Job Satisfaction and its Relationship to Organizational Commitment and Religious Commitment for Andrews University Employees

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Andrews University
School of Education

JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL COMMITMENT AND RELIGIOUS COMMITMENT FOR ANDREWS UNIVERSITY EMPLOYEES

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

by
Ralph Schröder
June 2003
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JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL COMMITMENT AND RELIGIOUS COMMITMENT FOR ANDREWS UNIVERSITY EMPLOYEES

A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

Ralph Schroeder

APPROVAL BY THE COMMITTEE:

Chair: Jimmy Kijai

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June 12, 2003
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ABSTRACT

JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL COMMITMENT AND RELIGIOUS COMMITMENT FOR ANDREWS UNIVERSITY EMPLOYEES

by

Ralph Schröder

Chair: Jimmy Kijai
ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University
School of Education

Title: JOB SATISFACTION AND ITS RELATIONSHIP TO ORGANIZATIONAL COMMITMENT AND RELIGIOUS COMMITMENT FOR ANDREWS UNIVERSITY EMPLOYEES

Name or researcher: Ralph Schröder

Name of degree of faculty chair: Jimmy Kijai, Ph.D.

Date completed: May 2003

Problem

Relatively few studies have examined job satisfaction and its intrinsic and extrinsic facets for religious private universities. Andrews University seems to benefit from an identification of factors contributing to job satisfaction, and a measurement of its employees’ organizational and religious commitment. This study can clarify whether religious commitment has a potentially mediating effect on the relationship between job satisfaction and organizational commitment.
Method

As part of this quantitative research study a survey questionnaire was mailed out to all 976 Andrews University employees' which measured levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment. The survey included items of three instruments: the Professional Satisfaction Scale, the Organizational Commitment Questionnaire, and the Intrinsic Religious Motivation Scale. Responses were measured on a 5-point Likert-type scale. In addition, five demographic items were part of the study. Data were statistically analyzed by using descriptive statistics, analysis of variance, correlational analysis, and factor analysis.

Results

This study revealed that AU employees were most satisfied with their relations with students, followed by relations with peers, and work itself. The lowest level of satisfaction was found for salary followed by organizational policy and administration and advancement. The investigation revealed that overall job satisfaction and its intrinsic and extrinsic facets were influenced by demographic variables, such as age, educational level, and occupational area. Organizational commitment was related to age and educational level. Moderate correlations were found between organizational commitment and job satisfaction. A seven-predictor model explained 44.2% of the variance of organizational commitment. Different predictor models were found for the four occupational subgroups. Religious commitment did not have a mediating effect on the relationship between job satisfaction and organizational commitment.
Conclusion

This study provided information about factors contributing to job satisfaction and dissatisfaction for Andrew University employees. Contrary to Herzberg's assumption that job satisfaction is not influenced by demographic variables, this study has shown that demographic factors can significantly influence job satisfaction as well as organizational commitment. Religious commitment was found to be a substantial predictor of organizational commitment by itself, but did not show a significant mediating effect on the relationship between job satisfaction and organizational commitment.
CHAPTER I

INTRODUCTION

Background and Rational

Job satisfaction is one of the most studied constructs in the fields of organizational and industrial psychology (Geyer & Daly, 1998; Hartzell, 1988; Howard & Frink, 1996; Tett & Meyer, 1993; Varona, 1996). Studies in the last three decades have shown conflicting evidence about the factors that are most important in employee satisfaction. While some findings suggest the dominance of extrinsic rewards (Butler, 1982; Gruenburg, 1980; Locke, Fitzpatrick, & White, 1983; Seybolt, 1976), other studies show the importance of intrinsic factors for motivating employees (Holdaway, 1978; Minor, 1980).

Unlike workers in the 1970s and 1980s who valued interesting work above everything else, the results of current 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 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 only ranked 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 1990s characterized by massive layoffs (Cameron, 1994) and increasing health care costs (Samuelson, 1994) may have caused a shift regarding the perception of the most important job satisfaction factors back towards the extrinsic domain. Jennings (2000) stated at the turn of the century that money and 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. According to Simon (2003), September 11, 2001, caused many workers to take another look at their daily lives, in the workplace and at home. Simon (2003) stated that the selfless efforts that were demonstrated on 9/11 and afterwards stimulated additional cooperation in all walks of life including the workplace. For instance, after September 11, 47% of those in the public sector said "people help each other," compared to 36% prior. It was indicated that people between the ages of 31 and 40 consistently reported more positive opinions after 9/11 than before, while those under 30 and over 50 tended to show more negative opinions. Cannon (2002) presented examples of people who have responded to the
events of September 11 by exchanging stability for fulfilling and meaningful careers. In the light of conflicting evidence and changing trends in the world of organizations, therefore, the following question seemed to need frequently a new answer: Which factors are most important to maintain or increase employee satisfaction at the present time?

Organizational commitment as 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. A committed employee is also assumed to be more productive, to be less often absent, and to be less likely to leave the company for another job (Young, 1998).

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 for 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 the 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 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 policies that would result in maximum job satisfaction and organizational commitment. 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 as work is performed and goals are met.

According to Andrews University employment records (Andrews University Human Resources, 2003), there was a 12.74% employee turnover for university employees in 1998, and a 15.20% labor turnover in 1999 not including contract and temporary workers. Andrews faculty showed a turnover of 11.11% in 1998, and an 8.78% turnover in 1999. When contract and temporary faculty were included the turnover rates were 11.81% in 1998, and 11.15% for 1999. According to Ingersoll (2002), the teaching profession in the public sector has a relatively high annual turnover with 14.3% in 1994-1995, and 17% in 2000-2001. Lorden (1998) reported an attrition rate of 32% within the 5 five years of work to 61% percent within 6 years for student affairs professionals in public universities. Nwadiani and Akpotu (2002) reported an average annual turnover rate of 16.18% for academic staff in public Nigerian universities
between 1990 and 1997. Based on the presented data, it can be estimated that the general volume of turnover at Andrews University was smaller than the turnover rate of similar institutions in the public sector. Therefore, it was hypothesized that the component of religious commitment could have a mediating influence on the relationship between job satisfaction and organizational commitment for Andrews University employees. Andrews University would benefit from an investigation that would further identify factors related to job satisfaction and a measurement of related constructs, such as organizational and religious commitment.

**Purpose of the Study**

The purpose of this study was to identify the most important factors related to job satisfaction and dissatisfaction for Andrews University employees. It was investigated whether there were significant differences between levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment as a result of demographic variables such as: occupational area, age, gender, length of employment, and educational level. Further, the investigation studied the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational commitment. It was then examined if there was a linear relationship between organizational commitment and Herzberg’s 15 job-satisfaction factors including religious commitment. Finally, the examination determined if religious commitment had a mediating effect on the relationship between job satisfaction and organizational commitment. The results of this study had a strong potential to provide valuable information for maintaining or improving job satisfaction.
and organizational commitment for Andrews University employees.

Conceptual Framework

The conceptual framework for this study was Frederick Herzberg's two-factor theory of job satisfaction. Herzberg distinguished between intrinsic and extrinsic factors related to job satisfaction. Intrinsic factors were believed to increase job satisfaction while extrinsic factors cause job dissatisfaction.

Dissatisfiers, also known as hygienes, could be compared with health hazards, such as impure water or polluted air. They make people leave. According to Herzberg, the most important dissatisfiers were: company policy and administration, supervision, relationships with supervisor, peers and subordinates; work conditions; salary and benefits; personal life; status; and security. In agreement with Herzberg's theory, Merit (1995) found that employees were dissatisfied with: poor 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 develop again a feeling of just receiving what they deserve. Therefore, Herzberg 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. Interesting work, for example, was identified as a major source of job satisfaction. In this context, it may be considered how many hours of concerted effort people devote to hobbies such as basket weaving, constructing model ships, taking and developing photographs, etc. (Merit, 1995).

According to Oberholster, Taylor, and Cruise (2000), employee commitment is a crucial factor in achieving organizational success. Individuals with low levels of commitment seem to be more concerned with personal success than with the success of the organization as a whole. By contrast, employees with high commitment to an organization see themselves as an integral part of the organization, and work for the organization as if the organization belongs to them. Mowday, Porter, and Dubin (1974) concluded that job satisfaction and organizational commitment are related, but separate employee experiences. He proposed job satisfaction as a more affective response and organizational commitment as a more relational response.

While some studies have viewed organizational commitment as a predictor of job satisfaction (Aranya & Ferris, 1984; Aranya, Lachman, & Amernic, 1982; Bateman & Strasser, 1984; Harrell, Chewning, & Taylor, 1986; Lachman & Aranya, 1986; McGregor, Killough, & Brown, 1989), other studies have shown job satisfaction as a predictor of commitment (Aranya & Valency, 1986; Ferris, 1983; Meixner & Bline,
1989; Williams & Hazer, 1986). 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, Steers, & Porter, 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. In this context, demographic variables, such as occupational area, age, gender, length of employment, and educational level, seem to be worth investigating, as they have shown inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1981; Blank, 1993; Iiaqua & Schumacher, 1995; Morris & Sherman, 1981; Sheldon, 1971).

Religious belief has been described as one of the most potent influences in one's life (Paloutzian & Ellison, 1982). 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 Tarr (1992), organizationally committed teachers were found as perceiving their relationships with colleagues more positively, evidencing higher levels of mission-related efficacy, and deriving more satisfaction from their work than either teaching- or job-committed
teachers. 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, vocational call, as well as collegial and spiritual enterprise. 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) found that over two-thirds of teachers saw teaching in a Seventh-day Adventist school as God's choice for their lives or viewed it as a ministry. The study seemed to indicate that individuals have chosen to teach in Seventh-day Adventist schools primarily for spiritual/religious reasons. As a result it may be 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). This may suggest a potentially mediating effect of religious commitment on the relationship between job satisfaction and organizational commitment.

**Research Questions**

*Research Question 1:* What are the levels of job satisfaction for (a) all Andrews employees, (b) Andrews faculty, (c) Andrews administrators, (d) Andrews hourly staff, and (e) Andrews salaried staff?

*Research Question 2:* Is there a significant difference in: (a) overall, (b) intrinsic, and (c) extrinsic job satisfaction based on: (a) occupational area, (b) age, (c) gender, (d) length of employment, and (e) educational level for Andrews University employees?
Research Question 3: Is there a significant difference in organizational commitment based on: (a) occupational area, (b) age, (c) gender, (d) length of employment, and (e) educational level for Andrews University employees?

Research Question 4: Is there a significant relationship between overall, intrinsic, and extrinsic job satisfaction and organizational commitment for Andrews University employees?

Research Question 5: Is there a linear relationship between organizational commitment and the 15 job satisfaction factors including religious commitment for Andrews University employees?

Research Question 6: Does religious commitment have a mediating effect on the relationship between job satisfaction and organizational commitment for Andrews University employees?

Significance of the Study

Despite the fact that job satisfaction and organizational commitment have been two of the most frequently studied phenomena in the areas of industrial and organizational psychology for decades, relatively few of these studies involved faculty in higher education (Locke et al., 1983). Only a few studies have paid attention to intrinsic and extrinsic job satisfaction and organizational commitment at private, religious institutions. In addition, the investigation of a possible mediating effect of religious commitment on job satisfaction and organizational commitment was seen as a potential contribution to the field of organizational psychology.
Although some studies have investigated differences in job satisfaction and organizational commitment between different groups of professionals, this area seemed to need further exploration. In addition, researchers have also suggested further clarification regarding the importance of intrinsic and extrinsic rewards and their relationship to organizational commitment (Cohen, 1992).

This study provides valuable information about how to maintain and increase job satisfaction and organizational commitment at Andrews University. The results can be used to further improve the work climate for University employees and to further lower labor turnover. This in return is a potential help for saving time and funds that are otherwise needed for recruitment and training of new employees.

Limitations

The findings of this study are only representative for Andrews University employees. Participants with fewer years of work experience were expected to have a more limited potential to compare job settings and objectively describe their level of job satisfaction as well as organizational and religious commitment than their colleagues with more years of experience. Therefore, three reliable and easy applicable instruments for measuring job satisfaction and organizational commitment, the Professional Satisfaction Scale and the Organizational Commitment Questionnaire, were chosen. In addition, the Intrinsic Religious Motivation Scale was chosen to measure the religious commitment of the participants. The forced-choice 5-point Likert format of these instruments helped all subjects to give a focused evaluation of their levels of job satisfaction as well as
organizational and religious commitment.

Previous investigations using a forced-choice format to measure the level of job satisfaction have shown weaker support for Herzberg’s two-factor theory than studies where the critical-incident method was used. At the same time a significant number of studies using the forced-choice method have sufficiently supported Herzberg’s theory and revealed agreement with the findings of the critical-incident method. Therefore, it was reasoned that the use of an instrument with forced-choice format would have a good potential to accurately measure the participants’ levels of job satisfaction.

The phenomena of social desirability was seen as a potential source for inflated ratings of job satisfaction as well as organization and religious commitment for Andrews University employees. Therefore, a questionnaire format was chosen that supported the participant’s feeling of anonymity. In addition, participants were ensured that AU Human Resources personnel would not see their responses. For this reason completed questionnaires were mailed to a neutral address at the School of Education.

Some of the subgroups relating to occupational area, age, length of employment, and educational level had the potential to show low numbers of participants. This could have caused an insufficient amount of variance for certain subgroups resulting in insignificant results. In such a case the researcher considered the option of either omitting a particular subgroup or recoding into a new, meaningful set of groups.

**Definitions**

*Achievement:* The successful or unsuccessful completion of a job; solution or
nonsolutions of problems; and seeing the results of one's work.

*Advancement:* A change in status within the organization as a result of performance (i.e. promotion, lack of thereof, or demotion).

*Growth:* A change in the work situation such that advancement is more or less likely, and an increase or decrease in chances to learn.

*Extrinsic job satisfaction, job dissatisfaction, dissatisfiers, and hygienes:* Terms interchangeably used for factors related to the context of the job causing extrinsic work motivation, including: interpersonal relationships with peers, students, and superiors; job security; organizational policy and administration; salary; status; supervision; and working conditions.

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

*Interpersonal relations with students:* Pleasant or unpleasant interactions with students.

*Interpersonal relations with superiors:* Pleasant or unpleasant interactions with superiors that 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:* The clear likelihood or unlikelihood of continuous employment, such as tenure, permanent contracts, budgetary stability, or assurance of continued
employment.

**Organizational commitment:** The relative strength of an individual's identification with and involvement in a particular organization. It was characterized by the following 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 (Porter, Steers, Mowday, Boulian, 1974).

**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, Smith, & Stone, 1992).

**Recognition:** Attention in the form of praise; personal acknowledgment by management; reward that is directly related to task accomplishment.

**Intrinsic religious commitment:** 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, Morris, & Hood, 1989).

**Responsibility:** The presence or absence of autonomy in carrying out assignments; an increase or decrease of authority over others; or accountability for task accomplishments.
Salary: Wage and compensation factors, such as pay scales, adjustments, reimbursements.

Status: Signs, symbols, or tokens of position and prestige, such as privileges, work space size and location, work space decor, symbolic titles.

Supervision: A competence or incompetence, fairness or unfairness, and efficiency or inefficiency of superiors.

Work itself: The nature of the task to be accomplished on the job (i.e., routine or varied, interesting or dull).

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 divided into five chapters. Chapter 1 presented an introduction, including: background and rationale, purpose of the study, conceptual framework, research questions, significance of the study, and limitations. A literature review is found in chapter 2. The research methodology, including: study population, instrumentation, procedures and data collection, and research design and data analysis, are described in chapter 3. Chapter 4 presents the results of the study as they relate to the characteristics of the subjects and research questions. A summary of findings, conclusions, and recommendations are provided in chapter 5. The Questionnaire as well as the letter of approval from the Andrews University Institutional Review Board and other correspondence is found in the Appendices. Finally, the Reference List contains the
bibliographic information of the study.
CHAPTER II

REVIEW OF LITERATURE

Job Satisfaction

Definition

According to Locke et al. (1983) job satisfaction has been one of the most frequently studied constructs in organizational and industrial psychology for several decades. Locke (1969) defined job satisfaction as a pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s values. Job dissatisfaction was described as the unpleasurable emotional state resulting from the appraisal of one’s job as frustrating or blocking the attainment of one’s job values or as entailing disvalues. In summary, job satisfaction and dissatisfaction were seen as a function of the perceived relationship between what one wants from one’s job and what one perceives it is offering or entailing.

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 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 coworkers and customers, and being more cooperative (Bateman & Organ, 1983).

According to results of the 2001 Randstad North America Employment Review (Roper Starch Worldwide, 2001), about half of the surveyed American and Canadian employees (N = 2,600) were very satisfied with their current job and the company they worked for. The survey concluded that satisfied employees improve customer service and reduce employee turnover, which positively impacts a company's bottom line.

Theoretical Framework

The literature on job satisfaction reveals three theoretical frameworks regarding job satisfaction (Glisson & Durick, 1988; Hoy & Miskel, 1996; Locke, 1976; Thompson, 1993). The first framework consists of content theories of job satisfaction. Content theories attempt to explain job satisfaction in terms of needs that must be satisfied or values that must be attained (Locke, 1976). Examples are Maslow's hierarchy of needs (Maslow, 1954) and Herzberg's two-factor theory (Herzberg, Mausner, & Snyderman, 1959).

The second framework contains process or discrepancy theories of job satisfaction. Process theories attempt to explain job satisfaction in terms of how categories of variables, such as expectancies, values, and needs, relate to causes of job
satisfaction (Locke, 1976). As an outgrowth, discrepancy theories stress that job satisfaction is the difference between an individual's desired work outcomes and what an individual actually receives in the organization or an individual's work motivation and organizational incentives (Hoy & Miskel, 1996). Examples are: Porter's (1961) need satisfaction theory; March and Simon's (1958) inducements-contributions theory; and Vroom's (1964) subtractive and multiplicative models of job satisfaction.

The third framework is related to situational models of job satisfaction. These models of job satisfaction attempt to explain how categories of variables (typically task-, organizational-, and individual characteristics) relate to job satisfaction as a whole (Hoy & Miskel, 1996). Examples for these theories include: the situational occurrences theory of job satisfaction (Quarstein, McAfee, & Galssman, 1992) and Glisson and Durick's (1988) predictors of job satisfaction (Thompson & McNamara, 1997).

Maslow's and Herzberg's Theories of Job Satisfaction

Maslow's Theory and Job Satisfaction

The two most widely organized theories of job satisfaction are attributed to Maslow (1954) and Herzberg et al. (1959). Maslow's work focused on what has commonly been referred to as a "hierarchy of needs" with the major premise being that lower order needs (physiological, security, and belongingness) need to be satisfied before individuals can fulfill their higher order needs (esteem and self-actualization). This hierarchical model presumes that when a lower order need is not satisfied it preoccupies the individual and precludes attention to higher order needs. Individual behavior is
motivated by a desire to satisfy the need that is most important at a specific point or period in time. Maslow maintained that all higher order needs are seldom totally satisfied and that individuals may proceed up the hierarchy without absolute fulfillment of basic needs. On the contrary, he concluded that for most individuals lower order needs are regularly satisfied (Derlin & Schneider, 1994).

**Herzberg's Two-Factor Theory of Job Satisfaction**

Frederick Herzberg and his associates (1959) conducted extensive interviews with 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).

Herzberg distinguished between intrinsic and extrinsic factors related to job satisfaction. Intrinsic factors were believed to increase job satisfaction while extrinsic rewards caused job dissatisfaction. Extrinsic job satisfaction factors were compared with health hazards, such as impure water or polluted air. They made people leave their jobs. Such factors were also named hygienes or dissatisfiers and dealt mainly with the environment of work, including: organizational policies and administration; interpersonal relationships with supervisors, peers and students; working conditions; salary; supervision; status; and job security (Herzberg et al., 1959). For example, Herzberg did not see money as an effective motivator or 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. In agreement with Herzberg’s theory, Merit (1995) found that employees were dissatisfied with: poor company policies and administration, poor supervision, low or unfair salary, poor working conditions, inadequate benefits, and lack of security.

Intrinsic factors of job satisfaction were believed to increase an employee’s motivation to work. For this reason intrinsic factors were referred to as content or motivators including achievement, recognition, advancement, growth, responsibility, and work itself. Interesting work, for example, was identified as a major source of job satisfaction. In this context, Merit (1995) pointed out how people devote many hours of concerted effort into their hobbies such as constructing model ships, taking and developing photographs, etc.

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.

Overall, the explanatory power of Herzberg's theory has been well documented; however, it was argued that its power may be a lack of an explicit statement 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.
Criticism of Herzberg’s Theory

Despite the fact that Herzberg’s theory has received a significant amount of attention and filled an important position in the study of motivation and job satisfaction, his two-factor approach has not remained without criticism. Early criticism stressed that only two groups of professionals, accountants and engineers, were represented in the original study in 1959 (Ewen, 1964). Brandt (1992) expressed his concern that females were excluded from the study.

According to Locke (1976), the only research design that found consistent support for Herzberg's theory was the critical incident approach. Flaws of this method were seen in the allowance of defensiveness to influence the responses and in the system of classifying the critical incidents. Research using different methods has found that both motivators and hygienes could cause job satisfaction. Brayfield (1960) faulted the two-factor theory also as method bound, and Ewen (1964) suggested that more than one method should have been used to support the theory.

Dunette, Campbell, and Hakel (1967) criticized the two-factor theory as being an oversimplification of the sources of job satisfaction and dissatisfaction as well as of the relationship between satisfaction and motivation.

Furthermore, the independence between motivators and hygienes was not clear-cut for all cases. Ewen (1964) found that dissatisfiers were capable of contributing to job satisfaction, while satisfiers contributed to both job satisfaction and dissatisfaction.
Butler's (1982) results also revealed that hygienes caused job satisfaction and dissatisfaction. In addition, motivators in his study caused both job satisfaction and dissatisfaction as well. Locke et al. (1983) concluded that company policies, for example, can affect the degree of achievement and responsibility allowed in a certain job. A study by Hanson, Martin, and Tuch (1987) found that intrinsic rewards such as professional interest, job responsibility, psychological recognition, career advancement, skill utilization and development, enjoyment of work, and autonomy in decision-making were important determinants of both job satisfaction and dissatisfaction.

Other researchers (Andrew, Faubion, & Palmer, 2002; Gruneberg, 1980; Seybolt, 1976) suggested that extrinsic rewards and factors such as monetary income, fringe benefits, job security, administrative policy, company reputation, job supervision, working conditions, and relationships with peers and management play a critical role in determining job satisfaction.

Armstrong (1971) concluded that the values of intrinsic and extrinsic job satisfaction changed as a result of occupational areas. Wanous (1974) found the same results due to differences in individual variables. Herzberg's claim that the two-factor theory was not dependent on demographic variables received only partial support. According to Gaziel (1986), job satisfaction was positively related to age and formal education.

A lack of coherent, explicit statements of the theory has resulted in differing ways of researchers' interpretations of Herzberg's theory (Gruneberg, 1979). King (1970) found five different ways in which the two-factor theory was interpreted. But only three of the
five models were actually used by Herzberg (1966) to support his theory.

Support for Herzberg's Theory

Despite controversial findings and criticism of Herzberg’s approach, his two-factor theory has received an acceptable amount of support. In responding to critics of the theory, Aebi (1973) reviewed the results of 156 earlier studies designed to test the two-factor theory. While 115 studies gave full or partial support to Herzberg’s theory, only 41 rejected his approach.

Holdaway (1978) presented data on the levels of, and relationships between, overall job satisfaction and facet satisfaction. He found that intrinsic facets (achievement, career orientation, recognition, stimulation, work accomplishment) were closely related to overall job satisfaction. Furthermore, the highest percentages of dissatisfaction occurred regarding the facets of attitudes of society and parents, status of educators, decision-making, consulting and bargaining procedures, preparing time, and staff procedures.

More recent studies which supported or advocated the use of Herzberg’s two-factor theory include Helm (1984), Armstrong (1985), Silver (1987), May and Decker (1988), Lyons (1989), Hasselkus and Dickie (1990), Cryer and Elton (1990), and Bowen and Radhakrishna (1991), and Olanrewaju (2002).

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

Park (1986) found considerable applicability of the two-factor theory in both American and Korean settings. Minor (1980) concluded that one of the reasons why Herzberg's theory still appears to be appealing to many researchers seems to be its focus on job enrichment through identification of motivators.

Job Satisfaction in Educational Settings

Herzberg's theory was also examined within academic settings. In agreement with previously stated findings, the two-factor theory received both support and criticism in the field of education.

Abreu (1980) found a significant relationship between Herzberg's intrinsic factors and the reaction of the faculty members of three doctoral-granting universities to items 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. These factors included: salary, job security, possibility of growth, institutional policy, working conditions, interpersonal relations, status, technical supervision, and personal life.

The findings of Olasiji's study (1983) of administrators and academic staff in a Nigerian university indicated that five out of six motivators were strong determinants of job satisfaction among both faculty and administration. Additionally, hygiene factors were found to be the major source of job dissatisfaction feelings among the two groups.
Diener (1985) tested the dual factor theory, and found that faculty received job satisfaction from student and personal growth, flexibility, autonomy, and intellectual challenge. Dissatisfaction sprang from working conditions, poor facilities and equipment, inflexible or heavy teaching schedules, low salaries, high amounts of bureaucracy, and student and faculty apathy. Lack of professional recognition was considered as a dissatisfier.

Gaziel (1986) investigated the generality of the two-factor theory for elementary school teachers in Israel. The results of both open-ended and closed-ended questionnaires supported Herzberg's two-factor theory. Factors related to job satisfaction included achievement, recognition, advancement, and responsibility. Factors causing job dissatisfaction included salary and reward system, policies and administration, supervision, and working conditions. An exception to Herzberg's profile was found in the fact that teachers identified their interpersonal relations with colleagues as satisfiers rather than dissatisfiers. Gaziel's results only partially supported Herzberg's claim (Herzberg et al., 1959) that the two-factor theory is not dependent on demographic variables. Age and formal education were found to be positively related to job satisfaction.

Hill (1987) gathered data 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, similar to Diener's results, the recognition dimension. Faculty seemed to obtain 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.

Nussel, Rusche, and Wiersma (1988) studied a sample of 426 college educators from public and private institutions. Again a Likert-type scale was developed using Herzberg's theory to test the satisfaction/dissatisfaction dichotomy for this population. The results 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. Scores associated with job dissatisfaction were tied to working conditions, salary, and administration. In agreement with previous findings (Friesen, Holdaway, & Rice, 1983; Gaziel, 1986), teachers saw their relationship with peers or colleagues as a satisfier rather than a dissatisfier.

Dawn and Westbrook (1997) found that accomplishment was the most frequently mentioned motivator for each company as well as for the total group of respondents studied. Two factors mentioned that most described dissatisfying experiences were management style and company policy.

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 can improve teaching and help retain teachers.
In contrary, Ashton (1989) found in his study of middle-school principals that pay was a significant predictor of job satisfaction. Andrew et al. (2002) concluded that counselor job satisfaction was significantly related to six extrinsic job factors. 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 areas 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 contrary, poor pay, poor promotion methods, lack of recognition, and no chance for advancement were found to contribute most to job dissatisfaction (Karugu, 1980).

Studies of university faculty have shown a decline in overall job satisfaction after the 1950s and 1960s. 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; 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; Renner & Jester, 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 investigators 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, Yorbrough, & 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.

Job Satisfaction and Demographic Variables

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 support has been found 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), 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.

Age

Dewar and Werbel (1979) and Dennis (1998) reported that job satisfaction increases with age. 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 50's 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).
More recent studies indicated an U-shaped curve in age on 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 existed for both men and women separately, and that the minimal level of satisfaction was similar across the sexes.

Contrary to these findings, Muchinsky (1978) found older employees to be less satisfied than their younger counterparts. Iiacqua 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.

Gender

Studies regarding the relationship between job satisfaction and gender have shown inconsistent results. While Haynes (1983) and Arthur (1987) found that males were more satisfied with their jobs than females, 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, McNeece, 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 a teachers than their male colleagues.

There is conflicting evidence regarding the role of intrinsic vs. extrinsic factors in job satisfaction and gender. While Blank (1993) 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.

**Length of Employment**

Evidence has been shown that job satisfaction is at its peak when a person begins a new job. Following this period there is a steady decline which is apparent when employees are in their 20s and 30s. Afterwards there is a gradual rise in job satisfaction up to pre-retirement around age 60.

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. These findings have suggested a honeymoon stage.

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for beginners, followed by frustration, and finally rising satisfaction.

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 and job satisfaction for university employees. On the contrary, a study by Ma and MacMillan (1999) revealed that teachers who stayed in the profession longer were less satisfied with their work.

Educational Level

Iiacqua and Schumacher (1995) concluded in their study that there was no significant relationship between job satisfaction and level of education. A similar result was revealed by Blank (1993) who found no differences in job satisfaction when educational level was considered.

On the contrary, Niehoff's study (1995) revealed a significant correlation between education and overall job satisfaction. In addition, 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 BA and a MA degree.

Job Satisfaction in Private and Public Sector

The literature on motivational differences and satisfaction between public and private sector employees is mixed. While multiple research has suggested that private sector employees are more satisfied than public sector employees (Blunt & Spring, 1991; Cacioppe, Perry, & Porter, 1982; Solomon, 1986), Blunt and Spring (1991) reported no
significant difference between private and public employees' degree of overall job satisfaction.

Since the 1990s, similarities between public and private sector employees' levels of satisfaction have been reported equally abundant. A 1991 survey of 177 public sector and 173 private sector employees, using Herzberg et al.'s (1959) motivational schema, found no significant difference between the two sectors in terms of what motivated employees and the level of overall job satisfaction (Maidani, 1991). Maidani even concluded that public sector employees valued hygiene factors significantly more than private sector employees. Similarly, an investigation by Bogg and Cooper (1995) in the United Kingdom revealed that levels of job dissatisfaction were significantly higher among public employees. Public sector employees were traditionally painted as being motivated by job security, stability, and service to society while eschewing monetary rewards, prestige, and the desire for challenge and autonomy. In contrast, private sector employees were portrayed as motivated by status, opportunity to advance, autonomy, and high pay while being unconcerned about contributions to society and job security (Baldwin, 1987; Clark & Wilson, 1961; Hartmann & Weber, 1980). Rainey (1982) noted a pattern of increasing similarity between the public and private sector employees in his 1982 study. Despite the mentioned indicators for increasing similarities between private and public sector employees, it seemed to be true that private sector employees placed a greater value on economic rewards than their counterparts in the public sector (Cacioppe et al., 1982; Rawls, Ulrich, & Nelson, 1976; Schuster, Colletti, & Knowles, 1973). Khojasteh (1993) confirmed in 1993 that pay and job security were of greater importance.
for private sector managers than for public managers. Two more recent studies by Jurkiewicz, Massey, and Tom (1998) and Karl and Sutton (1998) have suggested that public sector employees ranked a stable future first while private sector employees still saw a high salary to be most desirable.

Job Satisfaction and Other Factors

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

A direct relationship was also posited between performance and job satisfaction. 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 (Iaffaldano & Muchinsky, 1985; Michaels, Day, & Joachimsthaler, 1987). Babin and Boles (1996) also showed support for a significant positive relationship between job satisfaction and performance.

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. These 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 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. 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 this 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’s and Tymon’s (1994) results showed that impact was strongly related to enhanced work satisfaction and reduced stress.

**Organizational Commitment**

**Definition**

Organizational commitment was explained by March and Simon (1958) as an exchange relationship—each party making certain demands upon the other while providing something in return. Contributions on the part of employees were described as taking two general forms, production and participation. It was argued that the more effective the organization is in providing opportunities for employees to meet their multiple needs, the higher would be the propensity for the employee to participate and be
Etzioni (1961) distinguished among three forms of responses for organizational directiveness for participation: moral, calculative, and alienative involvement. Moral involvement reflected an identification with and internalization of an organization's values and goals. Calculative involvement meant a positive orientation to the source of authority, but was less intense because it was based on a rational exchange of benefits and rewards between the parties. Alienative involvement was a negative orientation to authority, found in relationships characterized by exploitation.

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.

Mowday, Porter, and Steers (1982) attempted to reconcile the differing concepts by distinguishing attitudinal and behavioral forms of commitment. Attitudinal commitment was described as focusing on the process by which people think about their relationship with an organization. Behavioral commitment related to the process by which the individual becomes locked into an organization and the means through which they deal with the situation. Mowday suggested that the mentioned two forms of organizational commitment were closely related and represent different points along the same continuum.

More recently a three-component model of organizational commitment was
described as follows (Meyer & Allen, 1987): (a) affective commitment, an employee's psychological attachment to an organization expressed through feelings such as loyalty, affection, warmth, and belongingness; (b) continuance commitment, an employee's retention with an organization because of high personal costs associated with leaving; and (c) normative commitment, an employee's obligation to stay because of internalization of the organization's goals, values, and mission.

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 literatures (Mueller & Wallace, 1992). Positive and rewarding features of work were expected to increase loyalty, which in turn will 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 affectively 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).

Varona (1996) described three distinct approaches to defining organizational commitment: 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). Finally, the attributions approach (Reichers, 1985) defined commitment as a binding of the individual to behavioral acts which occurs when individuals attribute an attitude of commitment to themselves after engaging in behaviors that are volitional, explicit, and irrevocable.

According to the results of a survey of 1,800 workers called America at Work, which was conducted by Aon Consulting (1998), organizational commitment was defined 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.

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Organizational Commitment and Demographic Variables

Occupational Area

Only a few studies were found investigating the relationship between organizational commitment and occupational area. Cohen (1994) revealed evidence for a moderator effect related to the type of occupation in the organizational commitment-income relationship. However, Niehoff (1995) did not find significant differences in the levels of organizational commitment between faculty, administrators, professionals, and staff.

Age

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 (Hrebiniax, 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 a tenure of 15 and more years was very rare.

Gender

Various studies have suggested the existence of a gender difference regarding the construct of organizational commitment. 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 Grsukey (1966). Females also showed higher levels of organizational commitment in studies by Hrebinjak and Alluto (1972), Mathieus and Zajac (1990), as well as Lincoln and Kalleberg (1990). No significant gender differences in organizational commitment were found in studies by Stevens et al. (1978), as well as Aryee and Heng (1990).

**Length of Employment**

There seems to be general agreement among researchers regarding the existence of a positive relationship between length of employment and organizational commitment (Fukami & Larson, 1984; Morris & Sherman, 1981; Salancik, 1977; Sheldon, 1971; Stevens et al., 1978; Welsch & LaVan, 1981).

Blackhurst, Brandt, and Kalinowski (1998) reported a significant interaction effect between position title, years in current position, and highest degree earned on organizational commitment. Women in student affairs positions showed the highest level of 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**

Steers (1977) concluded in his study that it may 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 positions.

Organizational Commitment and Other Variables

Organizational commitment has been researched extensively over the past two decades (Varona, 1996). Studies have demonstrated the relationship between commitment and other organizational variables, including: absenteeism (Larson & Fukami, 1984; Steers, 1977); leadership style (Morris & Sherman, 1981); job performance (Mowday et al., 1974; Steers, 1977); turnover (Angle & Perry, 1981); participation in decision making (Hall, 1977); amount of feedback received on the job; communication satisfaction (Downs et al., 1995; Varona, 1996); and socialization strategies of new employees (Buchanan, 1974).

In addition, role-related variables were found to correlate with organizational commitment. Buchanan (1974) revealed that job scope and challenge were positively related to commitment. Salancik (1977) concluded that everything that reduced an employee's feelings of responsibility would automatically reduce his or her level of commitment. An inverse relationship between role stress and organizational commitment was also noted by Morris and Sherman (1981), as well as Fukami and Larson (1984).
Morris and Steers (1980) found structural variables, such as formalization of rules, functional interdependence of employees, and centralization of authority, to be positively correlated with organizational commitment. Buchanan (1974) and Steers (1977) investigated the relationship between work experience variables and organizational commitment. It was found that individuals’ perceptions of the organization’s dependability, personal feelings of importance in the organization, belief that the organization had met their expectations, and coworkers' positive attitudes to be positively related to commitment. Other factors included the employees’ social involvement within the organization (Fukami & Larson, 1984; Sheldon, 1971), and the initiation of structure and leader consideration on the part of the organizational supervisors (Morris & Sherman, 1981).

An Aon Consulting survey (1998) of 1,800 workers released in mid-June 1998 found that the workplace factor with the greatest correlation to employee commitment to the company was management recognition of the importance of personal and family life (.53). The next most important factors affecting commitment were: the direction in which the organization is heading (.45), opportunities for personal growth (.45), the satisfaction an employee derives from the work (.43), and the extent to which the organization encourages employees to challenge the way that things are done (.45). Aon categorized the 17 drivers of work commitment into five areas: work/life balance; benefits and compensation; organizational culture, leadership, and direction; management of change; and employee selection, training, and development. The survey also found a strong relationship between job stress and job commitment. Job stress caused 53% of the
respondents to feel burned out and demonstrate less commitment to their employers. Only 39% of the respondents reported these symptoms in a previous Aon survey in 1995. It was reasoned that the additional stress may have been the result of increased time spent at work. While only 13% of the respondents admitted to working more than 50 hours weekly in 1995, 23% of the workers in 1998 reported working more than 50 hours a week. The two most important factors reported for attracting and keeping employees were salary (62%) and employee benefits (57%), followed by job location (50%), and job security (47%). In addition, it was noted that the average employee missed 10% more days of work in 1998 than in 1995.

Organizational Commitment and Overall Job Satisfaction

The relationship between job satisfaction and organizational commitment has received considerable attention. Mowday et al. (1974) concluded that job satisfaction and organizational commitment were related, but separate, employee experiences. He proposed that the affective response to the job (job satisfaction level) was more quickly and easily made than the commitment relationship.

Some studies have viewed organizational commitment as a predictor of job satisfaction (Aranya & Ferris, 1984; Aranya et al., 1982; Bateman & Strasser, 1984; Lachman & Aranya, 1986; McGregor et al., 1989). Other studies have shown satisfaction as a predictor of commitment (Aranya & Valency, 1986; Ferris, 1983; Meixner & Bline, 1989; Williams & Hazer, 1986). 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.

Harrell (1990) proposed and found support for a reciprocal relationship between commitment and satisfaction. Hearn (1990) also suggested that both constructs were related, as both respond to job and organizational characteristics.

Curry, Wakefield, Price, and Mueller (1986) found no basis for viewing job satisfaction as a predictor of organizational commitment, nor commitment causing satisfaction. This longitudinal study revealed that all variation levels in commitment and satisfaction were explained by variables outside of this relationship.

Various studies investigated different facets of job satisfaction as predictors, including: work, co-workers, supervision, pay, and promotion satisfaction. Correlations between job satisfaction and organizational commitment were found in the range of .50 (Brooke et al., 1988; Hall & Schneider, 1972; Meyer & Allen, 1987; Mowday et al., 1979). More recent research suggested that job characteristics were the best predictors of job satisfaction, while organizational commitment was best predicted by organizational factors (Curry et al., 1986; Hearn, 1990; Tarter, 1993).

Organizational Commitment and Intrinsic and Extrinsic Job Satisfaction

Only limited research has been conducted that investigated the importance of intrinsic and extrinsic rewards and their relationship to organizational commitment (Cohen, 1992). Support has been found for a relationship between commitment and both intrinsic and extrinsic rewards (Caldwell, 1980; Flynn & Solomon, 1985; Loscocco, 1990; Young, 1998). Investigators have attempted to determine the relative importance
of intrinsic and extrinsic rewards for predicting commitment. The majority of findings suggested that organizational commitment was more strongly associated with intrinsic rewards than with extrinsic rewards (Brief & Aldag, 1980; O'Reilly & Caldwell, 1980).

In contrast, other findings concerning blue-collar employees suggested that extrinsic rewards were more important than intrinsic rewards in predicting commitment (Angle & Perry, 1983; Loscocco, 1990). Curry et al. (1986) concluded that job characteristics were the best predictors for job satisfaction, and organizational factors the best predictors for organizational commitment. In addition, the question was also raised if job satisfaction was more intrinsic and organizational commitment more extrinsic in nature.

**Religious Commitment**

**Definition**

Religious commitment has been defined in various ways, and its multidimensional nature has been recognized throughout the last two decades (Benner, 1991; King, 1967; Spilka, Kojetin, & McIntosh, 1985). However, there was no general agreement regarding how to define and measure the various dimensions of religious commitment (Gartner, Larson, & Allen, 1991; Gorsuch, 1990).

Glock (1962) concluded that there was a considerable consensus in the more general areas of religiosity. He identified the following five dimensions: experiential (expectation of direct knowledge or emotion), ritualistic (religious practice), ideological (religious beliefs), intellectual (being informed about religion), and consequential
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, Morris, & Hood, 1989).

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

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 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).
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. 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 being measured, analyzed, and compared.

Finally, 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 religious behavior. The study of religiosity in real-life situations was also suggested by Bolvin, Donkin, and Darling (1990).

Allport's Intrinsic/Extrinsic Framework

Despite the fact that 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). According to Hood (1985), 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 religious 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 a supreme value, and 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 contrary, extrinsically motivated people were seen as more discriminatory and prejudiced (Feagin, 1964; McFarland, 1989).

Religious Commitment, Job Satisfaction, and Organizational Commitment

Relatively few studies have investigated the relationship between religious commitment, job satisfaction, and organizational 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. Organizationally committed teachers were found as perceiving their relationships with colleagues more positively, evidencing higher levels of mission-related efficacy, and deriving more satisfaction from their work than either teaching- or job-committed teachers.

Zimmer (1994) concluded that teachers who had a spiritual calling had a significantly higher internal locus of control, were less likely to depersonalize students, and had greater accomplishments than those not having a spiritual calling. A spiritual calling was also found to have a significant relationship to some very meaningful, attractive qualities in a teacher's personal attitude toward teaching and career.
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.

Rice (1990) found that over two-thirds of teachers saw teaching in a Seventh-day Adventist school as God's choice for their lives or viewed it as a ministry. The study seemed to indicate that individuals have chosen to teach in Seventh-day Adventist schools primarily for spiritual/religious reasons.

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

Quinn (1989) indicated in his study of 884 church members of three different Christian churches that religiousness was a significant predictor of psychological well-being. This relationship was maintained even when controlling for eight major demographic variables, and four personal and trait variables. Religious organizational involvement and internal religiousness were most closely related to positive psychological well-being, while extrinsic religiousness and low religious organizational involvement were most closely related to negative affect. 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.
Summary

An extensive review of literature revealed a significant amount of support for Frederick Herzberg’s two-factor theory and its 15 factors of job satisfaction (Bowen & Radhakrishna, 1991; Cryer & Elton, 1990; Friesen et al., 1983; Gaziel, 1986; Hasselkus & Dickie, 1990; Herzberg, Mausner, Peterson, & Capwell, 1987; Hill, 1987; McCarthy, 1997; Nussel, 1988; Olanrewaju, 2002; Rasmussen, 1990). Herzberg et al. (1959) distinguished between intrinsic and extrinsic facets of job satisfaction. Intrinsic factors of job satisfaction included achievement, recognition, advancement, growth, responsibility, and work itself, while extrinsic facets were: organizational policies and administration, interpersonal relationships with supervisors, peers and students; working conditions; salary; supervision; status; and job security. Evidence was shown that open-ended as well as closed-ended questionnaires supported Herzberg’s dual-factor theory (Gaziel, 1986; Hill, 1987; Nussel et al., 1988).

The most relevant definition of organizational commitment was found by Mowday et al. (1979) and Mowday et al. (1982). 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. Mowday et al. (1974) concluded that job satisfaction and organizational commitment were related, but separate, employee experiences. He proposed job
satisfaction as a more affective response, and organizational commitment as a more relational response. Although different studies have proposed different causal orderings between job satisfaction and organizational commitment (Bateman & Strasser, 1984; Harrell et al., 1986; Lachman & Aranya, 1986; McGregor et al., 1989; Meixner & Bline, 1989; Williams & Hazer, 1986), they have all found a significant, positive relationship between the variables. While some findings suggested that organizational commitment was more strongly associated with intrinsic rewards (Brief & Aldag, 1980; O'Reilly & Caldwell, 1980), other findings suggested that extrinsic rewards were more important than intrinsic rewards in predicting commitment (Angle & Perry, 1983; Loscocco, 1990). It was further established that demographic variables, such as occupational area, age, gender, length of employment, and educational level, have shown inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1981; Blank, 1993; Iiacqua & Schumacher, 1995; Morris & Sherman, 1981; 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). According to Allport (1966), the intrinsic/extrinsic concept helps to distinguish churchgoers whose type of membership supports and serves nonreligious and other ends from those for whom religion is an end in itself. Extrinsic religious motivated people were pictured as using religion, while their intrinsically motivated 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) concluded that teachers were generally satisfied with their jobs, and chose to work for the SDA church because of their commitment to the church.

The researcher is aware that most of the, for this topic, relevant, literature was found in the 1980s and 1990s. Despite existing efforts, relatively few studies were available after the turn of the century which considered the significant changes in the job market after September 11, 2001.
CHAPTER III

RESEARCH METHODOLOGY

This chapter provides a comprehensive description of the research methodology used for the study. The research design is outlined. Further, the sample and population of the study are described. The three instruments and demographic questions used in the study are explained, along with validity and reliability information detailed for each instrument. Finally, procedures related to conducting the study are detailed including data collection and data analysis.

Research Design

A quantitative descriptive research design was chosen for this investigation. A survey questionnaire was mailed out to all Andrews University employees which measured levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment. The survey package examined five demographic questions (occupational area, age, gender, educational level, and lengths of employment), 15 items of the Professional Satisfaction Scale, 15 items of the Organizational Commitment Questionnaire, and 10 items of the Intrinsic Religious Motivation Scale.

The purpose of this study was to identify important factors related to job
satisfaction and dissatisfaction for Andrews University employees. It examined significant differences between the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment as they related to demographic variables such as: occupational area, age, gender, length of employment, and educational level. Further, the investigation studied the correlations between overall, intrinsic, and extrinsic job satisfaction and organizational commitment. The possibility of a linear relationship between organizational commitment and the 15 job satisfaction factors including religious commitment was explored. Finally, it was examined if religious commitment had a potentially mediating effect on the relationship between job satisfaction and organizational commitment.

**Population and Sample**

The population for this study were all full-time and half-time employees at Andrews University. Student workers were not included in the investigation. According to information provided by the Department of Human Resources, Andrews University employed 976 employees at the time of the study. Due to the relatively low number of AU employees, all employees were included in the study. For this reason no sampling procedure was necessary. Thirty-two of the 835 employees were administrators, 384 were faculty, 280 were hourly staff, and 123 were salaried staff. The group of 32 administrators contained the President, Vice Presidents, the Deans and Vice Deans of the university, and other administrative personnel. In addition to the 32 administrators, there were several faculty members who were involved in administrative work, and were also counted as
administrators. The group of 384 faculty members included faculty working 11-12 months a year, faculty working 9-10 months a year, contract faculty, and part-time faculty. The group of 280 hourly staff employees included all employees who were working on an hourly basis. The 123 salaried staff were all Andrews employees who were working on a salaried basis, including: managers, supervisors, accountants, and treasurers.

**Instrumentation**

**Job Satisfaction Measure**

**Professional Satisfaction Scale**

The Professional Satisfaction Scale (PSS) was developed by William Blank (1993) to obtain participants’ perceptions of specific factors leading 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 included: achievement, recognition, work itself, responsibility, advancement, and growth. The nine items relating to job dissatisfaction were 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 a 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 the purpose of this study the researcher 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). These adjustments were applied in order to obtain a clearer overall job satisfaction score, and to provide the participants with the choice of a neutral response. Additionally, the 5-point Likert-scale provided the respondents with a familiar response format in order to make the participation more attractive and increase the response rate. Detailed coding procedures, described in the following sections, were chosen to allow for the separate measurement of intrinsic and extrinsic job satisfaction.

Reliability and Validity

A reliability test was conducted for the instrument using data from a pilot study along with data from the full study (Blank, 1993). The pilot study of 30 student affairs professionals from two different colleges produced a reliability coefficient alpha of .90. A later study of 115 employees from three different universities found an alpha of .83. These correlations indicated a high degree of internal consistency for the measured samples.

The PSS items (Blank, 1993) were identical to the 15 motivator-hygiene factors
used in Herzberg's original study of job satisfaction (Herzberg, 1959). Since then many studies have confirmed the validity of these factors in measuring job satisfaction (Bowen & Radhakrishna, 1991; Cryer & Elton, 1990; Friesen et al., 1983; Gaziel, 1986; Hasselkus & Dickie, 1990; Herzberg et al., 1987; Hill, 1987, McCarthy, 1997; Nussel et al., 1988; Olanrewaju, 2002; Rasmussen, 1990). Based on 155 studies on factors related to job satisfaction published between 1920 and 1954, Herzberg et al. (1987) identified work itself, supervision, working conditions, salary, advancement, security, organizational policy and administration, and relations with co-workers among the 10 most established factors related to job satisfaction. Gaziel (1986) found that open-ended as well as closed-ended questionnaires supported Herzberg's dual-factor theory. Factors related to job satisfaction included achievement, recognition, advancement, and responsibility, while factors related to job dissatisfaction included salary, policies and administration, supervision, and working conditions. Rasmussen (1990) concluded in his investigation that motivators, such as achievement, recognition, work itself, advancement, and responsibility, were greater indicators of job satisfaction, while hygiene factors such as working conditions, interpersonal relations, company policy and administration, supervision, salary, status, and job security, were strongly related to job dissatisfaction. Similar findings were also reported in other studies (Friesen et al, 1983; Hill, 1987; Nussel et al., 1988, Olanrewaju, 2002) supporting the validity of Herzberg's theory as well as its 15 job factors in measuring job satisfaction. Therefore, this instrument was evaluated as having a high degree of content validity. Consequently, it was found that a noticeable number of instruments, developed for the assessment of job satisfaction, have
included Herzberg's factors in their instruments (Nussel et al., 1988; Thongchant, 1987, Wolfson, 1986).

Organizational Commitment

Organizational Commitment Questionnaire

Mowday et al. (1979) and Mowday et al. (1982) defined organizational commitment as 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. 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. The OCQ was a 15-item survey which included the nine-items found in the short form of the survey and six reverse items. The 7-point Likert scale allowed for choices ranging from 1 (strongly disagree) to 7 (strongly agree). The six reversed items needed to be scored with 1 (strongly agree) to 7 (strongly disagree).

For the current study a 5-point Likert scale was chosen to match the format of the Professional Satisfaction Scale and the Intrinsic Religious Motivation Scale. In addition, a 5-point scale was seen as more convenient for a good response rate. The 5-point Likert-scale allowed for choices ranging from 1 (strongly disagree) to 5 (strongly agree). Median choices include: 2 (disagree), 3 (neutral), and 4 (agree).
Reliability and Validity

The instrument was administered to 2,563 employees working in a wide variety of jobs in the private and public sectors. This sample was judged to be broad enough to tap a reasonably representative sample of the working population. Of the participants, 243 were classified as university employees (Mowday et al., 1979).

For the nine groups studied by Mowday et al. (1979), the mean ranged from 4.0 to 6.1. Mean scores were typically slightly above the midpoint on the 7-point Likert scale. The standard deviation, ranging from .64 to 1.30, indicated an acceptable distribution of responses within the sample.

Reliability was demonstrated using Cronbach’s Alphas ranging from .82 to .93, with a median of .90. According to Smith, Kendall, and Hullin (1969), these results compared favorably with most attitude measures. Item analysis also indicated that each item had a positive correlation with the total score for the OCQ, with average correlations ranging from .36 to .72, with a median of .64. These results suggested that the 15 items of the OCQ were relatively homogeneous with the underlying attitude construct being measured.

Test-retest reliability coefficients for two independent samples (psychiatric technicians and management trainees) resulted in correlations of .53, .63, and .75 corresponding to 2-month, 3-month, and 4-month periods of time (Price & Mueller, 1986). These data also compared favorably to other attitude measures (e.g., job satisfaction).

Convergent validity was .70 using the Sources of Organizational Attachment
(SOA) scale, a 12-item measure of an individual’s desire to remain with or leave an organization. Correlations with a single “intent to leave” measure ranged from -.31 to -.63 (Price & Mueller, 1986). Discriminant validity was assessed by examining the relationship 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.

Religious Commitment

Intrinsic Religious Motivation Scale

Hoge’s (1972) Intrinsic Religious Motivation Scale (IRMS) was an adaptation of Allport and Ross’s (1967) Intrinsic/Extrinsic Motivation Scale in an attempt towards greater specificity in conceptualization and measurement. The IRMS has been described as the most psychometrically sound measure of intrinsic/extrinsic religious commitment along with Feagin’s (1964) Extrinsic Scale (Anderson, 1995). Moreover, the IRMS has been validated by two studies that used individuals nominated by ministers as having either ultimate (intrinsic) or instrumental (extrinsic) religious motivations.

The 5-point Likert-format of the IRMs allows for responses ranging from 1 (strongly disagree) to 5 (strongly agree) with median choices 2 (disagree), 3 (neutral), and 4 (agree). Three of the 10 items deal with extrinsic religious motivation. These 3 items needed to be mixed among the other 7 intrinsic items, and reversed before scoring the
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 ministers' judgments at .585. As predicted the scale also correlated with ministers' judgments beyond the .03 significance level whenever tested and beyond the .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.

According to the KR formula, the scale's reliability was acceptable with a value of .901 item-to-item correlations ranged from .132 (items 12 by 23) to .716 (items 5 by 1). Of the 45 item-to-item correlations, 22 were stronger than .5.

The persons judged by the minister to be intrinsic had a mean scale score of 1.51 and SD of .44, while those judged to be extrinsic had a mean of 2.42 and SD of .79 at the .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 alpha was reported at .902 and predictive validity was .582.

The new scale of the IRMS correlated well with the Feagin Intrinsic Scale and the Allport-Ross Intrinsic Subscale, partly due to items common to both. Hoge (1972) concluded that no earlier scale approached the IRMS in predicting the ministers'
judgment, though the Feagin and Allport-Ross intrinsic subscales were stronger than their extrinsic subscales.

Demographic Data

The following demographic variables have been commonly used in previous studies of job satisfaction and organizational commitment and appeared to the researcher as relevant for the subjects of this study: occupational area, age, gender, length of employment, and educational level. By studying differences among demographic variables this study addressed one of the mentioned criticisms of Herzberg's two-factor theory. Although Herzberg postulated that his theory was not dependent on demographic variables, critics pointed out that motivation-hygiene values differed as a result of occupational area and individual differences in different studies (Armstrong, 1971; Wanous, 1974). These differences included age, gender, length of employment, and educational level variables.

Procedures and Data Collection

Before the initiation of the study, necessary permission was requested from the Director of Human Resources and the Institutional Review Board to conduct the study using Andrews University employees. After the names and addresses of all study participants were obtained from the Department of Human Resources, a package was mailed out to all 835 employees of Andrews University. The package included: (a) a cover letter explaining the purpose of the research, assuring confidentiality of participants' information, and expressing appreciation for participants' time and effort;
(b) the Andrews Employee Survey including the items of the Professional Satisfaction Scale, the Organizational Commitment Questionnaire, the Intrinsic Religious Motivation Scale, and five demographic questions; and (c) an addressed and stamped return envelope for inter-campus/regular mail bearing the address of Andrews University Center for Statistical Analysis. The Center for Statistical Analysis was chosen as the return address to guarantee the anonymity and confidentiality of the participants' information and ensure a better response rate. When completed forms were returned to the Center for Statistical Analysis, the number code on the questionnaire was deleted to prevent re-mailing to participants who had already responded.

The initial questionnaire package was sent out to the participants of the study on April 15, 1999. The cover letter indicated that questionnaires should be returned by April 30, 1999. It was also mentioned that reminders would be sent out to non-respondents after May 1 to encourage subjects' participation.

In order to avoid reminding participants who already had sent in their responses, a code was applied to each questionnaire corresponding to the mailing addresses of each participant. The first follow-up mailing was sent to non-respondents on May 12, 1999. This reminder included the original questionnaires and a gentle request to respond within the next 2 weeks. Because the response rate barely reached 50%, a second follow-up mailing was repeated on May 23, 1999, with a similar content as the previous reminder. After the second mailing 540 surveys were completed and returned. Twenty-five out of the 835 originally sent surveys were returned because of wrong addresses or employees who had terminated their employment at Andrews University. Therefore, these 25 were
subtracted from the 835. As a result 540 returned surveys out of 810 mailed packages resulted in a response rate of 67%.

Data Analysis

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 obtaining the mean. Intrinsic job satisfaction scores were obtained in a similar way by adding the six job satisfaction factors according to Herzberg’s two-factor theory (achievement, advancement, recognition, growth, responsibility, and work itself), and calculating the mean. Likewise, scores for extrinsic job satisfaction were calculated by the sum of the 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 conditions), and then computing the mean.

The OCQ scores were coded similarly 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 as 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 7 (strongly disagree).

The demographic variable, occupational area, was subdivided into four groups with 1 (faculty), 2 (staff), 3 (administrators), and 4 (professionals). Age received the following four number codes: 1 (20-30 years), 2 (31-40 years), 3 (41-50 years), and 4 (51 years and older). Gender was divided into 1 (males) and 2 (females). Length of employment at the University was subdivided into six categories: 1 (1-4 years), 2 (5-10 years), 3 (11-20 years), 4 (21-30 years), 5 (31-40 years), and 6 (41 years and more). Educational level was coded into four categories: 1 (high-school diploma), 2 (BA, professional, or associate degree), 3 (master’s degree), and 4 (doctoral degree).

This study used descriptive statistics, analysis of variance, correlational analysis, and factor analysis for data analysis. Research question 1 was analyzed by using descriptive statistics. Numbers, mean scores, and standard deviations were listed for all AU employees, faculty, administrators, hourly staff, and salaried 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, advancement, recognition, etc.).

Research questions 2 and 3 were analyzed by using one-way analysis of variance using SPSS statistics. A 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, and (d) organizational commitment as they related to participants’ demographic characteristics, such as occupational area, gender, educational level, age, and length of employment. A Student Newman Keuls’s 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.

Correlational analysis was used for research question 4. Correlational analysis was used to determine the relationships between overall job satisfaction, intrinsic job satisfaction, extrinsic job satisfaction, and organizational commitment.

Finally, regression analysis was applied for research questions 5 and 6. Linear regression analysis using the stepwise method was used to determine the amount of variance in organizational commitment that was explained by the 15 job satisfaction factors and religious commitment. The direct method was then used to compare the relationships between overall job satisfaction and organizational commitment before and after the effects of religious commitment were removed.
CHAPTER IV

RESULTS

The purpose of this study was to identify the most important factors related to job satisfaction and dissatisfaction for Andrews University employees. The study examined whether significant differences existed between the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment as they related to such demographic variables as occupational area, age, gender, length of employment, and educational level.

Further, the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational commitment was studied. A linear relationship between organizational, commitment and the 15 job-satisfaction factors, including religious commitment was established. Finally, the extent to which religious commitment had a mediating effect on the relationship between job satisfaction and organizational commitment was clarified.

Characteristics of the Subjects

Table 1 shows that 234 (46.1%) of the respondents were males, and 247 (53.9%) were females. Seventy-one (13.9%) subjects were between the ages of 20 and 30, 85 (16.6%) between ages 31 and 40, 160 (31.3%) between 41 and 50 years old, and the
Table 1

**Characteristics of the Subjects**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
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<tr>
<td>Male</td>
<td>234</td>
<td>46.1</td>
</tr>
<tr>
<td>Female</td>
<td>274</td>
<td>53.9</td>
</tr>
<tr>
<td>Total</td>
<td>508</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<td></td>
</tr>
<tr>
<td>20-30 years old</td>
<td>71</td>
<td>13.9</td>
</tr>
<tr>
<td>31-40 years old</td>
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<td>16.6</td>
</tr>
<tr>
<td>41-50 years old</td>
<td>160</td>
<td>31.3</td>
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<tr>
<td>51 years and more</td>
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<td>38.2</td>
</tr>
<tr>
<td>Total</td>
<td>511</td>
<td>100.0</td>
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<td><strong>Educational level</strong></td>
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<tr>
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</tr>
<tr>
<td>BA, professional or associate degree</td>
<td>146</td>
<td>30.4</td>
</tr>
<tr>
<td>Masters degree</td>
<td>153</td>
<td>31.8</td>
</tr>
<tr>
<td>Doctoral degree</td>
<td>135</td>
<td>28.1</td>
</tr>
<tr>
<td>Total</td>
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<td>100.0</td>
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<tr>
<td><strong>Occupational area</strong></td>
<td></td>
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</tr>
<tr>
<td>Faculty</td>
<td>208</td>
<td>39.5</td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>8.9</td>
</tr>
<tr>
<td>Hourly staff</td>
<td>198</td>
<td>37.6</td>
</tr>
<tr>
<td>Salaried staff</td>
<td>73</td>
<td>13.5</td>
</tr>
<tr>
<td>Total</td>
<td>527</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Years working at Andrews University</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-4 years at AU</td>
<td>207</td>
<td>40.8</td>
</tr>
<tr>
<td>5-11 years at AU</td>
<td>121</td>
<td>23.9</td>
</tr>
<tr>
<td>11-20 years at AU</td>
<td>113</td>
<td>22.3</td>
</tr>
<tr>
<td>21 years and more at AU</td>
<td>66</td>
<td>13.0</td>
</tr>
<tr>
<td>Total</td>
<td>507</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Work type</strong></td>
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<td></td>
</tr>
<tr>
<td>Full-time work</td>
<td>420</td>
<td>89.4</td>
</tr>
<tr>
<td>Half-time work</td>
<td>50</td>
<td>10.6</td>
</tr>
<tr>
<td>Total</td>
<td>470</td>
<td>100.0</td>
</tr>
</tbody>
</table>
largest number of subjects, 195 (38.2%), were 51 years of age and older. Forty-seven (9.8%) of the respondents reported having only a high-school diploma, 146 (30.4%) had either a BA, professional, or associate degree, 153 (31.8%) had completed a master's degree, and 135 (28.1%) had graduated with a doctoral degree. The largest number of subjects, 208 (39.5%), belonged to the occupational group of faculty, 48 (8.9%) of which were administrators, 198 (37.6%) reported being hourly staff, and 73 (13.5%) were salaried staff. One person (0.2%) reported working 41 or more years at Andrews; and only nine (1.7%) of the respondents had worked at Andrews between 31 and 40 years. Because of these low numbers, I decided to recode three subcategories 21-30 years at AU, 31-40 years at AU, and 41 and more years at AU into one new subcategory 21 and more years at AU. After recoding, the following four subcategories emerged: The largest number of respondents, 207 (40.8%), had worked between 0 and 4 years at AU; 121 (23.9%) had spent between 5 and 11 years working at AU; 113 (22.3%) had worked between 11 and 20 years at the university, and only 66 (13.0%) had been working 21 or more years at AU. While the majority of the subjects, 420 (89.4%), were full-time employees, only 50 (10.6%) of the respondents were working part-time.

Data Analysis of Research Questions

Research Question 1

Research question 1 asked: What are the levels of job satisfaction for (a) all Andrews employees, (b) Andrews faculty, (c) Andrews administrators, (d) Andrews hourly staff, and (e) Andrews salaried staff?

Tables 2, 3, and 4 show the numbers, means, and standard deviations for overall,
intrinsic, and extrinsic job satisfaction and all 15 job-satisfaction factors as they relate to Andrews University employees (faculty, administrators, hourly staff, and salaried staff). Table 2 indicates similar levels of overall, intrinsic, and extrinsic job satisfaction for all Andrews University employees. Andrews employees tended to be moderately satisfied with their work. Administrators revealed the highest mean for overall job satisfaction ($\bar{x} = 3.87$), and salaried staff showed the lowest level ($\bar{x} = 3.59$). Faculty seemed to have the highest level of intrinsic job satisfaction ($\bar{x} = 3.84$) with the lowest mean for salaried staff ($\bar{x} = 3.63$). Administrators scored highest on extrinsic job satisfaction ($\bar{x} = 3.92$), while again salaried staff seemed to be least satisfied with the extrinsic facets of their job ($\bar{x} = 3.57$).

Table 2

<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</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>All Employees</td>
<td>527</td>
<td>3.73</td>
<td>.605</td>
</tr>
<tr>
<td>Faculty</td>
<td>208</td>
<td>3.76</td>
<td>.646</td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.87</td>
<td>.480</td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>198</td>
<td>3.72</td>
<td>.620</td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.59</td>
<td>.488</td>
</tr>
</tbody>
</table>
Table 3

Mean Scores for Intrinsic Job Satisfaction Factors for AU Employees

<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>522</td>
<td>4.07</td>
<td>.75</td>
<td>517</td>
<td>3.38</td>
<td>1.09</td>
</tr>
<tr>
<td>Faculty</td>
<td>206</td>
<td>4.10</td>
<td>.72</td>
<td>203</td>
<td>3.56</td>
<td>1.16</td>
</tr>
<tr>
<td>Administrator</td>
<td>47</td>
<td>4.00</td>
<td>.81</td>
<td>47</td>
<td>3.57</td>
<td>1.10</td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>196</td>
<td>4.11</td>
<td>.76</td>
<td>195</td>
<td>3.18</td>
<td>1.00</td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.90</td>
<td>.78</td>
<td>72</td>
<td>3.25</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 4

*Mean Scores for Extrinsic Job Satisfaction Factors for AU Employees*

<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>526</td>
<td>4.27</td>
<td>.82</td>
<td>524</td>
<td>4.32</td>
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<tr>
<td>Faculty</td>
<td>207</td>
<td>4.26</td>
<td>.83</td>
<td>206</td>
<td>4.41</td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>4.31</td>
<td>.69</td>
<td>48</td>
<td>4.29</td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>198</td>
<td>4.30</td>
<td>.83</td>
<td>198</td>
<td>4.31</td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>4.18</td>
<td>.82</td>
<td>72</td>
<td>4.14</td>
</tr>
</tbody>
</table>

Table 4 Continued

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>Salary Status</th>
<th>Supervision</th>
<th>Working Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>All Employees</td>
<td>527</td>
<td>3.14</td>
<td>1.11</td>
</tr>
<tr>
<td>Faculty</td>
<td>208</td>
<td>3.16</td>
<td>1.14</td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.48</td>
<td>.92</td>
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<tr>
<td>Hourly Staff</td>
<td>198</td>
<td>3.07</td>
<td>1.16</td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.04</td>
<td>1.02</td>
</tr>
</tbody>
</table>

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Table 5 indicates that Andrews University employees were most satisfied with their relations with students, followed by relations with peers, and then work itself. Andrews faculty appeared to be most satisfied with their relations with students and work itself, followed by relations with peers. Administrators showed their highest levels of job satisfaction regarding their relations with peers, followed by relations with students, and then relations with superiors. Hourly staff rated relations with students highest, followed by relations with peers, and then achievement. Salaried staff were most satisfied with their relations with peers, followed by relations with peers, and then work itself.

In summary, overall, Andrews employees, with the exception of faculty, were most satisfied with their relations with students and peers. In contrast, Andrews employees were least satisfied with their salaries.

Research Question 2

Research Question 2 asked: Is there a significant difference in (a) overall, (b) intrinsic, and (c) extrinsic job satisfaction based on (a) occupational area, (b) age, (c) gender, (d) educational level, and (e) length of employment for Andrews University employees?

Relationship Between Overall Job Satisfaction and Occupational Area

Table 6 shows the means for overall job satisfaction based on occupational area. Administrators displayed the highest level of overall job satisfaction ($\bar{x} = 3.87$), followed by faculty ($\bar{x} = 3.76$), hourly staff ($\bar{x} = 3.72$), and salaried staff ($\bar{x} = 3.59$). The ANOVA test indicated no statistically significant differences ($F = 2.303; p = 0.076$) in overall job satisfaction between occupational areas.
<table>
<thead>
<tr>
<th>Job Satisfaction Factor</th>
<th>Mean</th>
<th>Rank</th>
<th>Mean</th>
<th>Rank</th>
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<th>Rank</th>
<th>Mean</th>
<th>Rank</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relations with Students</td>
<td>4.33</td>
<td>1</td>
<td>4.41</td>
<td>1</td>
<td>4.29</td>
<td>2</td>
<td>4.31</td>
<td>1</td>
<td>4.14</td>
<td>2</td>
</tr>
<tr>
<td>Relations with peers</td>
<td>4.27</td>
<td>2</td>
<td>4.26</td>
<td>3</td>
<td>4.31</td>
<td>1</td>
<td>4.30</td>
<td>2</td>
<td>4.18</td>
<td>1</td>
</tr>
<tr>
<td>Work itself</td>
<td>4.18</td>
<td>3</td>
<td>4.41</td>
<td>2</td>
<td>4.17</td>
<td>4</td>
<td>4.03</td>
<td>5</td>
<td>4.03</td>
<td>3</td>
</tr>
<tr>
<td>Achievement</td>
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<td>4.10</td>
<td>4</td>
<td>4.00</td>
<td>7</td>
<td>4.11</td>
<td>3</td>
<td>3.90</td>
<td>5</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4.04</td>
<td>5</td>
<td>4.10</td>
<td>5</td>
<td>4.06</td>
<td>5</td>
<td>4.02</td>
<td>6</td>
<td>3.96</td>
<td>4</td>
</tr>
<tr>
<td>Relations with Superiors</td>
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<td>4.03</td>
<td>6</td>
<td>4.29</td>
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<td>4.06</td>
<td>4</td>
<td>3.84</td>
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<td>3.83</td>
<td>7</td>
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<td>3.76</td>
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<td>6</td>
<td>3.84</td>
<td>7</td>
<td>3.55</td>
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<td>3.56</td>
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<td>11</td>
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<td>3.40</td>
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<td>3.52</td>
<td>13</td>
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<td>3.37</td>
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<td>10</td>
<td>3.51</td>
<td>10</td>
<td>3.40</td>
<td>10</td>
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<td>3.18</td>
<td>14</td>
<td>3.25</td>
<td>13</td>
</tr>
<tr>
<td>Organization Policy &amp; Administration</td>
<td>3.28</td>
<td>14</td>
<td>3.26</td>
<td>14</td>
<td>3.50</td>
<td>14</td>
<td>3.35</td>
<td>12</td>
<td>3.06</td>
<td>14</td>
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<tr>
<td>Salary</td>
<td>3.14</td>
<td>15</td>
<td>3.16</td>
<td>15</td>
<td>3.48</td>
<td>15</td>
<td>3.07</td>
<td>15</td>
<td>3.04</td>
<td>15</td>
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</tbody>
</table>
Table 6

One Way Analysis of Variance Overall Job Satisfaction and Occupational Area

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>208</td>
<td>3.76</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.87</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>198</td>
<td>3.72</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.59</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>2.511</td>
<td>3</td>
<td>.837</td>
<td>2.303</td>
<td>.076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
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<td>523</td>
<td>.363</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>192.594</td>
<td>526</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
satisfaction among the four different occupational areas. Therefore, the implied null hypothesis that there would be no significant difference in overall job satisfaction among the occupational subgroups of Andrews University employees was retained.

**Relationship Between Intrinsic Job Satisfaction and Occupational Area**

Table 7 presents the mean scores for intrinsic job satisfaction based on occupational area. A statistically significant difference ($F = 2.656; p = .048$) in intrinsic job satisfaction was found among the four occupational subgroups. Faculty showed the highest intrinsic job satisfaction ($x = 3.83$), followed by administrators ($x = 3.79$), hourly staff ($x = 3.68$), and salaried staff ($x = 3.63$). Post Hoc Comparison using the Student-Newman-Keuls revealed that the employees who were faculty had a significantly higher level of intrinsic job satisfaction than employees who were salaried staff. Therefore, the implied null hypothesis that there would be no significant difference in intrinsic job satisfaction among the occupational subgroups of Andrews University employees was rejected.

**Relationship Between Extrinsic Job Satisfaction and Occupational Area**

A statistically significant difference ($F = 3.076; p = .027$) was found for extrinsic job satisfaction among the four different occupational subgroups. Table 8 shows that administrators displayed the highest level of extrinsic job satisfaction ($x = 3.92$), followed by hourly staff ($x = 3.74$), faculty ($x = 3.71$), and salaried staff ($x = 3.57$). Post Hoc Comparison using the Student-Newman-Keuls revealed that administrators had a
Table 7

One Way Analysis of Variance Intrinsic Job Satisfaction and Occupational Area

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>208</td>
<td>3.84</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.79</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>198</td>
<td>3.68</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.63</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3.680</td>
<td>3</td>
<td>1.227</td>
<td>2.656</td>
<td>.048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>241.514</td>
<td>523</td>
<td>.462</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>245.193</td>
<td>526</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 8

*One Way Analysis of Variance Extrinsic Job Satisfaction and Occupational Area*

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>208</td>
<td>3.71</td>
<td>.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.92</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly staff</td>
<td>198</td>
<td>3.74</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried staff</td>
<td>73</td>
<td>3.57</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>3.628</td>
<td>1.209</td>
<td>3.076</td>
<td>.027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>205.627</td>
<td>523</td>
<td>.393</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>209.254</td>
<td>526</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
significantly higher level of extrinsic job satisfaction than hourly staff, faculty, and salaried staff. Therefore, the implied null hypothesis that there would be no significant difference in extrinsic job satisfaction among the occupational subgroups of Andrews University employees was rejected.

**Relationship Between Overall Job Satisfaction and Age**

Table 9 shows the means for overall job satisfaction based on age. Statistically significant differences ($F = 3.99; p = .008$) were found among the four age groups. According to Post Hoc Comparison using Student Newman Keuls, employees older than 50 years showed a significantly higher level of overall job satisfaction ($\bar{x} = 3.85$) than their counterparts ages 31-40 ($\bar{x} = 3.68$), ages 41-50 ($\bar{x} = 3.66$), and ages 20-30 ($\bar{x} = 3.63$). Therefore, the implied null hypothesis that there would be no significant difference in overall job satisfaction among the four age groups of Andrews University employees was rejected.

**Relationship Between Intrinsic Job Satisfaction and Age**

No statistically significant differences ($F = 1.72; p = .162$) in intrinsic job satisfaction were found among the four age groups. Table 10 indicates that employees older than 50 years had the highest mean ($\bar{x} = 3.83$), followed by employees ages 31-40 ($\bar{x} = 3.72$), ages 41-50 ($\bar{x} = 3.69$), and ages 20-30 ($\bar{x} = 3.66$). Therefore, the implied null hypothesis that there would be no significant differences in intrinsic job satisfaction among the four age groups of Andrews University employees was retained.
Table 9

One Way Analysis of Variance Overall Job Satisfaction and Age

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>S</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years old</td>
<td>71</td>
<td>3.63</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40 years old</td>
<td>85</td>
<td>3.68</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50 years old</td>
<td>160</td>
<td>3.66</td>
<td>.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 years and older</td>
<td>195</td>
<td>3.85</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Between Groups   | 4.375 | 3 | 1.458 | 3.990 | .008 |
| Within Groups    | 185.268 | 507 | .365 |
| Total            | 189.642 | 510 |      |      |

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Table 10

*One Way Analysis of Variance Intrinsic Job Satisfaction and Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>S</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years old</td>
<td>71</td>
<td>3.66</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40 years old</td>
<td>85</td>
<td>3.72</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50 years old</td>
<td>160</td>
<td>3.69</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 years and older</td>
<td>195</td>
<td>3.83</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td></td>
<td></td>
<td>2.388</td>
<td>3</td>
<td>.796</td>
<td>1.720</td>
<td>.162</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td>234.583</td>
<td>507</td>
<td>.463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>236.970</td>
<td>510</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Relationship Between Extrinsic Job Satisfaction and Age

A statistically significant difference ($F = 5.116; p = .002$) in extrinsic job satisfaction was found among the four age groups of Andrews University employees. Table 11 shows that employees older than 50 years displayed the highest level of extrinsic job satisfaction ($x = 3.86$), followed by ages 31-40 ($x = 3.65$), ages 41-50 ($x = 3.64$), and ages 20-30 ($x = 3.62$). Post Hoc Comparison using Student Newman Keuls indicated that employees older than 50 years displayed a significantly higher level of extrinsic job satisfaction than their younger counterparts. Therefore, the implied null hypothesis that there would be no significant difference in extrinsic job satisfaction among the four age groups of Andrews University employees was rejected.

Relationship Between Overall Job Satisfaction and Gender

Table 12 shows the means for overall job satisfaction based on gender. Males and females displayed similar levels of overall job satisfaction (males: $x = 3.75$; females: $x = 3.72$). No statistically significant differences ($F = .325; p = .569$) were found between the two groups. Therefore, the implied null hypothesis that there would be no significant difference in overall job satisfaction among the gender groups of Andrews University employees was retained.

Relationship Between Intrinsic Job Satisfaction and Gender

No statistically significant difference ($F = .266; p = .607$) between males and
Table 11

*One Way Analysis of Variance Extrinsic Job Satisfaction and Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 years old</td>
<td>71</td>
<td>3.62</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40 years old</td>
<td>85</td>
<td>3.65</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50 years old</td>
<td>160</td>
<td>3.64</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 years and older</td>
<td>195</td>
<td>3.86</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Between Groups | 6.088 | 3 | 2.029 | 5.116 | .002 |
| Within Groups  | 201.094 | 507 |      | .397  |      |
| Total          | 207.182 | 510 |      |      |      |

Table 12

*One Way Analysis of Variance Overall Job Satisfaction and Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>234</td>
<td>3.75</td>
<td>.60</td>
<td>1,506</td>
<td>.325</td>
<td>.569</td>
</tr>
<tr>
<td>Female</td>
<td>274</td>
<td>3.72</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
females was found for intrinsic job satisfaction. Table 13 indicates that mean scores were similar for male (\(x = 3.76\)) and female (\(x = 3.73\)) employees. Therefore, the implied null hypothesis that there would be no significant difference in intrinsic job satisfaction among the gender groups of Andrews University employees was retained.

Table 13

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>S</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>234</td>
<td>3.76</td>
<td>.68</td>
<td>1,506</td>
<td>.266</td>
<td>.607</td>
</tr>
<tr>
<td>Female</td>
<td>274</td>
<td>3.73</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relationship Between Extrinsic Job Satisfaction and Gender

Table 14 presents no statistically significant differences (\(F = .294; p = .588\)) between the gender groups in extrinsic job satisfaction. Males and females portrayed similar mean scores for extrinsic job satisfaction (males: \(x = 3.74\); females: \(x = 3.71\)). Therefore, the implied null hypothesis that there would be no significant difference in extrinsic job satisfaction between the gender groups of Andrews University employees was retained.
Table 14

One Way Analysis of Variance Extrinsic Job Satisfaction and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>S.</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>234</td>
<td>3.74</td>
<td>.62</td>
<td>1,506</td>
<td>.294</td>
<td>.588</td>
</tr>
<tr>
<td>Female</td>
<td>274</td>
<td>3.71</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Relationship Between Overall Job Satisfaction and Educational Level

Table 15 shows the means for overall job satisfaction based on educational level. Statistically significant differences ($F = 6.375; p = .000$) were found among the four educational levels of Andrews University employees. According to the Post Hoc Comparison using Student Newman Keuls, employees with a doctoral ($\bar{x} = 3.90$) or a high-school degree ($\bar{x} = 3.81$) displayed significantly higher levels of overall job satisfaction than their counterparts with a master’s degree ($\bar{x} = 3.66$) and a bachelor, professional, or associate degree ($\bar{x} = 3.62$). Therefore, the implied null hypothesis that there would be no significant difference in overall job satisfaction among the educational levels of Andrews University employees was rejected.
Table 15

*One Way Analysis of Variance Overall Job Satisfaction and Educational Level*

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>47</td>
<td>3.81</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA or Associate Degree</td>
<td>146</td>
<td>3.62</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters Degree</td>
<td>153</td>
<td>3.66</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>135</td>
<td>3.90</td>
<td>.58</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td></td>
<td></td>
<td>6.777</td>
<td>3</td>
<td>2.259</td>
<td>6.375</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td>169.036</td>
<td>477</td>
<td>.354</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>175.813</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Relationship Between Intrinsic Job Satisfaction and Educational Level

A statistically significant difference ($F = 6.173; p = .000$) related to intrinsic job satisfaction was found between the four educational levels of Andrews University employees (Table 16). Post Hoc Comparison using Student Newman Keuls indicated that employees with a doctoral degree ($\bar{x} = 3.92$) had significantly higher levels of intrinsic job satisfaction than their counterparts with a master’s degree ($\bar{x} = 3.71$) or a bachelor, professional, or associate degree ($\bar{x} = 3.59$). In addition, employees with a high-school degree ($\bar{x} = 3.81$) showed significantly higher levels of intrinsic job satisfaction when compared with employees holding a bachelor, professional, or associate degree ($\bar{x} = 3.59$). Therefore, the implied null hypothesis that there would be no significant difference in intrinsic job satisfaction among the educational levels of Andrews University employees was rejected.

Relationship Between Extrinsic Job Satisfaction and Educational Level

Table 17 also presents a significant difference ($F = 5.426; p = .001$) in extrinsic job satisfaction between the different educational levels. The Post Hoc Comparison using Student Newman Keuls revealed that employees with a doctoral ($\bar{x} = 3.88$) or a high-school degree ($\bar{x} = 3.80$) had significantly higher levels of intrinsic job satisfaction than their counterparts with a bachelor, professional, or associate degree ($\bar{x} = 3.64$) or a master’s degree ($\bar{x} = 3.62$). Therefore, the implied null hypothesis that there would be no significant difference in extrinsic job satisfaction among the educational levels of Andrews University employees was rejected.
Table 16

One Way Analysis of Variance Intrinsic Job Satisfaction and Educational Level

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>47</td>
<td>3.82</td>
<td>.57</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA or Associate Degree</td>
<td>146</td>
<td>3.59</td>
<td>.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters Degree</td>
<td>153</td>
<td>3.71</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>135</td>
<td>3.92</td>
<td>.64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>8.325</td>
<td>3</td>
<td>2.775</td>
<td>6.173</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>214.442</td>
<td>477</td>
<td>.450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>222.767</td>
<td>480</td>
<td>.450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 17

*One Way Analysis of Variance Extrinsic Job Satisfaction and Educational Level*

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$SS$</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>47</td>
<td>3.80</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA or Associate Degree</td>
<td>146</td>
<td>3.64</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters Degree</td>
<td>153</td>
<td>3.62</td>
<td>.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>135</td>
<td>3.88</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td></td>
<td></td>
<td>6.298</td>
<td>3</td>
<td>2.099</td>
<td>5.426</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td>184.576</td>
<td>477</td>
<td>.387</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>190.874</td>
<td>480</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Andrews University employees was rejected.

Relationship Between Overall Job Satisfaction and Lengths of Employment

Table 18 shows the means for overall job satisfaction based on length of employment. No statistically significant differences ($F = .876; p = .453$) were found among the four different periods of employment at Andrews University. Mean scores for overall job satisfaction appeared to be at similar levels for the four groups with the highest mean for employees working more than 20 years at Andrews ($\bar{x} = 3.85$), followed by employees working 0-4 and 11-20 years at the University ($\bar{x} = 3.74$), and employees with 5-10 years ($\bar{x} = 3.66$) of employment for the institution. Therefore, the implied null hypothesis that there would be no significant difference in overall job satisfaction among the four different employment periods for Andrews University employees was retained.

Relationship Between Intrinsic Job Satisfaction and Lengths of Employment

There was no significant difference ($F = .561; p = .641$) found in regard to intrinsic job satisfaction based on length of employment. Table 19 indicates similar levels of intrinsic job satisfaction for the different employment periods. Employees working 0-4 years at Andrews displayed the highest level of intrinsic job satisfaction ($\bar{x} = 3.79$), followed by employees working 21 and more years at the University ($\bar{x} = 3.72$), and employees who worked 5-10 years and 11-20 years with the institution ($\bar{x} = 3.71$). Therefore, the implied null hypothesis that there would be no significant difference in intrinsic job satisfaction among the four different employment periods for Andrews
Table 18

*One Way Analysis of Variance Overall Job Satisfaction and Length of Employment*

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Years at AU</td>
<td>207</td>
<td>3.74</td>
<td>.58</td>
<td>.876</td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>5-10 Years at AU</td>
<td>121</td>
<td>3.66</td>
<td>.60</td>
<td>.876</td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>11-20 Years at AU</td>
<td>113</td>
<td>3.74</td>
<td>.62</td>
<td>.876</td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>More than 20 Years at AU</td>
<td>66</td>
<td>3.80</td>
<td>.69</td>
<td>.876</td>
<td></td>
<td></td>
<td>.453</td>
<td></td>
</tr>
</tbody>
</table>

Between Groups: | .973 | 3 | .324 | .876 | .453 |
Within Groups:  | 186.151 | 503 | .370 |
Total:          | 187.124 | 506 |     |

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### Table 19

*One Way Analysis of Variance Intrinsic Job Satisfaction and Length of Employment*

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$SS$</th>
<th>$df$</th>
<th>$MS$</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Years at AU</td>
<td>207</td>
<td>3.79</td>
<td>.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 Years at AU</td>
<td>121</td>
<td>3.71</td>
<td>.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20 Years at AU</td>
<td>113</td>
<td>3.71</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 20 Years at AU</td>
<td>66</td>
<td>3.72</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>.798</td>
<td>3</td>
<td>.266</td>
<td>.561</td>
<td>.641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td>238.367</td>
<td>503</td>
<td>.474</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>239.164</td>
<td>506</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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University employees was retained.

**Relationship Between Extrinsic Job Satisfaction and Lengths of Employment**

Table 20 does not reveal a significant difference ($F = 2.082; p = .102$) in extrinsic job satisfaction based on length of employment. Employees working more than 20 years at Andrews showed the highest level of extrinsic job satisfaction ($x = 3.86$), followed by employees working 11-20 years at the University ($x = 3.76$), and employees who worked 0-4 years ($x = 3.79$) and 5-10 ($x = 3.63$) years with the institution. Therefore, the implied null hypothesis that there would be no significant difference in extrinsic job satisfaction among the four different employment periods for Andrews University employees was retained.

**Research Question 3**

Research question 3 asked: *Is there a significant difference in organizational commitment based on (a) occupational area, (b) age, (c) gender, (d) educational level, and (e) length of employment for Andrews University employees?*

**Relationship Between Organizational Commitment and Occupational Area**

Table 21 presents the means for organizational commitment based on occupational area. No statistically significant difference ($F = 2.188; p = .088$) in organizational commitment was found among the four occupational subgroups of Andrews University employees. Administrators displayed the highest level of
Table 20

*One Way Analysis of Variance Extrinsic Job Satisfaction and Length of Employment*

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Years at AU</td>
<td>207</td>
<td>3.70</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 Years at AU</td>
<td>121</td>
<td>3.63</td>
<td>.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20 Years at AU</td>
<td>113</td>
<td>3.76</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 20 Years at AU</td>
<td>66</td>
<td>3.86</td>
<td>.71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>2.478</td>
<td>3</td>
<td>.826</td>
<td>2.082</td>
<td>.102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>199.572</td>
<td>503</td>
<td>.397</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>202.049</td>
<td>506</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Table 21

One Way Analysis of Variance Organizational Commitment and Occupational Area

<table>
<thead>
<tr>
<th>Occupational Area</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>205</td>
<td>3.86</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrator</td>
<td>48</td>
<td>3.97</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hourly Staff</td>
<td>197</td>
<td>3.82</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaried Staff</td>
<td>73</td>
<td>3.74</td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>1.603</td>
<td>3</td>
<td>.534</td>
<td>2.188</td>
<td>.088</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>126.691</td>
<td>519</td>
<td>.244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>128.293</td>
<td>522</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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organizational commitment ($\bar{x} = 3.97$), followed by faculty ($\bar{x} = 3.86$), hourly staff ($\bar{x} = 3.82$), and salaried staff ($\bar{x} = 3.74$). Therefore, the implied null hypothesis that there would be no significant difference in organizational commitment among the occupational subgroups at Andrews University was retained.

**Relationship Between Organizational Commitment and Age**

A statistically significant difference ($F = 8.995; p = .000$) in organizational commitment was found among the four age groups of Andrews University employees. Table 22 shows that employees older than 50 years had the highest level of organizational commitment ($\bar{x} = 3.96$), followed by ages 41-50 ($\bar{x} = 3.84$), ages 31-40 ($\bar{x} = 3.77$), and ages 20-30 ($\bar{x} = 3.63$). Post Hoc Comparison using Student Newman Keuls indicated that employees older than 50 years displayed a significantly higher level of organizational commitment compared to their younger counterparts. In addition, it was found that employees ages 41-50 and ages 31-40 had a significantly higher level of organizational commitment than employees who were between 20-30 years old. Therefore, the implied null hypothesis that there would be no significant difference in organizational commitment among the four age groups of Andrews University employees was rejected.

**Relationship Between Organizational Commitment and Gender**

Table 23 shows that there was no statistically significant difference ($F = .051; p = .821$) in organizational commitment between males and females. Similar levels of organizational commitment were found for male ($\bar{x} = 3.83$) and female ($\bar{x} = 3.84$)
Table 22

*One Way Analysis of Variance Organizational Commitment and Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30 Years old</td>
<td>69</td>
<td>3.63</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31-40 Years old</td>
<td>85</td>
<td>3.77</td>
<td>.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-50 Years old</td>
<td>160</td>
<td>3.84</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 Years and older</td>
<td>193</td>
<td>3.96</td>
<td>.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td></td>
<td></td>
<td>6.351</td>
<td>3</td>
<td>2.117</td>
<td>8.995</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td>118.387</td>
<td>503</td>
<td>.235</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>124.738</td>
<td>506</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 23

*One Way Analysis of Variance Organizational Commitment and Gender*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>231</td>
<td>3.83</td>
<td>.53</td>
<td>1,502</td>
<td>.051</td>
<td>.821</td>
</tr>
<tr>
<td>Female</td>
<td>273</td>
<td>3.84</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
employees. Therefore, the implied null hypothesis that there would be no significant difference in organizational commitment for male and female Andrews University employees was retained.

Relationship Between Organizational Commitment and Educational Level

A statistically significant difference \( F = 2.916; p = .034 \) in organizational commitment was found among the four educational levels of Andrews University employees (Table 24). Post Hoc Comparison using Student Newman Keuls indicated that employees with a high-school (\( \bar{x} = 3.93 \)) or doctoral degree (\( \bar{x} = 3.90 \)) had significantly higher levels of organizational commitment than their counterparts with a bachelor, professional, or associate degree (\( \bar{x} = 3.75 \)). Therefore, the implied null hypothesis that there would be no significant difference in organizational commitment among the educational levels of Andrews University employees was rejected.

Relationship Between Organizational Commitment and Length of Employment

No statistically significant differences \( F = .598; p = .616 \) in organizational commitment were found based on length of employment (Table 25). Employees working more than 20 years at Andrews showed the highest level of organizational commitment (\( \bar{x} = 3.90 \)), followed by employees working 11-20 years at the University (\( \bar{x} = 3.83 \)), and employees who worked 5-10 years (\( \bar{x} = 3.82 \)) and 0-4 (\( \bar{x} = 3.81 \)) years in the institution. Therefore, the implied null hypothesis that there would be no significant difference in organizational commitment among the four different employment periods for Andrews employees was retained.
Table 24

One Way Analysis of Variance Organizational Commitment and Educational Level

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School</td>
<td>47</td>
<td>3.93</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA or Associate Degree</td>
<td>145</td>
<td>3.75</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters Degree</td>
<td>152</td>
<td>3.83</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>134</td>
<td>3.90</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>2.164</td>
<td>3</td>
<td>.721</td>
<td>2.916</td>
<td></td>
<td>.034</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>117.269</td>
<td>474</td>
<td>.247</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>119.433</td>
<td>477</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 25

One Way Analysis of Variance Organizational Commitment and Length of Employment

<table>
<thead>
<tr>
<th>Length of Employment</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 Years at AU</td>
<td>205</td>
<td>3.81</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 Years at AU</td>
<td>121</td>
<td>3.82</td>
<td>.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20 Years at AU</td>
<td>112</td>
<td>3.85</td>
<td>.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 20 Years at AU</td>
<td>65</td>
<td>3.90</td>
<td>.51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td></td>
<td>.448</td>
<td>3</td>
<td>.149</td>
<td>.598</td>
<td>.616</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td>124.620</td>
<td>499</td>
<td></td>
<td>.250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>125.069</td>
<td>502</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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University employees was retained.

Research Question 4

Research question 4 asked: *Is there a significant relationship between overall, intrinsic, extrinsic job satisfaction, and organizational commitment for Andrews University employees?*

Table 26 presents the correlations between overall, intrinsic, extrinsic job satisfaction and organizational commitment. All six correlations were statistically significant at the .001 level (2-tailed). High correlations were found between overall job satisfaction and extrinsic job satisfaction ($r = .953$), and between overall job satisfaction and organizational commitment ($r = .584$). The table below summarizes these correlations:

<table>
<thead>
<tr>
<th></th>
<th>Overall Job Satisfaction</th>
<th>Intrinsic Job Satisfaction</th>
<th>Extrinsic Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Job Satisfaction</td>
<td>Pearson Correlation</td>
<td>.900**</td>
<td></td>
</tr>
<tr>
<td>Extrinsic Job Satisfaction</td>
<td>Pearson Correlation</td>
<td>.953**</td>
<td>.725**</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>Pearson Correlation</td>
<td>.584**</td>
<td>.515**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
and intrinsic job satisfaction ($r = .90$). The correlation between intrinsic and extrinsic job satisfaction appeared to be moderate ($r = .725$). Low correlations were found between organizational commitment and (a) overall job satisfaction ($r = .584$), (b) extrinsic job satisfaction ($r = .564$), and (c) intrinsic job satisfaction ($r = .515$).

Research Question 5

Research question 5 asked: *Is there a linear relationship between the 15 job-satisfaction factors including religious commitment, and organizational commitment for Andrews University employees?*

Table 27 lists the mean scores and standard deviations for organizational commitment, religious commitment, and the 15-job satisfaction factors. The highest mean was found for religious commitment ($\bar{x} = 4.38$), and the lowest mean score for salary ($\bar{x} = 3.14$). The mean for organizational commitment was somewhat in between these variables ($\bar{x} = 3.84$).

Table 28 shows the correlations between organizational commitment, religious commitment, and the 15-job satisfaction factors. While correlations between organizational commitment and the 15 job satisfaction factors including religious commitment were generally in the .20s and .30s, a stronger relationship was revealed between organizational commitment and organizational policy and administration ($r = .482$).

Table 29 shows the results of the linear regression analysis using the stepwise method between organizational commitment and the 15 job-satisfaction factors including
Table 27

*Means and Standard Deviations - Organizational Commitment, Religious Commitment, 15 Job Satisfaction Factors*

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Commitment</td>
<td>3.84</td>
<td>.471</td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>4.38</td>
<td>.501</td>
</tr>
<tr>
<td>Achievement</td>
<td>4.07</td>
<td>.735</td>
</tr>
<tr>
<td>Advancement</td>
<td>3.38</td>
<td>1.099</td>
</tr>
<tr>
<td>Growth</td>
<td>3.48</td>
<td>.984</td>
</tr>
<tr>
<td>Relations with Peers</td>
<td>4.27</td>
<td>.814</td>
</tr>
<tr>
<td>Relations with Students</td>
<td>4.32</td>
<td>.697</td>
</tr>
<tr>
<td>Relations with Superiors</td>
<td>4.03</td>
<td>1.021</td>
</tr>
<tr>
<td>Job Security</td>
<td>3.77</td>
<td>1.066</td>
</tr>
<tr>
<td>Organizational Policy &amp; Administration</td>
<td>3.27</td>
<td>1.014</td>
</tr>
<tr>
<td>Recognition</td>
<td>3.47</td>
<td>1.102</td>
</tr>
<tr>
<td>Responsibility</td>
<td>4.04</td>
<td>.842</td>
</tr>
<tr>
<td>Salary</td>
<td>3.14</td>
<td>1.125</td>
</tr>
<tr>
<td>Status</td>
<td>3.54</td>
<td>1.044</td>
</tr>
<tr>
<td>Supervision</td>
<td>3.81</td>
<td>1.019</td>
</tr>
<tr>
<td>Work itself</td>
<td>4.18</td>
<td>.779</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>3.43</td>
<td>1.116</td>
</tr>
</tbody>
</table>
Table 28

Pearson Correlations Organizational Commitment, Religious Commitment, 15 Job-Satisfaction Factors

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.362*</td>
<td>.286*</td>
<td>.120*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

* Correlation is significant at the 0.01 level (2-tailed).
Table 29

Regression Analysis Organizational Commitment and 15 Job-Satisfaction Factors Including Religious Commitment for All AU Employees

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<tr>
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<th>$R^2$ Change</th>
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<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
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<td>.081</td>
<td>.134</td>
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<td>.012</td>
<td>.081</td>
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</tbody>
</table>

$R^2 = .442, \, F(7, 497) = 56.326, \, p = 0.000$
religious commitment for all AU employees. The seven-predictor model explained 44.2% of the variance of organizational commitment. The variable entered in the first step was organizational policy and administration which explained 23.2% of the variance of organizational commitment. The next step—religious commitment—added 10.2% in this model. Variables entered in further steps explained the following amounts of variance in addition to the previous steps: work itself, 5%; salary, 2.5%; relations with students, 1.2%; advancement, 1.1%; and working conditions, .90%.

Table 30 shows the results of the linear regression analysis using the stepwise method between organizational commitment and the 15 job-satisfaction factors including religious commitment for AU faculty. A six-predictor model explained 55.6% of the variance of organizational commitment. The variable entered in the first step was organizational policy and administration, which explained 28.2% of the variance of organizational commitment. The next step—work itself—added 13.3% in this model. Variables entered in further steps explained the following amounts of variance in addition to the previous steps: religious commitment, 8.4%; salary, 2.7%; working conditions, 1.5%; and achievement, 1.5%.

Table 31 displays the results of the linear regression analysis using the stepwise method between organizational commitment and the 15 job-satisfaction factors including religious commitment for AU administrators. A five-predictor model explained 70.8% of the variance of organizational commitment. The variable entered in the first step was growth, which explained 39.6% of the variance of organizational commitment. The next step—religious commitment—added 13.6% in this model. Variables entered in further
Table 30

Regression Analysis Organizational Commitment and 15-Job Satisfaction Factors Including Religious Commitment for AU Faculty

<table>
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<td>.015</td>
<td>.096</td>
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</table>

$R^2 = .556, F_{(6, 188)} = 39.173, p = 0.000$
Table 31

*Regression Analysis Organizational Commitment and 15-Job Satisfaction Factors Including Religious Commitment for AU Administrators*

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$R^2 = .708, F_{(5, 39)} = 18.927, p = 0.000$
steps explained the following amounts of variance in addition to the previous steps: responsibility, 7.7%; job security, 4.6%; and relations with students, 5.3%.

Table 32 reveals the results of the linear regression analysis using the stepwise method between organizational commitment and the 15 job-satisfaction factors including religious commitment for AU hourly staff. A four-predictor model explained 39.8% of the variance of organizational commitment. The variable entered in the first step was organizational policy and administration, which explained 26.2% of the variance of organizational commitment. The next step—religious commitment—added 8.2% in this model. Variables entered in two further steps explained the following amounts of variance in addition to the previous steps: salary, 3.6%, and relations with students, 1.9%.

Table 33 shows the results of the linear regression analysis using the stepwise method between the 15 job-satisfaction factors including religious commitment and organizational commitment for AU salaried staff. A three-predictor model explained 24.7% of the variance of organizational commitment. The variable entered in the first step was responsibility, which explained 11.5% of the variance of organizational commitment. The next step—religious commitment—added 7.5% in this model. The last variable entered—recognition—explained an additional 5.6% of variance in addition to the previous steps.

Research Question 6

Research question 6 asked: Does religious commitment have a mediating effect on the relationship between job satisfaction and organizational commitment for Andrews
Table 32

Regression Analysis Organizational Commitment and 15 Job-Satisfaction Factors including Religious Commitment for AU Hourly Staff

<table>
<thead>
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$R^2 = .398, F_{(4, 183)} = 31.354, p = 0.000$
Table 33

Regression Analysis Organizational Commitment and 15 Job-Satisfaction Factors including Religious Commitment for AU Salaried Staff

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<th>$R^2$ Change</th>
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<tr>
<td>(Constant)</td>
<td></td>
<td>1.728</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility</td>
<td>.115</td>
<td>.115</td>
<td>.114</td>
<td>.226</td>
<td>1.965</td>
<td>.054</td>
</tr>
<tr>
<td>Religious</td>
<td>.190</td>
<td>.075</td>
<td>.263</td>
<td>.269</td>
<td>2.411</td>
<td>.019</td>
</tr>
<tr>
<td>Commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition</td>
<td>.247</td>
<td>.056</td>
<td>.115</td>
<td>.247</td>
<td>2.153</td>
<td>.035</td>
</tr>
</tbody>
</table>

$R^2 = .247$, $F_{(3, 62)} = 6.765$, $p = 0.001$
University employees?

Table 34 shows the results of a linear-regression analysis using the direct method between organizational commitment and overall job satisfaction including religious commitment. The comparison between the zero-order correlation ($r = .556$) and part correlation ($r = .497$) for overall job satisfaction revealed that the relationship between overall job satisfaction and organizational commitment was almost unchanged after the effects of religious commitment had been removed.

Table 34

*Regression Analysis - Overall Job Satisfaction, Organizational Commitment, and Religious Commitment*

<table>
<thead>
<tr>
<th></th>
<th>Correlations</th>
<th>$b$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zero-order</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td>.960</td>
<td>5.525</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Religious Commitment</td>
<td>.392</td>
<td>.364</td>
<td>.303</td>
<td>.325</td>
<td>.307</td>
</tr>
<tr>
<td>Overall Job Satisfaction</td>
<td>.556</td>
<td>.540</td>
<td>.497</td>
<td>.394</td>
<td>.504</td>
</tr>
</tbody>
</table>

$R^2 = .400$, $F_{(2,531)} = 177.026$, $p = 0.000$
Major Findings of the Study

This study revealed that Andrews University employees displayed moderate levels of satisfaction with their jobs. Somewhat similar levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment were found for all Andrews employees and the four occupation subgroups. All ratings of the 15 job-satisfaction factors were found to be on the satisfaction side. However, some factors were found to be closer to a neutral response than to a satisfaction response. Administrators revealed the highest degree of overall job satisfaction, while salaried staff showed the lowest level of satisfaction with their jobs. AU faculty displayed the highest level of intrinsic job satisfaction with the lowest mean found for salaried staff. Administrators scored highest on extrinsic job satisfaction, while salaried staff appeared to be least satisfied with the extrinsic facets of their jobs. Overall, AU employees were most satisfied with their relations with students, followed by relations with peers, and then work itself. Andrews faculty appeared to be most satisfied with their relations with students and work itself, followed by relations with peers. Administrators showed their highest levels of job satisfaction regarding their relations with peers, followed by relations with students, and then relations with superiors. Hourly staff rated relations with students highest, followed by relations with peers, and then achievement. Salaried staff were most satisfied with their relations with peers, followed by relations with students, and then work itself. There was agreement among AU employees about being least satisfied with their salaries, followed by organizational policies and administration.

One-way analysis of variance revealed that faculty at AU had significantly higher
levels of intrinsic job satisfaction than the other occupational subgroups. Administrators were found to have significantly higher levels of extrinsic job satisfaction when compared to their colleagues in the other occupational groups. The findings further showed that employees older than 50 years had significantly higher levels of overall and extrinsic job satisfaction than their younger counterparts. It was also revealed that AU employees with a doctoral or high-school degree displayed a significantly higher level of job satisfaction than their colleagues with a master's degree or a bachelor, professional, or associate degree. AU employees older than 50 years displayed a significantly higher level of organizational commitment than their younger counterparts. In addition, employees ages 41-50 and ages 31-40 were significantly more committed to their jobs than their younger colleagues between 20-30 years of age. Finally, results indicated that employees with a high-school or doctoral degree showed significantly higher levels of organizational commitment than their co-workers with a bachelor, professional, or associate degree.

This study found high correlations between overall and intrinsic job satisfaction as well as between overall and extrinsic job satisfaction. Moderate correlations were shown between intrinsic and extrinsic job satisfaction, as well as between organizational commitment and the three facets of job satisfaction (overall, intrinsic, and extrinsic job satisfaction).

A seven-predictor model including the 15 job-satisfaction factors and religious commitment explained 44.2% of the variance of organizational commitment for all AU employees. The variable entered in the first step was organizational policy and administration, which explained 23.2% of the variance of organizational commitment in
the model. Variables entered in further steps explained the following amounts of variance in addition to the previous steps: religious commitment, 10.2%; work itself, 5%; salary, 2.5%; relations with students, 1.2%; advancement, 1.1%; and working conditions, 0.9%. While correlations between organizational commitment and the 15 job-satisfaction factors including religious commitment were generally in the .20s and .30s, a stronger relationship was revealed between organizational commitment and organizational policy and administration ($r = .482$). Additional regression analyses were conducted for the four occupational subgroups at Andrews University. A six-predictor model including the 15 job-satisfaction factors and religious commitment explained 55.6% of the variance of organizational commitment for AU faculty. The sequences of variables entered are listed with the amount of variance explained: organizational policy and administration (28.2%), work itself (13.3%), religious commitment (8.4%), salary (2.7%), working conditions (1.5%), and achievement (1.5%). A five-predictor model explained 70.8% of the variance of organizational commitment for AU administrators. The following variables were entered in the model: growth (39.6%), religious commitment (13.6%), responsibility (7.7%), job security (4.6%), and relations with students (5.3%). A four-predictor model explained 39.8% of the variance of organizational commitment for AU hourly staff. The following variables were part of the model: organizational policy and administration (26.2%), religious commitment (8.2%), salary (3.6%), and relations with students (1.9%). A three-predictor model explained 24.7% of the variance of organizational commitment for AU salaried staff. The following variables were entered in the model: responsibility (11.5%), religious commitment (7.5%), and recognition (5.6%).
Finally, a comparison between the zero-order correlation and partial correlation for overall job satisfaction revealed that the relationship between overall job satisfaction and organizational commitment was almost unchanged after the effects of religious commitment had been removed.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter summarizes the purpose of the study, research methodology, and the review of literature. In addition, the results are presented with conclusions regarding the obtained findings. Finally, implications are discussed for Andrews University, and recommendations are provided for further research in the areas of job satisfaction and organizational commitment.

Purpose of the Study

The purpose of this study was to identify the most important factors that related to job satisfaction and dissatisfaction for Andrews University employees. It was investigated if there were significant relationships between the levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational commitment as they related to demographic variables such as: occupational area, age, gender, length of employment, and educational level. Further, the investigation studied the relationship between overall, intrinsic, and extrinsic job satisfaction and organizational commitment. It was then determined if there was a linear relationship between organizational commitment and Herzberg's 15 job-satisfaction factors including religious commitment. Finally, the investigation attempted to see if religious commitment had a mediating effect on the
relationship between job satisfaction and organizational commitment.

Research Methodology

A quantitative descriptive research design was used for this investigation. A survey questionnaire was mailed out to all 835 Andrews University employees, which measured levels of overall, intrinsic, and extrinsic job satisfaction as well as organizational and religious commitment. The survey package included 15 items of the Professional Satisfaction Scale, 15 items of the Organizational Commitment Questionnaire, and 10 items of the Intrinsic Religious Motivation Scale. Responses were measured on a 5-point Likert-type scale ranging from 1 (highly dissatisfied) to 5 (highly satisfied). In addition, five demographic items were part of the study including occupational area, gender, age, educational level, and length of employment. Data were statistically analyzed by using descriptive statistics, analysis of variance, correlational analysis, and factor analysis.

Review of Literature

while extrinsic facets were: organizational policies and administration, interpersonal relationships with supervisors, peers and students; working conditions; salary; supervision; status; and job security. Evidence was shown that open-ended as well as closed-ended questionnaires supported Herzberg's dual factor theory (Gaziel, 1986; Hill, 1987; Nussel et al., 1988).

The most relevant definition of organizational commitment was found by Mowday et al. (1979) and Mowday et al. (1982). 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. Mowday et al. (1974b) concluded that job satisfaction and organizational commitment were related, but separate, employee experiences. He proposed job satisfaction as a more affective response and organizational commitment as a more relational response. Although different studies have proposed different causal orderings between job satisfaction and organizational commitment (Bateman & Strasser, 1984; Harrell et al., 1986; Lachman & Aranya, 1986; McGregor et al., 1989; Meixner & Bline, 1989; Williams & Hazer, 1986), they have all found a significant, positive relationship between the variables. While some findings suggested that organizational commitment was more strongly associated with intrinsic rewards (Brief & Aldag, 1980; O'Reilly & Caldwell, 1980), other findings suggested that extrinsic rewards were more important than intrinsic rewards in predicting commitment (Angle & Perry, 1983; Loscocco, 1990). It was further established that demographic variables, such as occupational area, age,
gender, length of employment, and educational level, have shown inconsistent effects on job satisfaction and organizational commitment (Angel & Perry, 1981; Blank, 1993; Iiacqua & Schumacher, 1995; Morris & Sherman, 1981; 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). According to Allport (1966), the intrinsic/extrinsic concept helps 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 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) concluded that teachers were generally satisfied with their jobs, and chose to work for the SDA church because of their commitment to the church.

Results and Conclusions

Research Question 1

Research question 1 asked: What are the levels of job satisfaction for (a) all Andrews employees, (b) Andrews faculty, (c) Andrews administrators, (d) Andrews hourly staff, and (e) Andrews salaried staff?
This study revealed that Andrews University employees showed moderate levels of satisfaction with their jobs. Somewhat similar levels of overall, intrinsic, and extrinsic job satisfaction were found for Andrews University employees and the four occupational subgroups. None of the 15 job-satisfaction factors were found to be on the dissatisfaction side. However, several factors were found to be closer to a neutral response than to a satisfaction response, including salary, organizational policy and administration, advancement, working conditions, recognition, and growth. Administrators revealed the highest degree of overall job satisfaction, while salaried staff showed the lowest level of overall satisfaction with their job. AU faculty displayed the highest level of intrinsic job satisfaction with the lowest mean found for salaried staff. Administrators scored highest on extrinsic job satisfaction, while salaried staff appeared to be least satisfied with the extrinsic facets of their jobs. Overall, AU employees were most satisfied with their relations with students, followed by relations with peers, and then work itself. There was agreement among AU employees about being least satisfied with their salaries followed by organizational policy and administration, and then advancement.

Moderate levels of job satisfaction revealed for AU employees are in agreement with results of previously studied groups of employees. Gannon et al. (1980), McNeece (1981), and Willi and Stecklein (1982) also found job satisfaction levels between 3 and 4 on 5-point scales.

This study revealed that AU employees were least satisfied with their salaries followed by organizational policies and administration, and advancement. Additional factors that were in the neutral response range included working conditions, recognition,
and growth. According to Herzberg’s theory, advancement, recognition, and growth were classified as intrinsic factors which were believed to contribute to job satisfaction. The results of this study showed that AU employees did not show significant levels of satisfaction with these intrinsic factors. In contrast, the investigation revealed that AU employees rated extrinsic factors, such as interpersonal relationships, supervision, job security, and status, as satisfiers. According to Herzberg’s theory such factors would contribute to job dissatisfaction rather than to satisfaction. 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. Studies also suggested that intrinsic rewards such as professional interest, job responsibility, psychological recognition, career advancement, skill utilization and development, enjoyment of work, and autonomy in decision making were important determinants of both job satisfaction and dissatisfaction (Hanson et al., 1987; Kalleberg, 1977). Other researchers (Gruenberg, 1980; Seybolt, 1976) suggested that extrinsic rewards and factors such as monetary income, fringe benefits, job security, administrative policy, company reputation, job supervision, working conditions, and relationships with peers and management played a critical role in determining job satisfaction.

One reason for a lack of support for Herzberg’s two-factor theory might be the use of the forced-choice format in the measurement of job satisfaction. According to Locke (1976), 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 cause 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. However, despite these conflicting findings a considerable number of studies using a forced-choice format have supported the dual-factor theory of Herzberg (Gaziel, 1986; Hill, 1987; Nussel et al., 1988).

Andrews employees seemed to value interpersonal relationships with peers and students as important sources of job satisfaction. These findings are consistent with results of previous studies (Diener, 1985; Friesen et al., 1983; Gaziel, 1986; Khillah, 1986) in which teachers and university administrators saw their relationships 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. Since relationships with students and peers are a significant part of the work in educational settings, it seems more than reasonable that such relationships may have a strong potential to contribute to both intrinsic and extrinsic job satisfaction. Such findings may also point to the existence of a good interpersonal work climate at the University.

According to results of this investigation, the respondents were least satisfied with salary and organizational policies and administration. Due to the fact that AU is a rather small, private university, the institution may have less funds available to offer its
employees the competitive salaries that could be attained in larger, public institutions. Low levels of satisfaction with policy and administration may include factors such as management, communication, resources, and personnel policies. This result is in agreement with data from Watson (2000) who found that IT staff were least satisfied with management, lack of communication, and internal policies.

Research Question 2

Research question 2 asked: *Is there a significant difference in: (a) overall, (b) intrinsic, and (c) extrinsic job satisfaction based on: (a) occupational area, (b) age, (c) gender, (d) length of employment, and (e) educational level for Andrews University employees?*

This study found that overall job satisfaction was related to age and educational level. Intrinsic and extrinsic job satisfaction were related to occupational area and educational level, with extrinsic job satisfaction also being related to age.

Consistent with previous findings (Armstrong, 1971; Arthur, 1987; Sompong, 1990; Wanous, 1974) this study demonstrated that the levels of intrinsic and extrinsic job satisfaction were not the same for different occupational groups. In agreement with Niehoff (1995), the investigation found that administrators had significantly higher levels of satisfaction with the extrinsic aspects of their job than their counterparts who were faculty, hourly staff, or salaried staff. A comparison of the mean scores for the extrinsic job-satisfaction factors reveals that AU administrators seem to be more satisfied than all other occupational subgroups with their job security, relations with superiors, status, and
working conditions. Since the University cannot offer a competitive salary to its employees as compared to public educational institutions, AU administrators may feel relatively safe in their positions with less fear of being replaced than in the corporate sector. At the same time administrators may enjoy their status at the institution as being called “Dean” or “Vice President”. They may also appreciate better working condition than other employees, such as better offices or having the support of a secretary. Further, AU administrators seem to be on top of the chain of command at the institution, and may, therefore, appreciate more freedom at work and less restrictions from superiors. Finally, frequent meetings among the University's administrators as a group may facilitate the existence of AU administration as a potential “subculture”.

Consistent with Sudsawasd (1980) and Latham (1998) it was found that faculty had significantly higher levels of intrinsic job satisfaction than employees who were salaried staff. A comparison of the mean scores for the intrinsic job-satisfaction factors reveals that AU faculty seems to be more satisfied than all other occupational subgroups with their work and professional growth. Considering the nature of teaching and research, it could be reasoned that faculty may experience their work as more interesting, varied, and meaningful than other employees at the University. In addition, faculty seem to have more chances to participate in professional or personal growth and learn something new.

Contrary to the expectations, no significant difference was found for overall job satisfaction between the occupational subgroups. However, it may be noted that results were close to being significant ($p = .076$) with somewhat higher mean scores for
Consistent with the results of previous investigations (Dennis, 1998; Dewar & Werbel, 1979; Gibson & Klein, 1971; Hullin & Smith, 1965; Hunt & Saul, 1975) this study found that older employees had a significantly higher level of overall and extrinsic job satisfaction than their younger colleagues. It was shown 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, 41-50 years). These results are in agreement with Khillah (1986) who found teachers in their 50s being most satisfied with their jobs. It seems to be reasonable that employees older than 50 years may display higher levels of extrinsic job satisfaction. One can argue that employees in this age range have most likely achieved the status and economic stability they desired. As a result the salary level is either high due to the years of service or one may have accepted one's salary as most economic goals are reached. It seems also that job security becomes a more important factor for employees older than 50 as adaptation to changes in life and the job market may become more difficult and new job opportunities are more limited. Finally, it can be considered that after many years of service one may have well adapted to the working conditions, organizational policies, and interpersonal work relationships (peers, students, supervisor) of the organization.

Contrary to the expectations, no significant differences were found for intrinsic job satisfaction among the age groups. This could suggest that the intrinsic facets of a job may be less dependent on age than the extrinsic areas of an occupation. It could be argued that the intrinsic areas of job satisfaction, such as achievement, recognition,
advancement, growth, responsibility, and work itself, may have the same importance throughout a life-time, while many extrinsic rewards of a job may be either better achieved with increasing age (e.g., salary, status, job security, relations with superior) or be of less importance for the aging employee (e.g., working condition, organizational policy and administration, and supervision).

Studies regarding the relationship between job satisfaction and gender have shown inconsistent results. While some studies found that males were more satisfied with their jobs than females (Arthur, 1987; Gannon et al., 1980; Haynes, 1983; McNeece, 1981; Quinn & Shepard, 1974; Quinn et al., 1971; Smith & Plant, 1982) other investigations pointed to a higher job satisfaction for females (Hill, 1983; McNeel, 1984). This study was in agreement with a third set of findings (Blank, 1993; Hullin & Smith, 1964; Iiacqua & Schumacher, 1995; Quinn et al., 1974; Sauser & York, 1978; Smith & Plant, 1982) that did not reveal any significant differences for overall, intrinsic, and extrinsic job satisfaction between males and females. This may suggest an equal work climate for males and females at the university.

Consistent with Niehoff (1995) and Blank (1993), this study revealed significant differences in the levels of overall, intrinsic, and extrinsic job satisfaction for different levels of education for Andrews University employees. In agreement with Blank (1993), this investigation found that employees holding a doctoral degree were most satisfied with their jobs. No significant differences were found between the levels of overall, intrinsic, and extrinsic job satisfaction among employees who had a BA, associate, or professional degree and employees with a master's degree. Unexpectedly, this study
found a significant difference in overall job satisfaction between employees with a doctoral or high-school degree and employees with a master’s or bachelor, associate, or professional degree. These findings were also partially true for intrinsic and extrinsic job satisfaction. Employees holding a doctoral degree had significantly higher levels of intrinsic job satisfaction than their counterparts with a master’s degree or bachelor, associate, or professional degree. In addition, Andrews employees with a high-school degree were significantly more satisfied with the intrinsic facets of their jobs than employees with a BA, associate, or professional degree. A significant difference in the levels of extrinsic job satisfaction was found between employees with a doctoral degree and employees who had a master’s degree or bachelor, associate, or professional degree. It seems to be reasonable that employees with a doctoral degree are satisfied with their jobs as they are most likely to have achieved a desired job position. In contrast, AU employees with a master’s or BA degree may be affected by potential promotion blockages resulting in not reaching their desired position and consequently lower levels of job satisfaction. High levels of job satisfaction for employees with a high-school degree could be explained by reasoning that workers with a high-school degree may be more willing and content than more educated employees to evaluate their work as meaningful at AU and appreciate the safety of the University’s environment. In addition, the educational and other benefits of the organization may contribute to this finding.

Although previous studies (Avi-Itzhak, 1988; Khillah, 1986; Niehoff, 1995) have found different levels of job satisfaction based on the length of employment, this study did not show significant differences in the levels of overall, intrinsic, and extrinsic job satisfaction.
based on length of employment for Andrews University employees. No visible explanation was found for these results. Length of employment may not have a significant impact on the levels of job satisfaction at Andrews University.

Research Question 3

Research question 3 asked: *Is there a significant difference in organizational commitment based on: (a) occupational area, (b) age, (c) gender, (d) length of employment, and (e) educational level for Andrews University employees?*

This investigation revealed that organizational commitment was related to age and educational level. In agreement with Niehoff (1995) this study did not find significant differences in the levels of organizational commitment between faculty, administrators, hourly staff, and salaried staff. Such results may indicate that AU's occupational subgroups are equally committed to working for the organization.

Consistent support was found for a positive relationship between organizational commitment and age (Angel & Perry, 1981; Fukami & Larson, 1984; Hrebiniak, 1974; Morris & Sherman, 1981; Sheldon, 1971; Stevens et al., 1978). In agreement with such findings, this study revealed that employees between the ages of 20-30 were significantly less committed to the organization than their counterparts in the higher age groups. In addition, the mean scores for organizational commitment showed a steady increase with rising age. An increase of organizational commitment with age could be explained by several factors: As mentioned before, many extrinsic rewards of a job may be better achieved with increasing age (e.g., salary, status, job security, relations with superior),
and, therefore, positively influence organizational commitment. In addition, it seems likely that the aging employee may be more in agreement with the goals and values of the institution as chances are higher that he or she may have significantly contributed to the organization's values, direction, and change. Finally, a similar tendency may apply for organizational commitment as for job satisfaction. As older employees' adaptability to changes in the job market and new job chances decrease, their commitment to the organization is likely to increase. In contrast, the youngest group of employees (ages 20-30) may have the least commitment to the organization as many of its representatives may be students with significantly better career perspectives in different organizations outside the University.

While different studies (Angel & Perry, 1981; Grsuky, 1966; Hrebiniaik & Alluto, 1972) 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 Stevens et al. (1978), however, this study did not find significant gender differences in organizational commitment. As mentioned before related to job satisfaction this may indicate a work climate of equality for both genders at AU.

Previous studies (Morris & Sherman, 1981; Steers, 1977) have concluded that less educated employees showed higher levels of organizational commitment than their higher educated counterparts. The findings of this study showed partial support for such assumption. Employees with a high-school degree were found to have significantly higher levels of organizational commitment than their counterparts with a master's,
bachelor, associate, or professional degree. Contrary to the expectations, this study also revealed high levels of organizational commitment for employees with a doctoral degree. According to the analysis, employees holding a doctoral degree were significantly more committed to the organization than employees with a bachelor, associate, or professional degree. In this context, the findings of Blackhurst et al. (1998) may be considered who found a significant interaction effect for position title and highest degree earned on organizational commitment. Possessing a doctorate in Blackhurst’s study was associated with higher levels of organizational commitment for women in student-affairs positions at the level of director compared to lower levels of organizational commitment for women who held a doctorate but worked in associate and assistant student affairs positions. Since most Andrews employees with a doctoral degree are likely to hold an appropriate teaching or administrative position, their levels of organizational commitment can be expected to be higher than the organizational loyalty of those employees with a bachelor, associate, or professional degree. It can be argued that employees with a bachelor, professional, or associate degree are more likely to be students at the University while pursuing educational goals. As a result they may be more inclined to leave the organization for a better job after the completion of their studies. This may also be true, but to a lesser extent, for employees with a master’s degree. In contrast, employees with a high school degree may be more aware of limited chances for better positions, and, therefore, be more inclined to remain with the organization.

General agreement was found among researchers (Fukami & Larson, 1984; Morris & Sherman, 1981; Salancik, 1977; Sheldon, 1971; Stevens et al., 1978; Welsch & LaVan,
1981) regarding the existence of a positive relationship between length of employment and organizational commitment. Contrary to these findings, this study did not reveal significant differences in the levels of organizational commitment based on length of employment for Andrews University employees. Similar to the missing relationship between job satisfaction and length of employment, no explanation was found for these results. Length of employment may not have a significant impact on the levels of organizational commitment for Andrews University employees.

Research Question 4

Research question 4 asked: Is there a significant relationship between overall, intrinsic, and extrinsic job satisfaction and organizational commitment for Andrews University employees?

This study found high correlations between overall and intrinsic job satisfaction, as well as between overall and extrinsic job satisfaction. Intrinsic and extrinsic job satisfaction were moderately correlated. Moderate correlations were also found between organizational commitment and overall job satisfaction, intrinsic job satisfaction, and extrinsic job satisfaction. All six correlations were significant at the 0.01 level.

Although previous studies (Aranya & Ferris, 1984; Aranya & Valency, 1986; Aranya et al., 1982; Bateman & Strasser, 1984; Harell, 1990; Harwell et al., 1986; Hearn, 1990; Lachman & Aranya, 1986; McGregor et al., 1989; Meixner & Bline, 1989; Mowday et al., 1974b) have proposed different causal orderings between job satisfaction and organizational commitment, all have found a significant, positive relationship
between the two variables. Consistent with previous findings (Brooke et al., 1988; Hall & Schneider, 1972; Meyer & Allen, 1987; Mowday et al., 1979) this study found correlations between job satisfaction and organizational commitment in the range of .50. While the correlation between overall job satisfaction and organizational commitment as well as extrinsic job satisfaction and organizational commitment were in the high .50s ($r = .58$ and $r = .56$), the correlation between intrinsic job satisfaction and organizational commitment was in the low .50s ($r = .52$). High correlations in the .90s were found between overall job satisfaction and intrinsic job satisfaction, and overall job satisfaction and extrinsic job satisfaction. A moderate correlation in the .70s was shown between intrinsic and extrinsic job satisfaction. Such correlations are expected due to the close relationships between the three job-satisfaction facets.

Research Question 5

Research question 5 asked: *Is there a linear relationship between organizational commitment and the 15 job-satisfaction factors including religious commitment for Andrews University employees?*

This study revealed a linear relationship between organizational commitment and the 15 job-satisfaction factors including religious commitment. The seven-predictor model explained 44.2% of the variance of organizational commitment for all AU employees. The model included organizational policy and administration, religious commitment, work itself, salary, relations with students, advancement, and working conditions. While correlations between organizational commitment and the 15 job-
satisfaction factors including religious commitment were generally in the .20s and .30s, a stronger relationship was revealed between organizational commitment and organizational policy and administration ($r = .482$). Regression analyses conducted for the four occupational subgroups at Andrews University revealed different sets of predictor models. A six-predictor model for AU faculty included organizational policy and administration, work itself, religious commitment, salary, working conditions, and achievement. Variables in the five-predictor model for AU administrators were growth, religious commitment, responsibility, job security, and relations with students. The four-predictor model for AU hourly staff included organizational policy and administration, religious commitment, salary, and relations with students. Three variables were part of a regression model for AU salaried staff. These variables are: responsibility, religious commitment, and recognition.

The seven-predictor model including all AU employees explained 44.2% of the variance of organizational commitment. The results indicated that a higher amount of organizational commitment in the model was explained by extrinsic variables (27.2%) as compared to intrinsic factors (7.3%). These findings seem consistent with previous results (Angle & Perry, 1983; Loscocco, 1990), suggesting that extrinsic rewards were more important than intrinsic rewards in predicting organizational commitment. Curry et al., (1986) had concluded that organizational factors were better predictors for organizational commitment than job characteristics. It seems noteworthy that the four variables that were ranked lowest on job satisfaction for all AU employees (e.g., salary, organizational policy and administration, advancement, and working conditions)
explained 27.7% of the variance of organizational commitment in the model. All of these factors were also significant predictors of organizational commitment by themselves. Previous studies had also found that salary (Brookover, 2002; Reddy, 1996), organizational policies and administration (Watson, 2000), advancement (Reddy, 1996), and working conditions (Jones, 1998) were significant predictor of organizational commitment. This may suggest that improving AU employee's satisfaction with salary, organizational policy and administration, advancement, and working conditions could potentially increase their levels of organizational commitment.

Religious commitment appeared as a significant predictor of organizational commitment for all AU employees as well as for all four occupational subgroups. In all of the regression models religious commitment appeared in the second or third position. This may indicate how AU employees' faith and commitment to the church is also reflected in their commitment to work for the university. In this context, it could be argued that some AU employee potentially see their work at Andrews as a partial fulfillment of their Christian mission as previously found by Rice (1990) and Rutebuka (1996). Another explanation for this finding could be the fact that parts of the definitions for organizational and religious commitment may overlap. While the definition for organizational commitment contains a strong belief in and acceptance of the organization's goals and values, the religious commitment definition includes a strong belief in and acceptance of the church's values and goals.

Organizational policies and administration was the strongest predictor of organizational commitment in the model for all AU employees. As previously mentioned
this result was in agreement with Watson's findings (2000) that poor management, lack of communication, and internal policies were important contributors for IT professionals to seek for a change in employer. It could be possible that AU employees show a lower willingness to exert efforts for the organization and a lower desire to stay with the university as a result of dissatisfaction with poor management practices at the institution, ineffective communication, and ambiguous personnel policies. In this context it appears that even a high religious commitment of AU employees cannot make up for daily frustrations with organizational policies and administration at work.

Different sets of factors were found in the regression models of the four occupational subgroups at AU. Organizational commitment for AU faculty was most strongly predicted by organizational policy and administration, work itself, and religious commitment. The six-predictor model explained a noticeable amount of the variance of organizational commitment (55.6%). Additional factors included salary, working conditions, and achievement. AU faculty had indicated significant higher levels of intrinsic job satisfaction as indicated by factors like work itself and achievement in this model. It could be reasoned that faculty may derive a sufficient amount of satisfaction and meaning through engagement in teaching, research, and other professional activities. As result of the satisfaction in these areas, faculty may be more motivated to stay with the university. Lower levels of satisfaction for AU faculty were reported in the areas of salary, organizational policy and administration, and working conditions. As previously mentioned for all AU employees, research findings have suggested that salary (Brookover, 2002; Reddy, 1996), organizational policies and administration (Watson,
2000), and working conditions (Jones, 1998) were significant predictors of organizational commitment. This may suggest that management, salary, and working conditions are important factors when attempting to improve AU faculty's loyalty to the organization.

The highest amount of variance for organizational commitment (70.8%) was explained in a five-predictor model for AU administrators. The strongest predictor in this model was growth followed by religious commitment, responsibility, job security and relations with students. All five factors were significant factors in the model and by themselves. AU administrators had indicated high levels of satisfaction with job security, relations with students, and responsibility. As a result of less competitive salaries for AU employees, administrators may perceive a higher level of job security and may, therefore, be less likely to leave the organization for another job. In addition, the perception of meaningful duties and responsibilities at the organization as well as the rewarding sides of working with students may contribute to organizational loyalty. AU administrators revealed lower levels of satisfaction in the area of professional growth. This could indicate a potential feeling of AU administrators to be trapped in the stress and routine of their jobs without sufficient time or funds for continued professional growths and development. Several studies (Hagevik, 2001; McGinn, 1991; Sarabia, 2002) have suggested that training and effective career development were significant predictors of organizational commitment. AU management should, therefore, offer AU administrators more opportunities for professional growth and development in order to encourage organizational loyalty.

A four-predictor model explained 39.8% of the variance of organizational
commitment for AU hourly staff. Similar to results for AU faculty, organizational policy and administration and religious commitment were the two strongest predictors of organizational commitment for AU hourly staff. Additional factors were salary and relations with students. While hourly staff seem to be satisfied with their relations with students, little satisfaction was shown for salary, and organizational policy and administration at the University. These results may have similar reasons as provided for AU faculty and indicate areas of improvement when attempting to increase organizational loyalty for hourly staff.

Finally, a three-predictor model explained only 24.7% of the variance of organizational commitment for salaried staff. Although all three predictors (responsibility, religious commitment, recognition) explain a significant amount of variance for organizational commitment by themselves, this model seems to explain a relatively small amount of variance related to the measured construct. Therefore, it could be reasoned that the organizational commitment of managers, supervisors, and accountants at AU may be better predicted by factors that were not part of this investigation. However, it seems noteworthy that salaried staff was somewhat satisfied with their level of responsibility but not with the recognition for their work. It seems possible that managers and supervisors at the University may derive work motivation and increase job commitment through their responsibility at work. In agreement with this assumption, Jones (1998) had found that responsibility was significantly related to organizational commitment. Managers and supervisors may be required to work extra time for special events at the University or need to adapt to the frequent turnover of
student workers. As a result recognition may be an important factor that influences work motivation of AU salaried staff. Consistent with this assumption Reddy (1996) had found that performance recognition had a significant influence on employee turnover. Therefore, conscious efforts should be made by AU management to express more appreciation for the work and efforts of salaried staff at the organization.

Research Question 6

Research question 6 asked: \textit{Does religious commitment have a mediating effect on the relationship between job satisfaction and organizational commitment for Andrews University employees?}

This study found no mediating effect of religious commitment on the relationship between job satisfaction and organizational commitment. Removing the effects of religious commitment changed the correlation between overall job satisfaction and organizational commitment only in an insignificant manner. These findings may suggest that religious commitment does not have a significant influence on the organizational commitment of AU employees in the presence of job satisfaction.

Although research findings have suggested the importance of religion as a significant predictor of organizational commitment for lay Catholics (Ciriello, 1987; Tarr, 1992), no studies were found that analyzed the relationship between religious commitment, job satisfaction, and organizational commitment.

\textbf{Implications for the University}

Andrews University employees have shown moderate degrees of overall, intrinsic,
and extrinsic job satisfaction as well as organizational commitment. These results appear to be consistent across all four occupational subgroups of employees. Andrews employees were most satisfied with their work relationships, and work itself. This may suggest a good work climate at the University. The lowest degree of job satisfaction was found in regard to salary, and organizational policy and administration. Additional factors that were closer to the neutral response range were advancement, working conditions, recognition, and growth.

Aon Consulting (1998) found that salary (62%) and benefits (57%) were the two most important factors for attracting and keeping employees. Therefore, it might be beneficial to rethink the salary system for Andrews University as compared to other universities (especially for faculty and hourly staff). This may include salary raises, improved benefit packages, bonuses for good performance, and other reward programs.

In addition, it would be helpful to explore more specifically the areas of organizational policy and administration that may prevent employees from being more satisfied with their jobs. These areas seem especially relevant for AU faculty and hourly staff and should include: management, clarity of communication, adequacy of resources, and personnel policies. AU executives could invite representatives of all occupational subgroups (especially faculty and hourly staff) for a free lunch or dinner in order to listen to feedback from employees about strengths and weaknesses of AU organizational policies and administration. In the process AU management should communicate an openness for feedback and suggestions, and offer rewards for constructive ideas. Special attention should be given to the questions if and where AU rules and policies are
potentially too rigid, unspecific, and impersonal; and work expectations are too vague and unrealistic.

Another area for necessary improvement at the University is related to advancement. AU management should examine and potentially improve the fairness and openness of promotion guidelines (especially for hourly staff), provide more mentoring support for advancement candidates, and offer alternative positions if no advancement is possible. It is also important to consider that advancement may have a different meaning for individuals. For this reason the organization needs to work with individual employees to help them recognize, define, and re-define their goals throughout their careers at AU.

The organization will also benefit from a stronger emphasis on praise and personal acknowledgment of employee's performance by AU management (especially for salaried staff). This could be achieved by rewarding employees’ good performance and extra effort through rewards, such as special dinners, picture rewards ("Worker of the Month"), vacation packages, gifts, applause, cards, and e-cards.

Further, AU employees should be given more opportunities for professional and personal development (especially for administrators). For this reason the University should offer its employees more time for reflection on personal and professional goals, frequent training opportunities, chances for continuous education, and opportunities for networking, collaboration, and role changes.

AU management may also be advised to further improve physical work conditions. This may include: perception of reasonable amounts of work, adequate
temperature control and ventilation for all employees, up-to-date and adequate equipment and supplies, lighting conditions, adequate space, comfortable chairs, and flexible work stations.

Consistent with previous findings, AU faculty displayed the highest level of intrinsic job satisfaction, and administrative personnel showed the highest level of extrinsic job satisfaction. The equal levels of job satisfaction and organizational commitment between males and females may suggest that Andrews University offers an equal work atmosphere for both genders.

While organizational commitment seemed to increase steadily with age, job satisfaction seemed to be significantly higher only for employees older than 50 years of age. It further appeared that employees with a master's degree or bachelor, associate, or professional degree showed significantly lower levels of job satisfaction and organizational commitment than their counterparts with a doctoral or high-school degree. AU management may, therefore, benefit from strategies that increase job satisfaction and organizational commitment for its younger employees, and employees with a bachelor, associate, professional, or master's degree. Such strategies may include: increased tuition benefits, flexible work schedules and work arrangements, free gym memberships, good lunch benefits, raising younger employees' levels of responsibility, perception of challenging and meaningful work, and time for fun and friendships in the workplace.

Recommendations for Future Research

Future studies at private religious universities would benefit from further
investigations of job satisfaction, organizational and religious commitment, and the relationship between these constructs. Significant factors relating to job satisfaction and organizational commitment might be explored in more detail comparing religious and non-religious universities. Open-ended questions regarding satisfying and dissatisfying factors related to job satisfaction may be part of future investigations in order to allow for more accurate conclusions about the specific reasons for presented responses.

Job satisfaction and its intrinsic and extrinsic facets could be studied in their relationships to other, less investigated variables, such as communication, meaning, pay and promotion rules, and opportunity to have an impact on the organization. Likewise, organizational commitment could be explored in how it relates to other variables, such as formalization of rules, functional interdependence of employees, centralization of authority, acknowledgment of the importance of family life, and perception of challenging work. In addition, future research could benefit from further exploring whether organizational commitment is differently related to the intrinsic and extrinsic facets of job satisfaction. Finally, other variables might receive further investigation to see if there is a potentially mediating effect on the relationship between job satisfaction and organizational commitment.
APPENDICES
Andrews Employee Survey

Occupational Area:  
- Faculty  
- Hourly Staff  
Gender:  
- Male  
- Female  
Educational Level:  
- High School  
- BA, prof. or assoc. degree  
- Masters degree  
- Doctoral degree  
Years working at Andrews:  
- 0-4 years  
- 5-10 years  
- 11-20 years  
- 21-30 years  
- 31-40 years  
- 41-50 years  
Age:  
- 20-30 years  
- 31-40 years  
- 41-50 years  
Type of work:  
- Full-time  
- Half-time

Please circle the degree of your satisfaction with the following areas of your current work at Andrews University.  
1 - Very Dissatisfied, 2 - Dissatisfied, 3 - Neutral, 4 - Satisfied, 5 - Very Satisfied

1. Achievement: Successful or unsuccessful completion of a job, solution or non-solution of problems; seeing the results of one's work.  
   1 2 3 4 5

2. Advancement: Change in status within the organization as a result of performance (i.e., promotion, lack thereof, or demotion).  
   1 2 3 4 5

3. Growth: Changes in the work situation such as advancement is more or less likely; increase or decrease in chances to learn.  
   1 2 3 4 5

4. Interpersonal Relations (peers): Pleasant or unpleasant interactions with persons at the same level in the organizational hierarchy.  
   1 2 3 4 5

5. Interpersonal Relations (students): Pleasant or unpleasant interactions with students.  
   1 2 3 4 5

6. Interpersonal Relations (superiors): Pleasant or unpleasant interactions with superiors that may or may not be directly relevant to task accomplishment.  
   1 2 3 4 5

7. Job Security: Clear indications of the likelihood or unlikelihood of continuous employment, such as tenure, permanent contracts, budgetary stability, assurance of continued work.  
   1 2 3 4 5

8. Organizational Policy & Administration: Adequacy or inadequacy 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 acknowledgment by management, reward that is directly related to task accomplishment.  
   1 2 3 4 5

10. Responsibility: Presence or absence of autonomy in carrying out assignments; increase or decrease of authority over others; accountability for task accomplishment.  
    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 decor, symbolic titles, etc.  
    1 2 3 4 5

13. Supervision: Competence or incompetence, fairness or unfairness, and efficiency or inefficiency of superiors.  
    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 or work, such as the amount of work, temperature control, ventilation, adequate equipment and supplies.  
    1 2 3 4 5

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APPENDIX 2

LETTER OF APPROVAL FROM THE ANDREWS UNIVERSITY INSTITUTIONAL REVIEW BOARD
April 20, 1999

Ralph Schroeder
10459 Old US 31
Berrien Springs, MI 49103

Dear Ralph

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS
Review Category: Expedited Action Taken: Approved Advisor: Jimmy Kijai
Protocol Title: Intrinsic and Extrinsic Job Satisfaction and its Relationship to Organizational and Religious Commitment at Andrews University

On behalf of the Institutional Review Board (IRB) I want to advise you that your proposal has been reviewed and approved. 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,

Michael D Pearson
Graduate Assistant
Office of Scholarly Research

PS: Copy of the original previously signed by James R. Filter, PhD.
April 15, 1999

Dear Andrews University Employee:

As a doctoral candidate in the Andrews University Educational/Organizational Psychology Program, I am kindly requesting your assistance in completing my dissertation. The study is designed to identify factors associated with job satisfaction and organizational commitment among Andrews University employees.

Your involvement in this study would only require the completion of the two sided Andrews Employee Survey and its return via the (stamped) self addressed envelope in the next two weeks.

All responses will be treated with confidentiality. Please, do not write your name anywhere on the form. The number code in the right upper corner of the questionnaire will only be used to avoid sending reminders to participants who have already responded. The number code will be eliminated by a neutral party (Dr. Jerry Thayer) as soon as the questionnaires are returned so that confidentiality is not jeopardized.

Completion of this form is voluntary. You are not obliged to return the survey form; however, your cooperation will ensure the success of this study. By returning the survey you are expressing your implied consent to be part of this research project.

If you have any questions regarding the questionnaire or the study, please feel free to call me at (616)-471-9323 or send an email to: schroeder@andrews.edu. You can also contact Dr. Jimmy Kijai by phone: (616)-471-6240 or email: kijai@andrews.edu.

Thank you in advance for your efforts,

Sincerely,

Ralph Schroeder

Ralph Schroeder

Dr. Jimmy Kijai
Chair of the Dissertation Committee
May 12, 1999

Dear Andrews University Employee:

Two weeks ago you received an Andrews Employee Survey with a kind request for your assistance in completing my dissertation. I am aware that all of us have a busy work schedule. But in favor of a better response rate which strongly determines the success of this study, I chose to use this gentle reminder to encourage your participation. The completion of the two sided survey should not take longer than 10 minutes. All responses will be treated with confidentiality. The number code in the right upper corner of the questionnaire was intended to avoid sending reminders to participants who have already responded. The number code will be eliminated by a neutral party (Dr. Jerry Thayer) as soon as the questionnaires are returned.

If you have already responded or have chosen not to participate, please discard this letter. Completion of this form is voluntary. You are not obliged to return the survey form; however, your cooperation will ensure the success of this study. By returning the survey you are expressing your implied consent to be part of this research project.

For any questions, please feel free to call me at 471-9323 or send an email to: schroder@andrews.edu. You can also contact Dr. Jimmy Kijai (phone: 471-6240; or email: kijai@andrews.edu).

Thank you in advance for your efforts,

Sincerely,

Ralph Schroeder
May 23, 1999

Dear Andrews University Employee:

This is the last reminder for the Andrews Employee Survey. For this reason the number code has been eliminated. The completion of the two sided survey should not take longer than 10 minutes. In favor of a better response rate which strongly determines the success of this study, I'm kindly encouraging your participation for the last time. All responses will be anonymous, and treated with confidentiality.

If you have already responded or have chosen not to participate, please discard this letter. Completion of this form is voluntary. You are not obliged to return the survey form; however, your cooperation will ensure the success of this study. By returning the survey you are expressing your implied consent to be part of this research project.

For any questions, please feel free to call me at 471-9323 or send an email to: schroder@andrews.edu. You can also contact Dr. Jimmy Kijai (phone: 471-6240; or email: kijai@andrews.edu).

Thank you in advance for your efforts,

Sincerely,

Ralph Schroeder
Berrien Springs, Michigan 49104/(616)471-7771
REFERENCE LIST


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


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