
<td>4.55</td>
<td>0.43</td>
<td>NS</td>
<td>**</td>
<td>NS</td>
<td></td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Associates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>76</td>
<td>4.59</td>
<td>0.49</td>
<td>NS</td>
<td>**</td>
<td>NS</td>
<td></td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>Doctoral</td>
<td>23</td>
<td>4.51</td>
<td>0.62</td>
<td>NS</td>
<td>**</td>
<td>NS</td>
<td></td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* P=Primary; H=High School; C=Certificate; BA = Bachelor, Professional or Associates; M=Master’s; D=Doctoral.
**Significant difference at p<.001. NS means not significant.

Null Hypothesis 25: There is no difference in religious commitment among workers at NCU by length of employment.

Table 50 shows the analysis of variance results for religious commitment by NCU workers. The ANOVA test indicated that the null hypothesis was retained (F_{(4,253)}=1.45; p=.218). Therefore, there is a significant difference in religious commitment among the five employment categories.
Table 50

One-Way Analysis of Variance – Religious Commitment by Length of Employment

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1.407</td>
<td>4</td>
<td>0.352</td>
<td>1.45</td>
<td>0.218</td>
</tr>
<tr>
<td>Within Groups</td>
<td>61.398</td>
<td>253</td>
<td>0.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>62.805</td>
<td>257</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research Question 3 asked: What is the nature of the relationship among job satisfaction, organization commitment, and religious commitment?

Null Hypothesis 26: There is no multiple correlation between overall satisfaction and a linear combination of organization commitment and religious commitment.

Table 51 shows the correlations between the commitment variables; organizational commitment and religious commitment, and workers’ overall satisfaction variable. Organizational commitment showed moderate correlation ($R = 0.536$) with overall job satisfaction, whereas religious commitment had minimal correlation ($R = 0.239$) with overall satisfaction variable of NCU workers.

Table 51

Mean, Standard Deviations, and Correlations Between Workers at NCU – Overall Satisfaction Score and Religious and Organization Commitment Variables ($N = 258$)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Satisfaction</td>
<td>1.000</td>
<td>0.536**</td>
<td>0.239**</td>
</tr>
<tr>
<td>Organization Commitment</td>
<td>0.536**</td>
<td>1.000</td>
<td>0.159*</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.239**</td>
<td>0.159*</td>
<td>1.000</td>
</tr>
<tr>
<td>Mean</td>
<td>3.360</td>
<td>3.759</td>
<td>4.517</td>
</tr>
<tr>
<td>SD</td>
<td>0.641</td>
<td>0.687</td>
<td>0.508</td>
</tr>
</tbody>
</table>

*Significant at 0.05. **Significant at 0.01.
Table 52 shows the results of regression analysis for the commitment variables and overall satisfaction variable using the enter method. As a set, the two commitment variables were significantly related to job satisfaction \( (F_{(2,255)} = 56.402, p = 0.000) \) and account for 30.7% of the variance in the overall satisfaction scores. Therefore the null hypothesis was rejected. The better predictor is organizational commitment \( (\beta = 0.506) \).

### Table 52

*Linear Regression Results for NCU Workers' Overall Satisfaction Scores and Commitment Variables (N = 257)*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.727</td>
<td>0.326</td>
<td>2.232</td>
<td>0.026</td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.465</td>
<td>0.049</td>
<td>0.506</td>
<td>9.578</td>
<td>0.000</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.198</td>
<td>0.066</td>
<td>0.158</td>
<td>2.997</td>
<td>0.003</td>
</tr>
</tbody>
</table>

*Note. \( R^2 = 0.307, F_{(2,255)} = 56.402, p = 0.000. \)*

Null Hypothesis 27: There is no multiple correlation between intrinsic satisfaction and a linear combination of organization commitment and religious commitment.

Table 53 shows the correlations between the commitment variables: organizational commitment and religious commitment, and workers' intrinsic satisfaction variable. Organization commitment showed a moderate correlation \( (R = 0.512) \) with intrinsic satisfaction variable, whereas religious commitment showed a minimal correlation \( (R = 0.222) \) with the intrinsic satisfaction variable.

Table 54 shows the results of regression analysis for the commitment variables and the intrinsic satisfaction variable using the enter method. As a set, the two commitment variables were significantly related to intrinsic job satisfaction \( (F_{(2,255)} = \)
49.163, \( p = 0.000 \) and account for 27.8% of the variance in the intrinsic satisfaction score. Therefore the null hypothesis was rejected. The better predictor is organization commitment (\( \beta = 0.485 \)).

Table 53

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Satisfaction</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization Commitment</td>
<td>0.512**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.222**</td>
<td>0.159*</td>
<td>1.000</td>
</tr>
<tr>
<td>Mean</td>
<td>3.451</td>
<td>3.759</td>
<td>4.517</td>
</tr>
<tr>
<td>SD</td>
<td>0.677</td>
<td>0.687</td>
<td>0.508</td>
</tr>
</tbody>
</table>

*Significant at 0.05. ** Significant at 0.01.

Table 54

<table>
<thead>
<tr>
<th></th>
<th>( B )</th>
<th>( SE )</th>
<th>( \beta )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.812</td>
<td>0.352</td>
<td>2.305</td>
<td>0.022</td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.472</td>
<td>0.053</td>
<td>0.485</td>
<td>8.991</td>
<td>0.000</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.192</td>
<td>0.072</td>
<td>0.145</td>
<td>2.689</td>
<td>0.008</td>
</tr>
</tbody>
</table>

Note. \( R^2 = 0.278 \), \( F(2, 255) = 49.163, p = 0.000 \).

Null Hypothesis 28: There is no multiple correlation between extrinsic satisfaction and a linear combination of organization commitment and religious commitment.
Table 55 shows the correlations between the commitment variables: organizational commitment and religious commitment, and workers’ extrinsic satisfaction variable. Organizational commitment showed a moderate correlation ($R=0.501$) with extrinsic job satisfaction, whereas religious commitment showed a minimal correlation ($R=0.221$) with extrinsic satisfaction variable.

Table 55

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Satisfaction</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization Commitment</td>
<td>0.501**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.221**</td>
<td>0.159*</td>
<td>1.000</td>
</tr>
<tr>
<td>Mean</td>
<td>3.292</td>
<td>3.759</td>
<td>4.517</td>
</tr>
<tr>
<td>SD</td>
<td>0.675</td>
<td>0.687</td>
<td>0.508</td>
</tr>
</tbody>
</table>

*Significant at 0.05. **Significant at 0.01.

Table 56 shows the results of regression analysis for the commitment variables and extrinsic satisfaction variable using the enter method. As a set, the two commitment variables were significantly related to extrinsic job satisfaction ($F_{(2, 254)} = 46.060, p = 0.000$) and account for 26.6% of the variance in the extrinsic satisfaction score. Therefore the null hypothesis was rejected. The better predictor is organization commitment ($\beta = 0.472$).
Table 56

*Linear Regression Results for NCU Workers' Extrinsic Satisfaction Score and Commitment Variables (N = 256)*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.722</td>
<td>0.353</td>
<td>2.044</td>
<td>0.042</td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>0.456</td>
<td>0.053</td>
<td>0.472</td>
<td>8.673</td>
<td>0.000</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>0.192</td>
<td>0.072</td>
<td>0.146</td>
<td>2.684</td>
<td>0.008</td>
</tr>
</tbody>
</table>

*Note.* $R^2 = 0.266$, $F_{(2, 254)} = 46.060, p = 0.000$.

**Major Findings of the Study**

Research Question 1 asked: What are the levels of job satisfaction, organizational commitment, and religious commitment of full-time workers at Northern Caribbean University? The following results were found:

1. Northern Caribbean University workers displayed neutral levels of satisfaction with their jobs. Of the 15 motivator–hygiene factors studied, 12 were responded to with an overall mean of 3.00 or higher, placing them in the moderately category. The hygiene factor with the highest satisfier rating was relation with students, while the most frequently rated dissatisfier was organizational policy and administration.

2. Administrators/sector managers indicated the highest level of overall, intrinsic, and extrinsic job satisfaction while staff showed the lowest level of overall, intrinsic, and extrinsic job satisfaction with their jobs.

3. Administrators/sector managers showed the highest levels of job satisfaction regarding relations with students, work itself, relations with peers, and achievement.

4. Northern Caribbean University faculty appeared to be most satisfied with relations with students, responsibility, relationships with peer and work itself.
5. Staff were most satisfied with relations with students, achievement, responsibility, and relationship with peers.

6. All the workers tended to agree that they were satisfied with their relations with students and with their peers. In contrast, both administrators/sector managers and staff were least satisfied with organizational policy and administration while, faculty was least satisfied with working conditions.

7. Northern Caribbean University workers displayed high levels of organizational and religious commitment. Administrators/sector managers indicated the highest level of organizational and religious commitment, while the lowest level of organizational commitment indicated by the faculty and staff revealed the lowest level of religious commitment.

Research Question 2 asked: What are the relationships between (a) overall, (b) intrinsic, (c) extrinsic job satisfaction, (d) organizational commitment, (e) religious commitment and the following demographic characteristics: (a) occupational area, (b) gender, (c) age, (d) educational level, and (e) length of employment? The following results were found:

1. Administrators/sector managers had significantly higher levels of intrinsic job satisfaction than the other occupational subgroups of the University.

2. Male workers at Northern Caribbean University indicated a higher level of intrinsic job satisfaction than their female counterparts.

3. Workers older than 46 years had significantly higher levels of overall, intrinsic, and extrinsic job satisfaction than did younger workers.
4. Northern Caribbean University workers with a doctoral, master’s and a bachelor, professional or associate degree, a certificate and primary level displayed higher levels of overall and extrinsic job satisfaction than did their counterparts with just a high-school certificate. In addition, workers with a doctoral degree had higher levels of intrinsic job satisfaction than their counterparts with just a high-school certificate.

5. Workers with 11-14 years tenure at NCU had significantly higher extrinsic job satisfaction than those between 5-10 years.

6. A higher level of organizational commitment was indicated by workers who had worked between 15-25 years at NCU than those who had worked between 0-4 years and 5-10 years.

7. A higher level of organizational commitment was indicated by workers who were 46 years and older than those who were between 26-35 years.

8. Administrators/sector managers displayed a higher level of religious commitment in comparison to the staff workers of the institution.

9. Higher levels of religious commitment were found among workers who were 46 years and older in comparison to their younger colleagues.

10. NCU workers with a doctoral degree, master’s degree, B.A./professional/associate degree, a certificate, and primary level had significantly higher levels of religious commitment than did their counterparts with a high-school certificate.

Research Question 3 asked: What is the nature of the relationship among job satisfaction (intrinsic and extrinsic), organizational commitment, and religious
commitment among the workers of Northern Caribbean University? The following results were found:

1. As religious and organizational commitment of NCU workers increased, their overall job satisfaction tended to increase. The better predictor of overall job satisfaction is organizational commitment ($\beta = 0.51$).

2. As religious and organizational commitment of NCU workers increased, their intrinsic job satisfaction tended to increase. The better predictor of intrinsic job satisfaction is organizational commitment ($\beta = 0.49$).

3. As religious and organizational commitment of NCU workers increased, their extrinsic job satisfaction tended to increase. The better predictor of extrinsic job satisfaction is organizational commitment ($\beta = 0.47$).
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 presents a summary of the purpose of the study, research methodology, and the review of literature. The results are presented with conclusions regarding the findings. Finally, implications are discussed for Northern Caribbean University, and recommendations for further studies are also offered.

The purpose of this study was to investigate the level of job satisfaction and its relationship to organizational and religious commitment among full-time workers of Northern Caribbean University. The study investigated whether there were significant differences between levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment as a function of demographic variables such as: (a) occupational area, (b) age, (c) gender, (d) length of employment, and (e) educational level. Further, the investigation examined the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational and religious commitment.

Research Methodology

This study utilized a quantitative descriptive research design. A survey questionnaire was administered to all full-time administrators, sector managers, and faculty and staff members who were currently employed by the University at the time of
the study (September-December 2005). The questionnaire solicited information using the following: (a) five demographic questions (occupational area, gender, age, educational level and length of employment), (b) 15 items to measure professional satisfaction, (c) 15 items to estimate the level of organizational commitment, and (d) 10 items to assess intrinsic religious motivation. Data were analyzed by the use of descriptive and inferential statistics such as analysis of variance and regression analysis.

**Summary of the Literature**

This chapter presented a review of the literature with the expressed intent of providing important information about the construct of job satisfaction and its relationship to organizational and religious commitment.

The search for a universal definition of job satisfaction is not difficult; it is an impossible one (Green, 2000). Even though the definitions vary, the commonality seems to be that job satisfaction is a job-related emotional reaction. Although the importance of job satisfaction has been questioned (Nicholson et al., 1985), job satisfaction remains the most studied concept in organizational research (Agho et al., 1992).

From an employee's standpoint, job satisfaction is a desirable outcome itself. From an organizational and managerial standpoint, job satisfaction is important because of (a) its impact on absenteeism (Dow & Taylor, 1985), (b) turnover (Tett & Meyer, 1993), and (c) pro-social citizenship behavior, which manifests itself in helping coworkers and customers, and being more cooperative (Bateman & Organ, 1983).

Although Frederick Herzberg's two-factor theory with its 15 factors of job satisfaction has received some amount of criticism within the literature (Derlin & Schneider, 1994; Maidani, 1991; May & Decker, 1988), a significant number of studies
have shown that Herzberg’s motivation-hygiene theory still remains a viable theory for studying or researching job satisfaction (Blank, 1993; Bowen & Radhakrishna, 1991; Friesen et al., 1983; Gaziel, 1986; Herzberg et al., 1987; Hill, 1987; Nussel et al., 1988; Olanrewaju, 2002; Schroeder, 2003).

Herzberg et al. (1959) asserted that the concept of job satisfaction had two dimensions, namely intrinsic and extrinsic factors. The intrinsic factors relate to job content (work itself) and include achievement, recognition, work itself, responsibility, and advancement. The extrinsic factors relate to job context (work environment) and relations, and working conditions.

Organizational commitment of workers is not a new concept in the study of organizational behavior because a survey of the literature reveals that this topic was examined as early as 1938 (Barnard). However, when one considers the literature on this topic, it becomes apparent that little consensus exists with respect to the meaning of the term (Meyer & Allen, 1991; Morrow, 1993; Mowday et al., 1982). The most relevant definition of organizational commitment was found by Mowday et al. (1982). They defined commitment as the relative strength of an individual’s identification with and involvement in a particular organization. According to their investigation, organizational commitment was characterized by three factors: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization, and (c) a strong desire to maintain membership in the organization.

Although there is certainly a chicken-and-egg debate over issues regarding the relationship between job satisfaction and organizational commitment, several researchers
have made the case that job satisfaction is a predictor of organizational commitment (Dramstad; 2004; Eccles, 2003; Meixner & Bline, 1989; Porter et al., 1974; Price, 1977; Rose, 1991; Williams & Hazer, 1986).

The literature also reveals that demographic variables, such as occupational area, gender, age, educational level, and length of employment, have shown inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1983; Blank, 1993; Dramstad, 2004; Iiacqua & Schumacher, 1995; Morris & Sherman, 1981; Schroeder, 2003; Sheldon, 1971).

Allport’s intrinsic/extrinsic framework has been the dominant paradigm for measuring religion and religious commitment for the last three decades (Kirkpatrick & Hood, 1990; Schroeder, 2003). Allport (1966) suggests that the intrinsic/extrinsic concepts help to distinguish churchgoers whose type of membership supports and serves nonreligious and other ends from those for whom religion is an end in itself. Extrinsically religious motivated people were pictured as using religion, while their intrinsically motivated fellow comrades were described as living religion (Allport & Ross, 1967).

Several studies have noted the importance of religion as a significant predictor of organizational commitment for lay Catholics (Ciriello, 1987; Mancuso, 2003; Tarr, 1992). In agreement with these findings, studies in Seventh-day Adventist institutions (Dramstad, 2004; Rice, 1990; Rutebuka, 1996; Schroeder, 2003) concluded that teachers were generally satisfied with their jobs, and chose to work for the SDA church because of their commitment to the organization.
Results and Conclusions

This section of the study presents the results of the three research questions that were used in this study. Conclusions drawn from this study regarding the hypotheses are discussed in this section. The level of significance for testing the hypotheses was set at .05.

Research Question 1

Research question 1 asked: What are the levels of job satisfaction, organizational commitment, and religious commitment of the administrators/sector managers, faculty, and staff at Northern Caribbean University?

The findings from this study indicated that Northern Caribbean University workers were neutral about their level of satisfaction with their jobs (see Table 3). Of the 15 motivator-hygiene factors studies, 9 were found to be closer to a neutral response than to satisfactory response including, (a) organizational policy & administration, (b) working conditions, (c) salary, (d) recognition, (e) status, (f) growth, (g) advancement, (h) job security, and (i) supervision. The remaining 6 that were in the satisfactory category included (a) relations with supervisors, (b) work itself, (c) relations with peers, (d) achievement, (e) responsibility, and (f) relations with students.

Administrators/sector managers had the highest level of overall job satisfaction, while staff members tended to be neutral concerning their overall job satisfaction. Administrators/sector managers were satisfied with their level of intrinsic job satisfaction, while faculty and staff members were neutral about their level of intrinsic job satisfaction. Overall, NCU employees were neutral about their level of extrinsic job satisfaction, with Administrators/sector managers having the highest level of satisfaction.
Administrators/sector managers were most satisfied with their job, regarding the relations with students, work itself, their relations with peers, and their achievement. The faculty members at Northern Caribbean University appeared to be most satisfied with relations with students, their level of responsibility, their relationships with peers, and with work itself. Staff members were most satisfied with relations with students, their level of achievement, responsibility, and relationship with peers. The common themes that emerged were the employees' satisfaction with their relationship with students and peers and their level of achievement.

In fact, relations with students, responsibility, achievement, relations with peers, and work itself were among the highest and most frequently rated satisfiers indicated by the workers. On the contrary, organizational policy and administration, working conditions, and salary were the most frequently rated dissatisfiers among the workers of Northern Caribbean University (see Table 9). These findings are in keeping with the findings by Blank (1993); Gannon et al. (1980); McNeece (1981); Willi and Stecklein (1982); Schroeder (2003); and Huang (2004), who also found that employees had only slightly moderate job satisfaction levels—between 3 and 4 on 5-point scales. Researchers (Dow & Taylor, 1985; Tett & Meyer, 1993) have indicated that job satisfaction is associated with organizational outcomes such as employee turnover, work stress, absenteeism, and job performance.

The findings from this study indicated that three out of the six motivators were strong determinants of job satisfaction among the workers of Northern Caribbean University. These factors were responsibility, achievement, and work itself, thus showing partial support for Herzberg’s two-factor theory. This conclusion is consistent with earlier
studies that found that professionals in educational settings are satisfied with the intrinsic aspects of their jobs (Abreu, 1980; Blank, 1993; Cohen, 1974; liacqua & Schumacher, 1995; Latham, 1998; Olasiji, 1983).

Interpersonal relationships with students and peers were also determined by the respondents to provide high job satisfaction. This finding is consistent with results of previous studies (Blank, 1993; Diener, 1984; Friesen et al., 1983; Gaziel, 1986; Khillah, 1986; Schroeder, 2003) in which teachers and university administrators saw their relationship with students or peers as sources of job satisfaction. Although Herzberg’s theory had classified interpersonal relationships more as dissatisfiers than satisfiers, there seems to be a rationale for the motivating power of such relationships in the field of education. Schroeder (2003) posits that since relationships with students and peers are a significant part of the work in educational settings, it seems more than reasonable that such a relationship may have a strong potential to contribute to both intrinsic and extrinsic job satisfaction.

Another exception to Herzberg’s two-factor theory was that although recognition was classified as a satisfier, it was acknowledged by NCU workers as a dissatisfier. However, such findings are in agreement with previous findings. Ewen (1964) had found that dissatisfiers were capable of contributing to job satisfaction, while satisfiers were related to both job satisfaction and dissatisfaction. Butler’s (1982) findings also revealed that hygienes can cause job satisfaction, and motivators were capable of contributing to dissatisfaction.

One possible reason for partial support for Herzberg’s two-factor theory might be the use of the forced-choice format in the measurement of job satisfaction. Lock (1976,
as cited in Schroeder, 2003) stated that the only research design that found consistent support for Herzberg's theory was the critical incident approach. Research using different methods has found that both motivators and hygienes could create job satisfaction (Karugu, 1980; Khillah, 1986; Sudsawasd, 1980). For this reason Brayfield (1960) named the two-factor theory as method-bound, and Ewen (1964) suggested that more than one method should have been used to support the theory.

The areas of greatest job dissatisfaction as reported by the Northern Caribbean University workers were organizational policy and administration, working conditions, and salary. These are all extrinsic in nature. In general, NCU faculty members tended to be more dissatisfied with their working conditions than the financial support that they received. The results from this research are supported by findings from Murray and Murray (1998), who found that division chairs in community college settings are dissatisfied with institutional policy and administration and, as a result, have greater propensity to leave the institution. Olanrewaju (2002) also studied business faculty members and found that factors such as institutional policy, working conditions, and salary contributed to job dissatisfaction. Similarly, Diener (1984) found that factors chiefly responsible for dissatisfaction among the 277 faculty members in his study were working conditions (i.e., equipment, facilities, schedules), low salaries, and high amounts of administrative bureaucracy.

According to the result of this investigation, in every category of employment, NCU employees exhibited high levels of organizational commitment. Administrators/sector managers indicated the highest commitment to the organization and the faculty members exhibited the least commitment to the organization (see Table
The employees’ overall organizational commitment is in agreement with findings from Dramstad (2004) who found that teachers in parochial church-operated schools typically exhibit a high level of commitment. This high commitment of employees is desirable in building up a professional team and reducing turnover.

However, a number of institutional factors have been found to correspond with faculty commitment. Harshbarger (1989), for example, concluded that faculty-university value congruence was one of the principal factors affecting faculty commitment. Other studies (Allen, 1992; Graham, 1996; Kawakubo, 1988) have reported that communication satisfaction, a sense of autonomy, and an internal locus of control seem to contribute toward the organizational commitment of faculty, while external control is apparently a negative factor.

This study found that NCU employees had a very high level of religious commitment toward the organization. This result is in agreement with data from Rice (1990) who reported on a survey that sought to discover why teachers chose to work in Seventh-day Adventist schools. She found that over two-thirds either saw teaching in an SDA school as God’s choice for their lives or viewed it as a ministry.

Research Question 2

Research Question 2 asked: What are the relationships between (a) overall, (b) intrinsic, (c) extrinsic job satisfaction, (d) organizational commitment, (e) religious commitment, and the following demographic characteristics: (a) occupational area, (b) gender, (c) age, (d) educational level, and (e) length of employment for NCU workers?

The findings under research question 2 indicated that there is a significant difference in intrinsic job satisfaction among workers at NCU by occupational area (see
Table 16) and such finding was in general agreement with studies done by Armstrong (1971), Arthur (1987), Sompong (1990), and Wanous (1974). A comparison of the mean scores for intrinsic job satisfaction factors revealed that NCU administrators seemed to be more satisfied than the other occupational subgroups with relations with students, work itself, achievement, responsibility, and advancement. This result is somewhat different from that found by Niehoff (1995) and Schroeder (2003). They found that administrators had higher levels of extrinsic job satisfaction, while faculty indicated a higher level of intrinsic job satisfaction. In agreement with this, Latham (1998) concluded that intrinsic rewards play a greater role in teacher motivation and job satisfaction than extrinsic rewards. He further stated that job satisfaction could improve teaching and help retain teachers. Given the importance of intrinsic job satisfaction among faculty, this finding raises grave concerns.

There was a significant difference in intrinsic job satisfaction among NCU workers by gender (see Table 19). Studies regarding the role of intrinsic vs. extrinsic factors in job satisfaction and gender have shown inconsistent results. While Blank (1993) as well as Schroeder (2003) found no significant gender difference when distinguished between intrinsic and extrinsic job satisfaction, McNeel (1984) and Hill (1983) concluded that females were more intrinsically satisfied than males. Contrary to this viewpoint, male workers at NCU were more intrinsically satisfied than female workers.

There were significant differences in overall intrinsic and extrinsic job satisfaction among workers at NCU by age. The findings revealed that workers who were 46 years and older had higher levels of overall, intrinsic, and extrinsic job satisfaction than their
colleagues who were between 26 and 35 years. However, no significant difference existed between workers in any of the other groups. These results are in agreement with Cockburn (1998) who found that younger and older teachers had higher levels of job satisfaction than their colleagues in the intermediate group. In agreement with this Herzberg (1957) suggested that while morale is high among young workers, it tends to go down during the first few years of employment. He further stated that the low point is reached when workers are in their middle and late 20s or early 30s. After this period, satisfaction steadily climbs with age.

Hypotheses 10, 11, and 12 indicated that there are significant differences in overall, intrinsic, and extrinsic job satisfaction among workers at NCU by educational level (see Tables 26, 28, 30). Such findings are in partial agreement with Niehoff (1995), Blank (1993), and Schroeder (2003). They found that employees holding a doctoral degree were most satisfied with their jobs, and findings from this present study revealed that workers with a doctoral degree, master's degree, and a bachelor's, professional, or associate degree displayed higher levels of overall and extrinsic job satisfaction than their counterparts with just a high-school certificate. The findings also revealed that workers with a doctoral degree indicated higher levels of intrinsic job satisfaction than did their counterparts with just a high-school certificate. No significant difference was found between the levels of overall, intrinsic, and extrinsic among the other employees (see Tables 27, 29, 31).

Hypothesis 15 indicated that there is a significant difference in extrinsic job satisfaction among NCU workers by length of employment. Studies showing the relationship between tenure and job satisfaction have shown inconsistent results (Begeian
et al., 1992; DeSatantis & Durst, 1996). However, the findings from this study are somewhat consistent with those of Avi-Itzhak (1988), Khillah (1986), and Niehoff (1995). They found that a positive relationship existed between length of service and job satisfaction.

Unexpectedly, this study found that workers with 11-14 years’ tenure at NCU indicated the highest level of extrinsic job satisfaction followed by workers with more than 26 years’ tenure (see Table 34). One could possibly argue that the reason for such a finding could be because for this particular study, workers with 11-14 years’ tenure at NCU were in the minority (see Table 35). It seems reasonable that workers with more than 26 years’ tenure at NCU would indicate a higher level of overall job satisfaction. One could argue that, over the years, workers in this category would have developed a sense of achievement and productivity. Also it can be considered that after many years of service within the organization, one may have well adapted to the organizational policies and administration and have developed good working relationships with peers, students, supervisors, and administrators.

Hypothesis 18 indicated that there is a significant difference in organizational commitment among the workers at NCU by age group (see Table 38). Consistent support was found for a positive relationship between organizational commitment and age (Angel & Perry, 1981; Dramstad, 2004; Morris & Sherman, 1981; Schroeder, 2003; Sheldon, 1971). In agreement with such findings, this study revealed that employees between the ages of 26-35 are significantly less committed to the organization than are their colleagues who were 46 years old and older.
Hypothesis 20 indicated that there is a significant difference in organizational commitment among NCU workers by length of employment (see Table 41). This finding compares very favorably with findings of previous studies (Angel & Perry, 1981; Fukami & Larson, 1984; Morris & Sherman, 1981; Rivers, 1994; Salancik, 1977; Stevens et al., 1978). They found that a positive relationship existed between length of employment and organizational commitment. A comparison of the mean scores for organizational commitment by length of employed revealed that workers with tenure of 15 – 25 years had a higher level of organizational commitment than workers with 0 – 4 years and 5-10 years’ tenure (see Table 42). These workers who are committed to the organization would, of course, tend to remain loyal to the employing organization.

Hypothesis 21 indicated that there is a significant difference in religious commitment among NCU workers by occupational area. A comparison of the mean scores for religious commitment by occupational area indicated that administrators/sector managers indicated the highest level of religious commitment to the university. The staff members indicated the lowest level of religious commitment. This might be possible because religious organizations tend to be more careful in ensuring that administrators and faculty members are practicing members of their faith before they are hired. However, these institutions tend to be more lax when it comes to support staff. The reasoning seems to be that support staff members are less critical to the mission of the institution than are faculty members and administrators.

Hypothesis 23 indicated that there is a significant difference in religious commitment among NCU workers by age. A comparison of the mean scores for religious commitment by age revealed that workers who were 46 years and older were more
satisfied with their level of religious commitment than were workers who were 35 years and under. This finding seems to be consistent with the notion that more mature persons tend to be ‘settled in’ in their religious beliefs while younger persons are more likely to be ‘settling in’ in their beliefs. Younger workers are more likely to question the status quo than are older workers.

The null hypotheses, which were retained, are worthy of mention. The current study found that there were no significant differences in overall and extrinsic job satisfaction among workers at NCU by occupational areas (see Tables 15 and 18), and these findings are consistent with the literature. Schroeder (2003) found that there was no significant difference for overall job satisfaction between the occupational subgroups of Andrews University workers. Olasiji’s (1983) study indicated no significant difference between extrinsic job satisfaction among the faculty and administrators in a Nigerian University. Workers, regardless of their job classification, had similar levels of satisfaction. This level of satisfaction is consistent across all job categories.

This study found no significant difference in overall and extrinsic job satisfaction among workers at NCU by gender (see Table 19). These findings are partially supported by studies done by Blank (1993), Hullin and Smith (1964), Liacqua and Schumacher (1995), Smith and Plant (1982), and Schroeder (2003) who found no significant differences for overall, intrinsic, and extrinsic job satisfaction between males and females.

Contrary to previous studies (Avi-Itzhak, 1988; Khillah, 1986), no significant differences were found for intrinsic job satisfaction among workers at NCU by length of employment. This was probably due to the fact that a number of workers have been
working at NCU for a short period of time (0-4 years), thus commitment and others factors that contribute to intrinsic motivation have not been established as yet.

This study revealed that organizational commitment was not related to occupational area among the workers at NCU. These findings are in agreement with Niehoff (1995) and Schroeder (2003) where they found no significant differences in the levels of organizational commitment between administrators, faculty, and staff.

While different studies (Angel & Perry, 1981; Grusky, 1966) have shown that females were more committed to the organization than their male counterparts, other studies (Mathieu & Zajac, 1990) have revealed higher levels of organizational commitment for male employees. Consistent with findings from Aryee and Heng (1990) and Schroeder (2003), however, this study did not find significant gender differences in organizational commitment.

Although findings are at times inconsistent in the literature, it appears that there are significant relationships between organizational commitment and educational level (Blackhurst et al. 1998; Mottaz, 1986). Contrary to these findings, this study did not reveal significant differences in the levels of organizational commitment based on educational level.

This study revealed that religious commitment was not related to gender and length of employment among the workers at NCU. No studies have been done to investigate such. Thus these findings can be added to the body of literature.

Research Question 3

Research Question 3 asked: What is the nature of the relationship among job satisfaction (intrinsic, extrinsic), organizational commitment, and religious commitment?
The findings of this study indicated that there were significant multiple correlations between overall, intrinsic, extrinsic job satisfaction and a linear combination of organizational and religious commitment. All three correlations were significant at the 0.05 level. Consistent with previous findings (Brooke et al., 1988; Meyer & Allen, 1987; Schroeder, 2003) this study found moderate correlations between overall, intrinsic, and extrinsic job satisfaction and organizational commitment. Minimal correlation was found between overall, intrinsic, and extrinsic job satisfaction and religious commitment. Organizational commitment was the best predictor of all three job satisfaction facets.

Implications for the University

This study has provided findings related to job satisfaction and its relationship to organizational commitment and religious commitment among workers at Northern Caribbean University. In light of the findings and information obtained from the literature, the following implications have been identified.

Northern Caribbean University employees have displayed a neutral level of satisfaction with their jobs. A satisfactory level of organizational and religious commitment was also indicated. A close view of specific job facets indicates that the highest satisfaction levels occur in the area of responsibility, achievement, relations with peers and students, and work itself. Organizational policy and administration, working conditions, and salary were the facets reflecting the lowest satisfaction levels. Additional factors that were also neutral in response were recognition, status, growth, advancement, job security, and supervision. Administrators need to pay close attention to these findings. While it is encouraging to note that employees are not dissatisfied in those
areas, their indifference should be cause for concern. They need to review how policies are administered and the perception of those affected.

Minor (1980) found that the wide appeal of Herzberg's theory for practitioners is its focus on rejuvenating interest in job enrichment through identification of motivators. Therefore, it may become beneficial for the administrators of NCU to try to identify those motivating factors that influence the workers in an effort to promote greater job satisfaction.

Since recognition was identified by the workers as a dissatisfier rather than a satisfier, this factor should receive greater attention by the administrators. Administrators should evaluate the reward system in place in light of the many contemporary changes taking place in higher education to determine if the current reward systems are meeting the needs of the workers (especially staff). Blank (1993) posits that the cumulative effect of employees who routinely receive recognition for their accomplishments is increased self-esteem and confidence, along with increased respect for the individual giving praise. The administrators should continue to recognize and reward employees for their longevity and commendable contributions to service, teaching, and research. Awards for Teacher of the Year, Researcher of the Year, and Employee of the Year should be celebrated annually.

Along with focusing on intrinsic satisfiers or motivator factors, it might be more beneficial for the administrators of NCU to make intentional efforts to review the organizational policies and authority structures to ensure that employee satisfaction needs are met. This is in light of the fact that organizational policies and administration was cited as the most common factor contributing to the lowest level of job satisfaction for all
workers. This hygiene factor encompasses university management, clarity of communication, adequacy of resources, and personnel policies. NCU administration could try to improve the organizational climate by having workers contribute more to the decision-making process of the organization, thereby creating a feeling of ownership. The administration could help workers understand why policies are important and identify employees' perceptions of current policies through talk-back seasons, special workers' luncheons, interviews and monthly workers' meetings. It would also be beneficial for the institution to continue informing new workers of the policies of the organization, and if changes are made they should be properly communicated to the entire workforce.

Working conditions were also cited as an area that contributed to low level of job satisfaction among the workers at NCU. An improvement in the working conditions could help to create high levels of morale and a positive working environment for the workers of the University. NCU administration should therefore continue to improve the physical working conditions at the institution. This may include having up-to-date and adequate equipment and supplies, having more comfortable and accommodating offices with proper lighting and ventilation for workers, easy access to the faculty and staff lounge, and flexible work schedules.

Another area for improvement at the University is related to salary. Aon Consulting (1998) found that salary (62%) and benefits (57%) were among the two most important factors for attracting and keeping employees. Tutor (1986) also found that salary increases were linked to other motivational factors as well as to perceived achievement. Although NCU has a different compensation system from the other two
universities in Jamaica, it should ensure that its remuneration package is attractive to the workers who are required for its operation. This may include developing a system to reward excellence of performance while offering tangible benefits to outstanding employees.

The results from this study also revealed that the University would benefit more if greater emphasis were placed on growth and advancement, especially for faculty. This is very important because opportunities for professional growth are more likely to enhance advancement possibilities or change in status. This could be achieved by having a worker’s development plan, which would function as a guide in selecting and developing career enrichment opportunities. This plan could include financial support for graduate studies, active membership in professional organizations, regular attendance to local and international conferences, and participation in faculty exchange programs. It would be advantageous for the institution to have a system that would require workers who benefited from the financial support program of the University to work with the institution for a mutually agreed upon period of time after completion of their program of study. Blank (1993) advocates that professional plans, focusing on growth and achievement, would ultimately result in greater satisfaction on behalf of the individual and the institution.

Contrary to previous findings, NCU administrators/sector managers indicated a higher level of intrinsic job satisfaction than did the faculty. Latham (1998) posits that intrinsic rewards play a greater role in teacher motivation and job satisfaction than extrinsic rewards. It may be beneficial for the administrators of NCU to design a program to aid in improvement of the intrinsic level of job satisfaction among the faculty.
An improvement in this area could lead to greater productivity, more vitality, and reduction in faculty turnover. One of the greatest satisfiers is work itself. Employees who are recognized by administrators for their effectiveness in contributing to the accomplishment of the objectives of the University are more likely to develop a high level of job satisfaction. The work environment should have a high level of autonomy so that the workers are encouraged to participate in planning and decision making.

Although the findings indicated that there is an equal level of overall and extrinsic job satisfaction, organizational, and religious commitment between males and females at NCU, yet the females have a lower level of intrinsic job satisfaction (see Table 9). These findings are to be interpreted with caution because 17.2% of the subjects refrained from stating their gender and thus it is not known what impact these would have had on the results. The University should determine if there is a lower level of intrinsic job satisfaction among the female employees and if this is so, efforts should be made to correct the situation.

The highest level of job satisfaction, organizational commitment, and religious commitment was seen for workers older than 46 years, while the lowest level was among workers between 25-36 years. It can also be seen that workers with only high-school education had the lowest level of job satisfaction. Similarly, workers with more than 26 years’ tenure at NCU had the highest level of job satisfaction, while those with tenure between 5-10 years had the lowest level of job satisfaction.

It would be incumbent upon the administrators to attract employees with advanced degrees while supporting employees to obtain these degrees. It would be advisable for the administration of NCU to implement certain strategies as a means of
increasing the level of job satisfaction, organizational commitment, and religious commitment for the younger workers, especially those between ages 26-35 since these have the lowest level of job satisfaction. Workers should be encouraged and assisted in furthering their studies, especially those workers with only a high-school certificate. NCU should ensure that there is a development plan for each worker which would indicate the steps that should be taken for the worker’s educational growth. This plan should be reviewed on a regular basis and should be an integral part of the appraisal system.

**Recommendations for Future Research**

The following recommendations are based on the findings of this study:

1. This study examined the level of job satisfaction, organizational and religious commitment at a University owned and operated by the Seventh-day Adventist church. The church also owns and operates high schools and primary schools in Jamaica. Further studies should be conducted to determine the level of job satisfaction, organizational commitment, and religious commitment of the employees in these institutions.

2. The study shows that religious commitment of the workers at NCU was very high. This is a desirable factor for workers since those with high religious commitment are more likely to remain with the organization (Oberholster & Taylor, 1999). Further studies should be conducted to determine the factors that affect religious commitment among workers at NCU.

3. A comparative study should be conducted to examine the level of job satisfaction and organizational commitment between employees of a private university operated by a religious organization and those in a public university. This would indicate
the effect of religious commitment on the level of job satisfaction in a religious organization.

4. A similar study should be conducted using a different research design, for example a case study, in order to obtain additional information on the level of job satisfaction, organizational commitment, and religious commitment among the workers at NCU.

5. An investigation should be conducted to determine how job satisfaction, organizational commitment, and religious commitment are affected by factors that were not included in the scope of this study such as decision making and communication.

6. A comparative study should be conducted to determine differences that may exist in job satisfaction, organizational commitment, and religious commitment between the different colleges of NCU.
APPENDIX A

NORTHERN CARIBBEAN UNIVERSITY EMPLOYEE SURVEY
Northern Caribbean University

Employee Survey

Section 1

Please tick the appropriate box

Occupational Area: □ Administrator (Including Deans, Chairs and Sector Managers)  □ Faculty  □ Staff

Gender: □ Male  □ Female

Age: □ 20–under  □ 21–25 years  □ 26–30 years  □ 31–35 years  □ 36–40 years  □ 41–45 years  □ 46–50 years  □ 51 & over

Educational Level: □ Primary Level  □ High School  □ Certificate  □ BA, professional or Associate degree  □ Masters Degree  □ Doctoral Degree

Years working at Northern Caribbean University:
□ 0–4 years  □ 5–10 years  □ 11-14 years  □ 15–20 years  □ 21–25 years  □ 26–30 years  □ 31–35 years  □ 36–40 years  □ 41 & over  □ 41 & over
Section 2

Reflecting on your work at Northern Caribbean University, to what extent are you satisfied with the following as defined? 1 – Very Dissatisfied, 2 – Dissatisfied, 3 – Neutral, 4 – Satisfied, 5 – Very Satisfied

1. Achievement: Means the degree of completion of a job. 1 2 3 4 5
2. Advancement: Change in status within the organization. 1 2 3 4 5
3. Growth: Changes in the work situation such as advancement. 1 2 3 4 5
4. Interpersonal Relations (peers): Quality of interactions with persons at the same level in the organizational hierarchy. 1 2 3 4 5
5. Interpersonal Relations (students): Quality of interactions with students. 1 2 3 4 5
6. Interpersonal Relations (superiors): Quality of interactions with superiors that may or may not be directly relevant to task accomplishment. 1 2 3 4 5
7. Job Security: Indications of the likelihood of continuous employment, such as tenure, permanent contracts, budgetary stability, assurance of continued work. 1 2 3 4 5
8. Organizational Policy & Administration: Quality of university management, including clarity of communications, adequacy of resources, personnel policies, fringe benefits, etc. 1 2 3 4 5
9. Recognition: Attention in the form of praise, personal acknowledgement by management, reward that is directly related to task accomplishment. 1 2 3 4 5
10. Responsibility: Level of autonomy in carrying out assignments. 1 2 3 4 5
11. Salary: Wage and compensation factors, such as pay scales, adjustments, reimbursements. 1 2 3 4 5
12. Status: Signs, symbols, or tokens of position and prestige, such as privileges, work space size and location, work space décor, symbolic titles, etc. 1 2 3 4 5
13. Supervision: Competence of superiors (e.g. fairness and effectiveness) 1 2 3 4 5
14. Work Itself: The nature of the tasks to be accomplished on the job (i.e. routine or varied, interesting or dull). 1 2 3 4 5
15. Working Conditions: The physical conditions of work (such as the amount of work, temperature control, ventilation, adequate equipment and supplies.) 1 2 3 4 5

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Section 3

Please circle the degree of your agreement with the following statements:

1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree

16. I am willing to put in a great deal of effort beyond that normally expected in order to help this university be successful.

17. I talk about this university to my friends as a great organization to work for.

18. I feel very little loyalty to this university.

19. I would accept almost any type of job assignment in order to keep working for this university.

20. I am proud to tell others that I am a part of this university.

21. I find that my values and the university's values are similar.

22. I could just as well be working for a different organization as long as the type of work was similar.

23. This university really inspires the very best in me in the way of job performance.

24. It would take very little change in my present circumstances to cause me to leave this university.

25. I am extremely glad I chose this university to work for over others I was considering at the time I joined.

26. There's not too much to be gained by sticking with this university indefinitely.

27. Often, I find it difficult to agree with this university's policies on important matters relating to its employees.

28. I really care about the fate of this university.

29. For me this is the best of all possible organizations for which to work.

30. Deciding to work for this university was a definite mistake on my part.
Section 4

*Please circle the degree of your agreement with the following statements:*

1 - Strongly Disagree, 2 - Disagree, 3 - Neutral, 4 - Agree, 5 - Strongly Agree

31. My faith involves all of my life.  
32. One should seek God’s guidance when making every important decision.  
33. It doesn’t matter so much what I believe as long as I lead a moral life.  
34. In my life I experience the presence of the Divine.  
35. My faith sometimes restricts my actions.  
36. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.  
37. Nothing is as important to me as serving God as best as I know how.  
38. I try hard to carry my religion over into all my other dealings in life.  
39. Although I believe in my religion, I feel there are many more important things in life.  
40. My religious beliefs are what really lie behind my whole approach to life.

*Items 1-15 from Blank (1993), items 16-30 from Mowday (1979), items 31-40 from Hodge (1972)*
APPENDIX B

LETTER OF APPROVAL FROM THE ANDREWS UNIVERSITY

INSTITUTIONAL REVIEW BOARD
April 13, 2004

Donna Brown  
C/o Northern Caribbean University  
Manderville, Manchester Jamaica, W.I.

Dear Donna

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

IRB Protocol #: 04-026  
Application Type: Original  
Dept: Education

Review Category: Exempt  
Action Taken: Approved  
Advisor: Hinsdale Bernard

Protocol Title: Job Satisfaction and its Relationship to Organizational and Religious Commitment among Workers at Northern Caribbean University

This letter is to advise you that the Institutional Review Board (IRB) has reviewed and approved your proposal for research. You have been given clearance to proceed with your research plans.

All changes made to the study design and/or consent form, after initiation of the project, require prior approval from the IRB before such changes can be implemented. Feel free to contact our office if you have any questions.

The duration of the present approval is for one year. If your research is going to take more than one year, you must apply for an extension of your approval in order to be authorized to continue with this project.

Some proposal and research design designs may be of such a nature that participation in the project may involve certain risks to human subjects. If your project is one of this nature and in the implementation of your project an incidence occurs which results in a research-related adverse reaction and/or physical injury, such an occurrence must be reported immediately in writing to the Institutional Review Board. Any project-related physical injury must also be reported immediately to the University physician, Dr. Loren Hamel, by calling (269) 473-2222.

We wish you success as you implement the research project as outlined in the approved protocol.

Sincerely,

Jessica Shine,  
Graduate Assistant  
Institutional Review Board  
Cc: Hinsdale Bernard

Jessica Shine,  
Graduate Assistant  
Institutional Review Board

APPROVED  
Office of Scholarly Research

Office of Scholarly Research  
(269) 471-6361 Fax: (269) 471-6246 E-mail: irb@andrews.edu  
Andrews University, Berrien Springs, MI 49104

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Dear Dr. Thompson

I am a Ph. D. Student at Andrews University, in the United States of America. I am currently at the research stage of my program of study. My research focuses on “Job Satisfaction and its relationship to organizational and religious commitment among workers at Northern Caribbean University”.

This study will utilize a survey instrument to collect data from administrators, faculty and staff workers at the university. There are no known physical or emotional risks associated with completing this survey. All information collected will be held in strictest confidence. At no time will the respondents’ names be used. In addition participation will be totally voluntary and the respondents will be free to terminate their consent at any time without prejudice.

As you know, in an era of increasing competition and scarce resources, maximizing employees, productivity, job satisfaction, and commitment to organization is a critical issue for administrators especially in developing countries such as ours.

Northern Caribbean University stands to benefit greatly from this study as I feel that the results will provide some valuable insight in improving job satisfaction for employees and so lower the turnover rate. The findings from this study will also benefit the nation, the church organization, and other corporate bodies. Their practices could be improved by maximizing “dissatisfiers” and providing guidelines and policies that facilitate healthy workers and good working environments.
I am therefore requesting permission to administer the attached questionnaire to the employees of Northern Caribbean University during the this semester March to June 2004. Any instructions and/or requirements you may have regarding this request would be most helpful and appreciated.

I thank you for your time in considering this request. I look forward to hear from you at your earliest convenience.

Sincerely,

Donna Brown

c: Dr. Hinsdale Bernard, Dissertation Chair
    Dr. Charles Panton, Director, Office of Research and Grants
    Dr. Trevor McClymount, Dean, College of Business and Continuing Education

att:
Donna Brown
Northern Caribbean University
Mandeville, Manchester
Phone: (876)-5232135
e-mail: donsbrown@hotmail.com

October 10, 2004

Dear Colleague,

As a doctoral student in the Andrews University Educational Administration and Leadership Program, I am kindly requesting your assistance in completing my dissertation. The study is designed to identify factors associated with job satisfaction, organizational and religious commitment among Northern Caribbean University Employees. Permission has been granted by the University Administration to conduct this study.

Your involvement in this study would require you to complete the enclosed three-sided Northern Caribbean University Employee Survey and return via the self-addressed envelope in two weeks time. All your responses will be voluntary and confidential. Therefore, please don’t write your name anywhere on the form. You are not obliged to return the survey form; however, your cooperation would be highly appreciated since it would ensure the success of this study. By returning the survey you are indicating your implied consent for the information submitted to be used as a part of this research project.

If you have any questions regarding the questionnaire or the study, please feel free to call me at 523-2135 or 8753048. You may also contact my primary advisor at Andrews University, Dr. Hinsdale Bernard, by telephone at (269) 471-6702 or by e-mail at hbernard@andrews.edu. If you have any questions concerning your rights as a research subject, please contact Andrews University Institutional Review Board at (269) 471-6361 or irb@andrews.edu.

Thank you in advance for your efforts.

Sincerely,

Donna Brown
Doctoral Student
Andrews University
Educational Administration and Leadership

Dr. Hinsdale Bernard
Chair of the Dissertation Committee

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
REFERENCE LIST


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Mayo, E. (1945). *The social problems of an industrial civilization*. Boston: Harvard University, Graduate School of Business Administration.


Samuelson, J. (1994). Rethinking health care: The main goal should be to control costs, not create universal insurance. *Newsweek, 123*, 50.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


VITA

Name: Donna Brown  
PhD Candidate  
Educational Administration

Undergraduate and Graduate Schools Attended:

Andrews University  
University of Technology

Degrees Awarded:

1995  MA in Education, Andrews University, West Indies College Extension Site, Mandeville, Jamaica.

1992  BA in Business Education (Hons), University of Technology, Kingston, Jamaica.

1989  Diploma in Teaching (Business Studies), University of Technology, Kingston, Jamaica.

Professional Experiences:

1998-Present  Assistant Professor, College of Business and Continuing Education, Northern Caribbean University, Mandeville, Jamaica.

1989-1998  Head of Business Department, Kingsway High School, Kingston, Jamaica.


1986-1987  Accounting Clerk, East Jamaica Conference of Seventh-day Adventists.