

INFLUENCE OF PERCEIVED ORGANIZATIONAL SUPPORT, ORGANIZATIONAL  
COMMITMENT, AND PROFESSIONAL COMMITMENT ON TURNOVER INTENTIONS  
OF HEALTHCARE PROFESSIONALS IN JAMAICA

BY

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A DISSERTATION

Submitted to

The H. Wayne Huizenga School of Business and Entrepreneurship

Nova Southeastern University

In partial fulfillment of the requirements for the degree of

DOCTOR OF BUSINESS ADMINISTRATION

2005

UMI Number: 3197584

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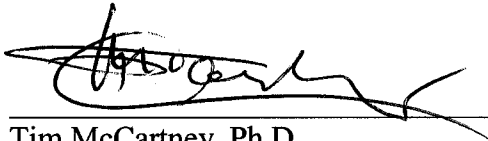
Influence Of Perceived Organizational Support, Organizational Commitment, And Professional  
Commitment On Turnover Intentions Of Healthcare Professionals In Jamaica

By

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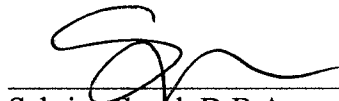
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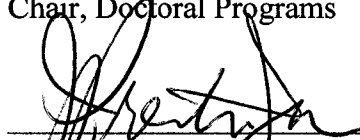
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## CERTIFICATION STATEMENT

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## Abstract

### Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intentions of Healthcare Professionals in Jamaica

By

Valerie O. Kerr

This study investigated the influence that perceived organizational support, organizational commitment, and professional commitment have on the turnover intentions of nurses, pharmacists, and physicians in Jamaica. The core theoretical frameworks for this study were the Hom-Griffeth Turnover Model, the Meyer and Allen (1991) Three-Component Model of organizational commitment, and Eisenberger et al.'s (1986) organizational support theory.

The purpose of this study was to empirically examine employees in the healthcare sector in Jamaica with regard to: (1) the relationship between perceived organizational support, organizational commitment, professional commitment, and turnover intention; (2) the strongest contributor to turnover intention among the independent variables included in the study; (3) the variables that moderate relationships within the turnover model; (4) the difference in the levels of perceived organizational support, organizational commitment, professional commitment, and turnover intention among physicians, pharmacists, nurses, and clerical/administrative staff; and (5) the relationship of selected demographic variables with perceived organizational support, organizational commitment, professional commitment, and turnover intention.

The survey instrument consisted of the following: Eisenberger et al.'s (1986) Survey of Perceived Organizational Support (SPOS); Meyer et al.'s (1993) Revised Organizational Commitment Questionnaire; Meyer and Allen's (1991) Occupational Commitment Questionnaire; Eisenberger et al.'s (2001) Felt Obligation Questionnaire and Exchange Ideology Questionnaire; and the Staying or Leaving Index (Bluedorn, 1982). Data were gathered from 227 employees of four state owned hospitals in Jamaica. Hypothesis tests included Pearson's product-moment correlation, partial correlation, One-Way ANOVA, and multiple regression analysis.

The results revealed: a significant negative relationship between turnover intention and perceived organizational support (POS), affective organizational commitment (AC), continuance commitment (CC), professional affective commitment (PAC), and professional continuance commitment (PCC); POS as the greatest contributor to reducing turnover intention; felt obligation to be an intervening variable in the POS-AC relationship; the CCS not to be comprised of two interpretable subscales; professional commitment to be a more proximal indicator of turnover intention than AC; a significant difference in POS, AC, CC, PAC, and turnover intention across the four occupational groups, but not in PCC; significant differences in the relationship between professional commitment and AC for managerial and non-managerial staff; and relationships between a variety of demographic variables and POS, AC, CC, PAC, PCC and turnover intention, but not as postulated.

## Acknowledgements

I express my gratitude to the professors on my dissertation committee, Dr. Timothy McCartney, Dr. Frank Cavico, and Dr. Sabrina Segal. Special thanks are extended to Dr. Segal for her encouragement and guidance early in the dissertation process in completing the Prospectus, for consistently urging me along the path to completion, and for always caring about my well being when Jamaica was threatened by numerous hurricanes. I am also beholden to Dr. Barry Barnes who initially piqued my interest in the organizational behavior field and, more specifically, in organizational commitment. His insistence that research papers reflect the dissertation research guidelines made compliance with the dissertation process that much easier.

My sincere appreciation goes to the CEOs of the four hospitals that participated in the study - Mr. Everton Anderson, Mrs. Sheryl Cameron, Mrs. Beverley Needham, and Mr. Percival Cameron – and the Regional Directors of the three participating Regional Health Authorities in Jamaica – Mr. Keith Shakespeare, Dr. Sheila Campbell Forrester, and Ms. Catherine Gregory - who give the initial approval for the hospitals to be included in the study.

I wish to acknowledge my family who showed patience and understanding amidst the times of neglect as I sought to complete this onerous task, and who were my staunch advocates as I pursued each step of the process.

I also owe a debt of gratitude to my colleagues at Health Corporation Limited and my church brethren who unceasingly spoke words of assurance, expressing faith in my capability to commit myself with excellence.

Last, but certainly not least, I give heartfelt praise to Almighty God who strengthened me with the resolve to endure to the end and who provided me with the required wisdom, knowledge, and understanding to make this dissertation an accomplished work.

## TABLE OF CONTENTS

	Page
List of Tables.....	ix
List of Figures.....	xii
Chapter	
I. INTRODUCTION.....	1
Background of the Problem.....	1
Purpose of the Study.....	8
Theoretical Background.....	9
Significance of the Study.....	13
Statement of the Problem.....	17
Research Questions.....	18
Definition of Key Terms.....	21
Organization of the Study.....	23
Summary.....	23
II. LITERATURE REVIEW.....	24
Turnover.....	24
Turnover Intention.....	27
Attitudinal Antecedents of Turnover.....	30
Personal Characteristics and Turnover.....	31
Work Commitment.....	32
Organizational Commitment.....	34
Meyer and Allen's Three Component Model.....	39
Relations among the Components.....	42
Dimensionality of Continuance Commitment.....	43
Generalizability of the Model outside North America.....	44
A General Model of Workplace Commitment.....	45
Professional Commitment.....	47
Professional Commitment and Organizational Commitment.....	49
Perceived Organizational Support.....	53
Perceived Organizational Support and Organizational Commitment.....	55
Perceived Organizational Support and Professional Commitment.....	58
Organizational Commitment, Professional Commitment, POS, and Turnover Intention.....	59
Summary.....	64

Chapter	Page
III. METHODOLOGY.....	65
Research Design.....	65
Population and Sample.....	65
Study Variables.....	66
Measurement of Variables.....	67
Perceived Organizational Support.....	67
Organizational Commitment.....	67
Professional Commitment.....	68
Turnover Intention.....	68
Felt Obligation.....	68
Exchange Ideology.....	68
Degree of Professionalization.....	69
Position in the Organizational Hierarchy.....	69
Demographic Variables.....	70
Reliability and Validity Measures.....	71
Perceived Organizational Support.....	72
Organizational Commitment.....	73
Professional Commitment.....	78
Turnover Intention.....	79
Felt Obligation.....	79
Exchange Ideology.....	80
Research Questions and Hypotheses.....	80
Data Collection Procedures.....	93
Statistical Analysis.....	94
Dimensionality.....	95
Reliability.....	96
Validity.....	97
Descriptive Statistics.....	98
Hypothesis Testing.....	98
Summary.....	100
IV. ANALYSIS AND PRESENTATION OF FINDINGS.....	101
Description of Responses.....	101
Analysis of the Scales.....	108
Perceived Organizational Support (POS) Scale.....	109
Affective Organizational Commitment Scale (ACS).....	109
Continuance Organizational Commitment Scale (CCS).....	110
Felt Obligation Scale (FOS).....	111
Exchange Ideology Scale (EIS).....	111
Professional Affective Commitment Scale (PACS).....	112



Chapter	Page
Professional Continuance Commitment Scale (PCCS).....	113
Staying Leaving Index (SLI).....	114
Summary.....	114
Hypothesis Testing.....	116
Summary.....	148
 V. DISCUSSION AND CONCLUSIONS.....	 151
Overview of the Study.....	151
Summary and Interpretation of Results.....	151
Implications of the Findings.....	166
Theoretical Implications.....	166
Practical Implications.....	169
Limitations of the Research.....	172
Recommendations for Future Research.....	174
Summary.....	175
 Appendix	
A. Questionnaire.....	176
B. Letter and Consent Form for Survey Respondents.....	183
C. Letters Requesting Permission to Use Survey Instruments.....	187
D. Letters Requesting Permission to Conduct Survey.....	190
E. Descriptive Statistics Output.....	194
F. Factor Analysis Output.....	203
G. Hypothesis Testing Output.....	208
 REFERENCES.....	 235
 BIBLIOGRAPHY.....	 253

## LIST OF TABLES

Table	Page
1. Population Composition.....	66
2. Internal Consistency Reliabilities for Affective and Continuance Commitment Scales.....	76
3. Average Weighted Reliabilities for ACS and CCS.....	76
4. Questionnaire Distribution Data.....	94
5. Response Rates by Occupation.....	102
6. Frequency Distribution of Occupations.....	103
7. Composite Occupational and Professional Data of Respondents.....	104
8. Composite Demographic Data of Sample.....	106
9. Perceived Organizational Support Factor Loadings.....	109
10. ACS Factor Loadings.....	110
11. CCS Factor Loadings.....	111
12. FOS Factor Loadings.....	112
13. EIS Factor Loadings.....	112
14. PACS Factor Loadings.....	113
15. PCCS Factor Loadings.....	114
16. SLI Factor Loadings.....	114
17. Revised Scale Constructs and Reliabilities.....	115
18. Descriptive Statistics for Major Variables.....	117
19. Correlation (Pearson) between POS, ACS, CCS, PACS, PCCS and Turnover Intention.....	118

Table	Page
20. Descriptive Statistics for POS and ACS by Occupation.....	119
21. Descriptive Statistics for FOS by Occupation.....	120
22. Descriptive Statistics for POS, ACS, and Turnover Intention by Occupation.....	121
23. Descriptive Statistics for POS and CCS by Occupation.....	122
24. Descriptive Statistics for POS, CCS, and Turnover Intention by Occupation.....	123
25. Descriptive Statistics for POS, PACS, and PCCS by Occupation.....	125
26. Descriptive Statistics for ACS, CCS, PACS, and PCCS by Occupation.....	127
27. Partial Correlation Coefficients for Dimensions of Organizational Commitment as intervening variables in the relationship between Dimensions of Professional Commitment and TI.....	128
28. Partial Correlation Coefficients for Dimensions of Professional Commitment as intervening variables in the relationship between Dimensions of Organizational Commitment and TI.....	129
29. Descriptive Statistics for ACS and CCS by Occupation.....	132
30. Descriptive Statistics for POS, FOS, and EIS by Occupation.....	137
31. Correlations (Pearson's) for POS scale and FOS at different levels of Exchange Ideology.....	137
32. Correlations (Pearson's) for AC and PAC at different degrees of professionalization.....	138
33. Correlations (Pearson's) for AC and PCC at different degrees of professionalization.....	139
34. Correlations (Pearson's) for AC and PAC based on position in the organizational hierarchy.....	140
35. Correlations (Pearson's) for AC and PCC based on position in the organizational hierarchy.....	140

Table	Page
36. Correlations (Pearson's) for AC and Turnover Intention at different levels of PAC.....	141
37. Correlations (Pearson's) for AC and Turnover Intention at different levels of PCC.....	142
38. One-Way ANOVA for Occupational Groups.....	143
39. Scheffé Test for Significant Differences in Means Between Occupational Groups.....	144
40. Correlations (Pearson's) for Age, Gender, Marital Status, POS, ACS, CCS, PACS, PCCS and TI.....	146
41. Correlations (Pearson's) for Organizational Tenure, Years of Working Experience, Average Tenure, Professional Tenure, Educational Level, POS, ACS, CCS, PACS, PCCS and TI.....	146
42. Summary of Hypothesis Test Results.....	150
43. Hypothesis Test Results for Research Question 1.....	155
44. Hypothesis Test Result for Research Question 2.....	160
45. Hypothesis Test Result for Research Question 3.....	160
46. Hypothesis Test Result for Research Question 4.....	162
47. Hypothesis Test Result for Research Question 5.....	163
48. Hypothesis Test Result for Research Question 6.....	164
49. Hypothesis Test Results for Research Question 7.....	166

## LIST OF FIGURES

Figure	Page
1. Proposed Turnover Model.....	19
2. Defining Undesirable Turnover (Griffeth & Hom, 2001).....	25
3. Hom-Griffeth Theory of Turnover (Griffeth & Hom, 2001).....	28
4. A General Model of Workplace Commitment (Meyer & Herscovitch, 2001).....	46
5. Revised Turnover Model.....	133

# Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intentions of Healthcare Professionals in Jamaica

## Chapter I

### Introduction

This study seeks to determine the relationship between perceived organizational support, organizational commitment, and professional commitment, and their influence on turnover intentions of healthcare professionals in a developing country, typified by Jamaica. Social exchange theory and reciprocation ideology provide the theoretical framework for the study, with the three dimensional model of organizational commitment developed by Meyer and Allen (1991), and the organizational support theory posited by Eisenberger, Huntington, Hutchison, and Sowa (1986) being the main theories to be tested. The background of the problem, the purpose and significance of the study, statement of the problem, as well as the research questions, are outlined in Chapter I.

#### *Background of the Problem*

Turnover, unlike other workplace behaviors, results in a breach in the relationship between individuals and the organization. Besides the obvious negative effects that staff shortages have on an organization's overall quality of performance, organizations have become increasingly cognizant of the high costs associated with voluntary dysfunctional turnover, namely, costs associated with recruitment, retraining, dislocation of group cohesion, and the loss of tacit knowledge (Chang, 1999; Droege & Hoobler, 2003; Griffeth & Hom, 2001; Numerof & Abrams, 2003). Human resource professionals and researchers project that the cost of one turnover incident ranges from between 93 percent to 200 percent of a leaver's salary, depending

on his or her skill and level of job responsibility. The increased job stress and low morale that develops in those employees who choose to remain, ultimately increases their propensity to leave. This self-perpetuating characteristic of turnover is one of the factors that have contributed to the importance of turnover research (Griffeth & Hom, 2001).

With the advent of increasing global competition for highly skilled, well trained, and increasingly better educated personnel, Michelman (2003) warned that there could be severe repercussions for those organizations that fail to enhance their retention strategy skills.

According to a 2000 U.S. Bureau of Labor statistics report, by 2010 there could be as many as 10 million more jobs available than there are employees in the United States (Michelman, 2003). Consequently, managers are being forced, now more than ever before, to identify the potential causes for high voluntary turnover, thereby equipping themselves to formulate and implement effective strategies to stem the outward flow of their human resources.

Michelman (2003) emphasized that many firms, in reconsidering the importance of employee retention strategies, are finding that the key to retention is found in a strategy that considers both their employees' personal aspirations (career development, recognition, reward) and the aspirations they possess for their organizations. The answer is to create a culture that values employees' work, places importance on their opinions, welcomes employees' ideas, treats people with respect, evaluates and rewards performance, and provides professional development opportunities and leadership that acts with integrity (Michelman, 2003; Pieper, 2003). This approach contributes to the development of strong organizational commitment, an attitudinal concept that has been consistently found by researchers to be a strong predictor of turnover and turnover intention (Hom & Griffeth, 1995; Mills & Blaesing, 2000; Porter, Steers, Mowday, & Boulian, 1974; Steel & Ovalle, 1984; Tett & Meyer, 1993).

Unfortunately, the crucial link between organizational commitment and retention rates has been poorly understood within the healthcare industry (Numerof & Abrams, 2003). The traditionally dominant role of the physician in the healthcare arena has contributed to an inadequate understanding, and devaluation, of the role of the manager (Starr, 1982). Thus, strong management cultures have not been a prevalent feature of the healthcare industry, with investment in management and process infrastructure falling years behind that made in other industries. This management deficiency has been further exacerbated by the overriding goal of achieving greater cost efficiencies, even to the detriment of employee satisfaction (Numerof & Abrams, 2003). The end result is a human resource crisis in healthcare, such that health services worldwide are suffering from a severe shortage of healthcare professionals, including nurses, pharmacists, and to a lesser extent, physicians (Numerof & Abrams, 2003; Pieper, 2003; Schaffner & Ludwig-Beymer, 2003).

Pieper (2003) reported that two out of three healthcare organizations in the U.S. are experiencing labor shortages, with 50 percent reporting long-term vacancies of six months or more in key positions. Whereas there is an ever increasing demand for healthcare services, the labor pool is either staying the same or decreasing (Numerof & Abrams, 2003). Abrams (2004) noted that high turnover rates in the U. S., approaching 20 percent in many cases, only intensify the impact of a declining labor pool across all healthcare professions. Abrams (2004) also emphasized that the failure to reduce this high turnover rate is already affecting the quality and availability of healthcare services. In a 2001 survey conducted by the American Nurses Association, 75 percent of nurses said they felt the quality of care had declined in their organization over the previous two years; inadequate staffing being cited as the biggest factor contributing to the decline, with nursing vacancies at 125,000-plus and rising (Pieper, 2003).



In a 2000 survey conducted by the American Society of Health-System Pharmacists, 44 percent of respondents said their vacancy rates for pharmacists were higher in 2000 than they had been during the five previous years. In 2000, approximately 30 percent of pharmacists were employed in healthcare delivery settings, with 24 percent being employed in hospitals and six percent working in long-term care facilities and home health care (Numerof & Abrams, 2003). These demanding environments, where acute patients require intensive services, pose a challenge to recruiting pharmacists. In terms of recruiting entry-level practitioners, 40 percent of respondents described the overall shortage of pharmacists as “severe”, with 70 percent describing the shortage of experienced pharmacists as “severe” (Numerof & Abrams, 2003).

In developing countries, such as Jamaica, the shortage of healthcare professionals is even more severe, being aggravated by the migration of these professionals to more developed countries (Ministry of Health, 2003). The availability of attractively remunerated, non-clinical, but related vocations, as well as the tendency of healthcare professionals to move out of the clinical setting into managerial positions in the quest for self-actualization, also has contributed to the significant drain of professional manpower from the clinical arena (Ministry of Health, 2003; Numerof & Abrams, 2003).

A common feature of most countries, especially developing countries like Jamaica, is the dominant role of the state in the provision and financing of healthcare services (Rigoli & Dussault, 2003). In the past few years, Jamaica’s healthcare system, not unlike other developing countries, has been taken through a series of reforms in an effort to address a changing epidemiological profile; problems of service quality; inefficient productive use of services; the need to improve services to indigent and disadvantaged groups; and the failure of the health care model to efficiently pursue and attain health policy objectives (Ministry of Health, 1999). In

1999, these reform initiatives saw the Ministry of Health's service delivery functions being devolved to four semi-autonomous Regional Health Authorities (RHAs), resulting in a decentralized contract model with quasi-independent, but still state operated, provider institutions (Ministry of Health, 1999). In addition to these state run healthcare facilities that are the major providers of medical in-patient and surgical healthcare services, there is a vibrant private sector healthcare system that dominates in the delivery of ambulatory care.

The Government of Jamaica believes that health is the right of every citizen. Health is, therefore, viewed as a collective good to be publicly planned and channeled to citizens by the government. In keeping with this policy, state operated healthcare services are highly subsidized by the state, with fees reflecting only a small fraction of the actual cost of the services being provided (Ministry of Health, 2001). The prevailing international economic climate, with rising fuel prices and a devaluating Jamaican dollar, has contributed significantly to erosion of the country's economy. Consequently, a number of businesses have been forced to close due to the withdrawal of foreign investors and the demise of the financial sector. The layoff of workers during this economic recession has led to an increase in the unemployment rate and an increasing private sector to public sector shift in the demand for healthcare services, thus increasing the burden on an already stretched cadre of healthcare professionals in the public sector (Ministry of Health, 2003).

With the state unable to mount an effective defense against the competitive forces emanating from the private sector, the greatest impact of the labor shortage in healthcare is being felt in the public sector domain. Consequently, Ministry of Health officials in Jamaica have expressed grave concerns about the generally high vacancy rates across various groups of healthcare staff within state operated healthcare facilities. Data for the year 2002 revealed a 22

percent vacancy rate among registered nurses, with rates for public health nurses, midwives and pharmacists of 9 percent, 50 percent, and 29 percent, respectively. Available vacancy rate data for physicians date back to the year 2000, when a 20 percent vacancy rate was noted (Ministry of Health, 2003).

Many commentators have raised the matter of inadequate compensation and benefits as the main cause for the shortage of personnel in state owned healthcare institutions (“Healthcare crises”, 2005). Researchers, however, have found the link between pay and turnover to be somewhat tenuous (Meyer & Herscovitch, 2002; Numerof & Abrams, 2003). Other factors must, therefore, be contributing to the manpower crisis in healthcare. It is crucial to develop an understanding of these factors to prevent further deterioration and to possibly bring about some improvement in the situation.

Research has consistently identified organizational commitment and turnover intention to be dominant factors in predicting turnover (Blau & Boal, 1987; Cohen, 1993; Cotton & Tuttle, 1986; Farkas & Tetrick, 1989; Huselid & Day, 1991; Jaros, 1997; Mathieu & Zajac, 1990; Meyer & Allen, 1997; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Porter et al., 1974; Steel & Ovalle, 1984; Tett & Meyer, 1993; Williams & Hazer, 1986). Numerous studies, conducted to identify the contributing factors to turnover within the nursing profession, also have revealed supporting evidence of a strong relationship between organizational commitment and turnover similar to that found across other occupational groupings (Cavanagh, 1990; Lum, Kervin, Clark, Reid & Sirola, 1998; Lucas, Atwood & Haganan, 1993; Mills & Blaesing, 2000; Urden, 1999). Previous research repeatedly demonstrated that committed employees generally have a stronger desire to remain with their employer, and will continue to contribute toward the attainment of organizational objectives with which they agree. Chang (1999) found, among the

different dimensions of work commitment, that affective organizational commitment had the strongest effect on turnover intention, followed by professional commitment (career commitment, occupational commitment), and then continuance organizational commitment.

Weiner and Vardi (1980) found that the type of occupation had some effect on the commitment/turnover relationship. They argued that the magnitude of the relationship differs across occupational groups and work situations, such as professional settings, where the economic contract is less pronounced, and obligation considerations assume more important roles in controlling work behavior. Meyer, Allen, and Smith (1993) found that the inclusion of the occupational commitment variable into hierarchical regression analyses, after entering organizational commitment variables, added significantly to the prediction of intention to leave the organization; hence, occupational commitment helped to explain the variance in outcome variables, over and above that explained by organizational commitment. Chang (1999) found that professional commitment strengthened the effect of affective organizational commitment on turnover intention, although not finding the same moderating effect of professional commitment on the continuance organizational commitment-turnover intention relationship. Chang's (1991) research also found evidence of a direct inverse relationship between professional commitment and turnover intention.

Close examination of the research on organizational commitment antecedents reveals some common underlying psychological themes (Meyer & Allen, 1997). Specifically, the research highlights the importance of work experiences that communicate the organization's support of its employees through fair treatment, and enhancement of employees' sense of personal importance and competence by appearing to value their contributions to the

organization (Meyer & Allen, 1997). These concepts are contained in the multidimensional construct, perceived organizational support (POS), developed by Eisenberger et al. (1986).

Numerous studies have reported a strong positive relationship between POS and affective organizational commitment (Cohen, 1999; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Hutchinson, 1997; O'Driscoll & Randall, 1999; Rhoades, Eisenberger, & Armeli, 2001; Shore & Tetrick, 1991; Shore & Wayne, 1993). A strong positive relationship between POS and professional commitment has also been inferred by Cohen (1999). Hence POS, by increasing both affective organizational commitment and professional commitment, reduces indirectly the potential for employees to want to leave the organization. In addition to the commitment mediated effect of POS on turnover, there is empirical evidence that POS has a direct influence on turnover intention (Rhoades & Eisenberger, 2002; Wayne, Shore, & Linden, 1997).

In support of the POS-commitment-turnover relationship, Folger and Konovsky (1989) reported that the perceived fairness of a merit-pay distribution committed employees to their firm more than did satisfaction with the amount of the raise. Griffeth, Hom, and Gaertner (2000) also asserted that just procedures, even more than fair pay, encourage employees to stay with an organization. Fair treatment by employers connotes that they value employees and care about their well-being, which reinforces employees' expectations that they will be fairly treated throughout their tenure. To reciprocate, employees develop stronger commitment to the organization (Eisenberger et al., 1986; Shore & Wayne, 1993). Ultimately, their desire to remain with the organization also increases (Meyer & Allen, 1997).

### *Purpose of the Study*

This study partially tests propositions of the Meyer and Allen (1991) three-component model of organizational commitment as well as Eisenberger et al.'s (1986) organizational

support theory. Meyer and Allen (1991) view organizational commitment as multidimensional, consisting of affective commitment, continuance commitment, and normative commitment. The relationship between turnover intention and two of these organizational commitment dimensions – affective commitment and continuance commitment – as well as professional commitment and perceived organizational support is investigated among three healthcare professional groups - nurses, pharmacists, and physicians. The study also examines whether there are differences in the relationships among these variables for the three categories of healthcare professionals.

Research of the relationship between professional commitment and the dimensions of organizational commitment has produced conflicting findings (Aranya & Ferris, 1983; Hall, 1967; Wallace, 1993; Weiner & Vardi, 1980). The dominance of organizational commitment or professional commitment among professionals is also inconclusive. This study will seek to bring greater understanding to these areas of the literature.

The research seeks also to determine whether professional commitment moderates the effect of affective organizational commitment on turnover intention, as intimated by Chang (1999). Other moderating effects studied are: felt obligation and exchange ideology on the POS-affective commitment relationship; and the degree of professionalization and position in the organizational hierarchy on the professional commitment-affective commitment relationship. Additionally, the role of personal characteristics in the POS-commitment-turnover intention relationship is addressed in the study.

### *Theoretical Background*

This study draws extensively on organizational support and organizational commitment theories, both of which have their roots in social exchange theory and reciprocation ideology.

Researchers have been increasingly interested in the role of exchange processes in organizations, a research area with an underlying framework in social exchange theory (Wayne et al., 1997).

Social exchange theorists have alluded to employment as the trade of effort and loyalty for tangible benefits and social rewards (Gould, 1979; Levinson, 1965; Mowday, Porter, & Steers, 1982; Steers, 1977). Social exchanges entail unspecified obligations; when one person does another a favor, there is an expectation of some future return, though exactly when it will occur and in what form is often unclear (Gouldner, 1960). Gouldner (1960) proposed that there is a universal ethic requiring equality between the amounts of help received and returned. This norm of reciprocity, according to Gouldner (1960), serves society by restraining the powerful from exploiting the weak and by stabilizing mutually beneficial social relationships. As implied by the norm, greater help received generally increases the amount of help returned (Eisenberger, Cotterell & Marvel, 1987). To the extent that both the employee and the employer apply the reciprocity norm to their relationship, favorable treatment received by either party is reciprocated, leading to beneficial outcomes for both (Rhoades & Eisenberger, 2002).

Gouldner (1960) noted that partners in a developing social relationship often give each other more help than previously received, which seems to violate the equivalence required by the reciprocity norm. He suggested that such overcompensation is an investment, based on the belief that one's partner will respond in kind. The role of an anticipated self-gain in reciprocation is indicated by the finding that repayment following help was greater when there was evidence that the donor's resources would increase in the future. In short, creditors prefer to have others in their debt because they believe that the norm of reciprocity will produce generous repayments (Eisenberger et al., 1987). Rousseau (1989) noted that employees tend to take a long-term

approach to social exchange relationships at work, with the pattern of reciprocity over time determining the perceived balance in exchanges.

There are two main ways that social exchange has been conceptualized in the management literature: first, as a global exchange relationship between employees; and second, as a more focused, dyadic relationship between subordinates and their superiors (Settoon, Bennett & Liden, 1996). This study, and hence the following discussion, focuses on the global exchange relationship.

At the global level of social exchange, Eisenberger et al. (1986) suggested that employees form a global belief concerning the extent to which the organization values their contributions and cares about their well-being. They labeled this belief perceived organizational support (POS). High levels of POS are thought to create obligations within individuals to repay the organization. Furthermore, POS is associated with a trust that the organization will provide assistance to the employee, when needed, to ensure that the employee can carry out the job effectively and deal with stressful situations (Rhoades & Eisenberger, 2002).

According to organizational support theory, the development of POS is encouraged by employees' tendencies to assign humanlike characteristics to the organization (Eisenberger et al., 1986). Levinson (1965) noted that actions taken by agents of the organization often are viewed as indications of the organization's intent rather than attributed solely to the agents' personal motives. Levinson (1965) suggested that this personification of the organization is influenced by a number of factors, including: the organization's legal, moral, and financial responsibility for the actions of its agents; organizational policies, norms, and culture that provide continuity and prescribe role behaviors; and the power the organization's agents exert over individual employees. On the basis of the organization's personification, employees view their favorable or



unfavorable treatment by the organization's agents as an indication that the organization favors or disfavors them.

Social exchange theorists argue that resources received from others are more highly valued if they are based on discretionary choice rather than circumstances beyond the donor's control. Such voluntary aid is welcomed as an indication that the donor genuinely values and respects the recipient (Cotterel, Eisenberger, & Speicher, 1992; Eisenberger et al., 1987; Gouldner, 1960). As such, organizational rewards and favorable job conditions such as pay, promotions, job enrichment, and influence over organizational policies contribute more to POS if the employee believes that they result from the organization's voluntary actions, as opposed to external constraints such as union negotiations or governmental health and safety regulations (Eisenberger et al., 1986; Eisenberger et al., 1987; Shore & Shore, 1995).

Organizational support theory also addresses the psychological processes underlying consequences of POS. Rhoades and Eisenberger (2002) noted that an appealing feature of organizational support theory is that it provides clear, readily testable, predictions regarding antecedents and outcomes of POS together with specificity of assumed processes and ease of empirically testing these processes. Rhoades and Eisenberger (2002) surmised that, on the basis of the reciprocity norm, POS should produce a felt obligation to care about the organization's welfare and to help the organization reach its objectives. Additionally, the caring, approval, and respect connoted by POS should fulfill such socioemotional needs as affiliation and emotional support, leading workers to incorporate organizational membership and role status into their social identity (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger et al., 1986). Further, POS should strengthen employees' beliefs that the organization recognizes and rewards increased performance. These processes should have favorable outcomes for both employees and

the organization, for example, increased affective commitment and reduced turnover (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001).

Meyer and Allen's (1991) three-dimensional view of organizational commitment is broadly accepted as a promising approach to a composite measure of the attachment of an individual to an organization (Mathieu & Zajac, 1990; Meyer et al., 2002). The model contributes to the body of theoretical knowledge and has become generally recognized by practitioners; hence the choice of this model to measure organizational commitment in this study.

### *Significance of the Study*

This research adds value to the progression of organizational behavior and the health services management field by contributing to a general understanding of the POS-commitment-turnover relationship among healthcare professionals. Further, the study directly impacts all organizations that value their employees and desire to gain further insight to enable them to retain adequate numbers of high quality staff to offer optimal service.

One of the most important mandates for management executives is to implement creative strategies to maintain the rate of voluntary dysfunctional turnover within manageable limits (Numerof & Abrams, 2003). However, to successfully meet this challenge, managers need to be equipped with information about the factors that contribute to employees wanting to remain with an organization, based on empirical investigation rather than anecdotal evidence. As managers develop greater clarity about the factors that contribute to reduced turnover they can formulate and develop effective organizational policies, procedures, and systems and foster a culture that creates an environment where employees' intent to stay is enhanced. The ongoing shortage of healthcare professionals has made it increasingly critical for effective retention strategies to be found without delay; hence, the relevance of this investigation.

This study is of particular significance in attempting to determine the effect of organizational commitment, professional commitment, and perceived organizational support on the turnover intention of nurses, pharmacists, and physicians employed in state owned health care institutions throughout Jamaica, where the voluntary turnover rate has reached crisis proportions. Although a number of turnover studies have been conducted among nurses, there is, unfortunately, a dearth of studies investigating turnover among other health professionals.

By definition, highly committed employees wish to remain with their employing organizations (Mowday et al., 1982). However, recent meta-analyses by Mathieu and Zajac (1990) and Meyer and Herscovitch (2001) have demonstrated that the relationship between organizational commitment and turnover has produced few large correlations. One explanation for the low commitment-turnover correlation is that other variables probably moderate this relationship (Mathieu & Zajac, 1990; Randall, 1990). It has been noted that minimal research has been conducted to address this issue. This study's investigation of the moderating effect of professional commitment on the affective commitment-turnover intention relationship, as well as the inclusion of various personal characteristics that have been found in the literature to also moderate the commitment-turnover relationship, will enhance the understanding of this relationship for both academicians and practitioners alike. Further, the inclusion of three forms of work commitment – affective organizational commitment, continuance organizational commitment, and professional commitment – will enhance the ability to determine the forms of work commitment that, if strengthened, will result in a reduced level of turnover.

Wallace (1993) found that the degree to which an occupation is characterized as a profession relative to other occupations, that is, the degree of professionalization, influenced the association between professional and organizational commitment. Specifically, it was observed

that the higher the professionalization of the occupation the higher the association between professional and organizational commitment. Wallace (1993), however, identified various research gaps that needed further investigation, which this study seeks to address. First, the majority of studies of the professional commitment and organizational commitment relationship have involved the accounting profession, such that Wallace (1993) noted in her meta-analysis that the degree of professionalization as a potential moderator of the correlation between professional and organizational commitment needs more in-depth study among other professional groups, and in particular among the traditional professions, such as medicine. Other research gaps identified by Wallace (1993) include: the issue of which commitment - professional or organizational - predominates among professionals; and the study of other potential moderators of professional and organizational commitment, such as employee characteristics including length of tenure, education, and age.

The importance of perceptions of supportive and fair practices within the organization in the development of commitment has contributed to the selection of POS as an independent variable in this turnover study. Relatively few studies have investigated the interaction effects between POS and the components of organizational commitment in influencing turnover intention or the direct influence of POS on turnover intention. More specifically, there has been minimal investigation of the role of POS among professionals. This study will seek to make a contribution to the literature in these areas.

Although the study of the relationship between organizational commitment and turnover intention has been of interest to many researchers, most studies on this topic have been conducted in organizational settings in developed countries. With respect to Meyer and Allen's (1991) Three-Component Model of organizational commitment, Meyer et al., (2002) observed

that it was not possible to conduct a systematic evaluation of cross-cultural generalizability as the number of studies conducted outside North America was still relatively small. It is, therefore, evident that more studies are needed in a variety of countries and cultures to explore the robustness of the organizational commitment construct and its consequences.

This study contributes towards resolving the controversy surrounding the dimensionality of Meyer and Allen's (1991) continuance commitment scale (CCS). Attempts by researchers to evaluate the dimensionality of the CCS, using confirmatory factor analyses, have yielded mixed results. Some studies have found evidence for a two-dimensional structure (Hackett, Bycio, & Hausdorf, 1994; McGee & Ford, 1987; Meyer, Allen, & Gellatly, 1990; Meyer et al., 2002; Somers, 1993). McGee and Ford (1987) labeled these two dimensions 'personal sacrifices' (CC:HiSac) and 'high alternatives' (CC:LoAlt) and observed that both had different antecedents and a differential impact on turnover intention. On the other hand, other researchers have found the CCS to be unidimensional (Dunham, Grube, & Castaneda, 1994; Ko, Price, & Mueller, 1997; Shore & Tetrick, 1991).

The commitment-turnover literature is largely based on research on blue-collar employees and white-collar professionals in the private sector (Blau & Boal, 1987; Hrebiniak & Alutto, 1972; Mueller, Wallace, & Price, 1992; Shore & Martin, 1989). In the Jamaican context, only one empirical study of organizational commitment was identified, which comprised a sample of employees from private sector not for profit organizations in a non-healthcare setting (Wilson, 1996). This study will expand the research findings on organizational commitment and turnover by including a comparative investigation of turnover rates and the role of organizational commitment, professional commitment, and perceived organizational support among public sector healthcare professionals.

Manpower shortages in healthcare result in a deterioration of the quality of health services provided, with critical implications for a nation's productivity. Thus governments, and more particularly health administrators, cannot afford further erosion in the numbers of healthcare professionals. To this end, the findings of this study can facilitate public policy intervention, particularly within the context of developing countries.

#### *Statement of the Problem*

As organizations become increasingly vulnerable to the critical shortage of human resources, it is imperative that managers understand and meet the needs of their employees. This study is being conducted at a time when healthcare services worldwide are suffering from a severe shortage of healthcare professionals. The culture that has prevailed within healthcare, namely, the ascendancy of the physician and the consequent devaluation of the importance of management expertise, has certainly contributed to the reputation that healthcare institutions have earned regarding the lack of progressive human resource policies and practices. The developing countries are even more severely impacted as increasing numbers of healthcare professionals migrate to satisfy shortfalls being experienced by the developed countries. In addition, those professionals who remain in the service are overburdened, not only because of the shortage of adequate staff, but because of the increasing demand for healthcare services. In Jamaica, this situation has been further fuelled by the downturn in the nation's economy.

The influence of organizational commitment on the employee's desire to remain with an organization is well documented, as is the strong relationship that exists between perceived organizational support and affective organizational commitment. It has been noted by researchers, however, that some of the expected relationships between Meyer and Allen's (1991) three dimensions of organizational commitment and turnover behavior have not always been

found among professionals (Cohen, 1991; Weiner & Vardi, 1980). These developments in the commitment-turnover literature show the need for further testing of these constructs among professionals. Further, the recognition in the literature that the professional commitment-organizational commitment relationship may vary depending on the degree of professionalization lends support to the view that the process of organizational commitment among professionals and non-professionals may vary significantly.

### *Research Questions*

Based on the research problem cited in this section and the review of the literature, the following research questions are investigated in this study:

- 1) Are POS, organizational commitment, professional commitment and turnover intention related as outlined in the proposed turnover model depicted in Figure 1?
- 2) Does affective organizational commitment have the strongest relationship with turnover intention when compared with perceived organizational support, continuance organizational commitment, and professional commitment?
- 3) Is the relationship between perceived organizational support and felt obligation moderated by exchange ideology?

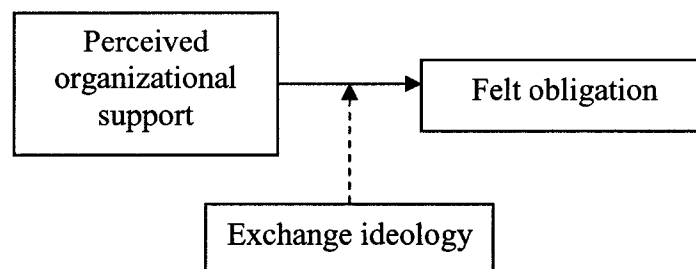
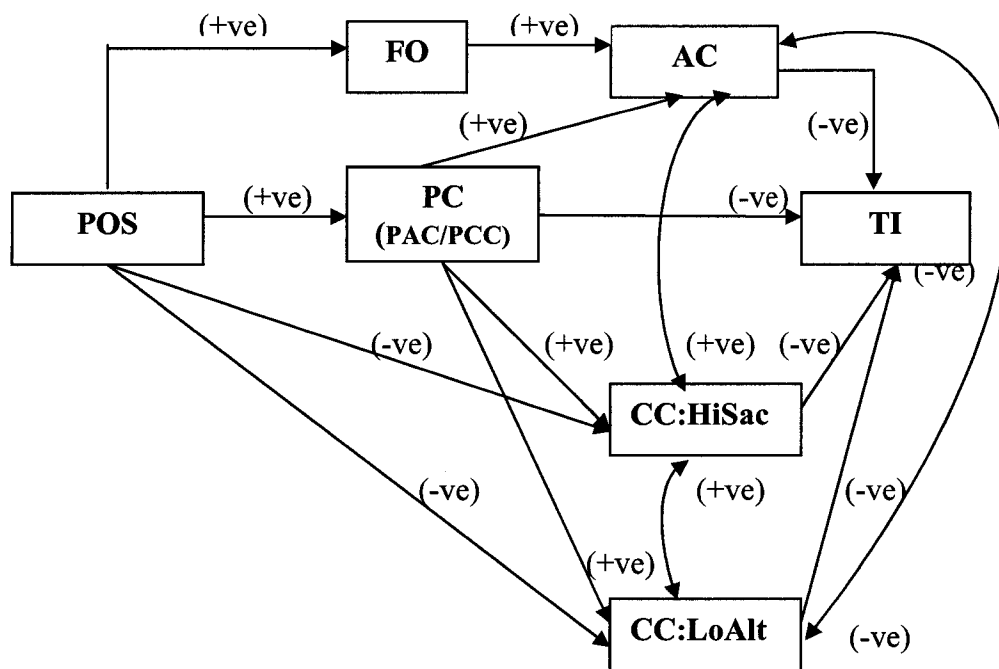


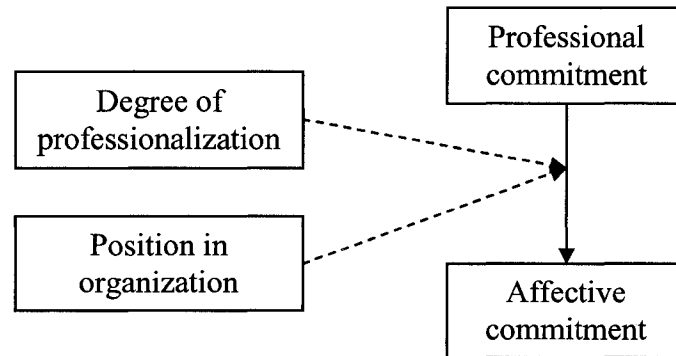
Figure 1. Proposed Turnover Model



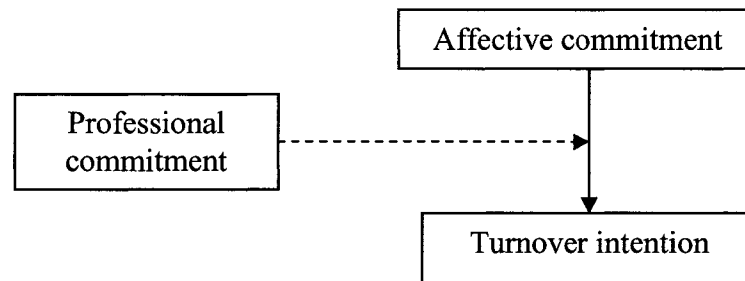
POS = perceived organizational support; FO = felt obligation; PC = professional commitment;  
 AC = affective organizational commitment; CC:HiSac = continuance organizational commitment  
 – high sacrifices; CC:LoAlt = continuance organizational commitment – low alternatives; TI =  
 turnover intention



4) Is the relationship between professional commitment and affective organizational commitment moderated by: a) the degree of professionalization; and b) the employee's position within the organization?



5) Is the relationship between affective organizational commitment and turnover intention moderated by professional commitment?



6) Do the levels of perceived organizational support, organizational commitment, professional commitment, and turnover intention differ between nurses, pharmacists, physicians, and administrative staff?

7) Are the demographic variables age, gender, organizational tenure, children, marital status, kinship responsibilities, educational level, work experience, and professional tenure related to the variables POS, organizational commitment, professional commitment, and turnover intention?

### *Definition of Key Terms*

For the purposes of this study, the following definitions of key terms will apply:

*Affective commitment.* An employee's emotional attachment, identification with, and involvement in an organization (Meyer & Allen, 1991).

*Ambulatory care.* Treatment provided to patients not confined to bed (Thomas, 1997).

*Attitudinal commitment.* An employee's identification with the goals and values of the organization and the desire to maintain membership with the organization (Porter et al., 1974).

*Behavioral commitment.* The binding of the individual to behavioral acts that result when individuals attribute an attitude of commitment to themselves after engaging in behaviors that are volitional, explicit, and irrevocable (Reichers, 1985).

*CC:HiSac.* A subcomponent of Meyer and Allen's (1991) continuance commitment construct reflecting perceived sacrifices associated with leaving the organization (McGee & Ford, 1987).

*CC:LoAlt.* A subcomponent of Meyer and Allen's (1991) continuance commitment construct reflecting a perceived lack of alternative employment opportunities (McGee & Ford, 1987).

*Continuance commitment.* Commitment based on costs that an employee associates with leaving the organization (Meyer & Allen, 1991).

*Exchange ideology.* The belief by employees that it is appropriate and useful to base their concern with the organization's welfare and their work effort on how favorably they have been treated by the organization. Involves employees' application of the reciprocity norm to their relationship with their work organization (Eisenberger et al., 2001)

*Felt obligation.* A prescriptive belief regarding whether one should care about the organization's well-being and should help the organization reach its goals (Eisenberger et al., 2001).

*Normative commitment.* The employee's feeling of obligation to stay with the organization (Meyer & Allen, 1991).

*Perceived organizational support (POS).* A global sense of support; the extent to which organizational conditions help facilitate implementation and outcomes of an innovation (Eisenberger et al., 1986).

*Professional commitment.* Relative strength of identification with and involvement in one's profession (Morrow & Wirth, 1989). Synonyms used in the literature include career commitment, career salience, and occupational commitment.

*Professionalization.* The degree to which an occupation is characterized as a profession relative to other occupations (Wallace, 1993).

*Side-bet.* Something of value to an individual that is unrelated to his/her present line of activity which he/she has "bet" on being consistent in his/her present behavior. The consequences of being inconsistent will be so expensive that being inconsistent is not a feasible alternative (Becker, 1960).

*Turnover intention.* A conscious and deliberate willfulness to leave the organization (Mobley, Horner, & Hollingsworth, 1978).

*Voluntary dysfunctional turnover.* Occurs when effective performers or highly skilled or trained employees who are not easily replaced freely choose to leave their employing organization (Griffeth & Hom, 2001).

### *Organization of the Study*

This study consists of five chapters. Chapter I consists of the background of the problem, the purpose of the study, the theoretical background, the significance of the study, statement of the problem, the research questions, and definitions of the key terms used in the study. Chapter II reviews the pertinent literature on turnover and turnover intention, organizational commitment, professional commitment, and perceived organizational support, together with integrated theoretical considerations. Chapter III describes the methodology utilized in the study, research questions with hypotheses, research design, survey procedures, and statistical techniques to be employed in analyzing the data. Chapter IV consists of the data analysis and interpretation of the findings and results of the study. Finally, Chapter V includes the discussion and conclusion to reinforce the previous chapters by presenting an overview of the study, the study's conclusions, and recommendations for future research.

### *Summary*

This chapter has provided an introductory overview of the background and nature of the problem of retaining high quality employees in the midst of increasing global competition, with particular reference to the healthcare sector in a developing country setting. The importance of studying the relationship between POS, organizational commitment, professional commitment, and their influence on turnover intentions, in the context of the worldwide manpower crisis that currently exists in healthcare, was discussed. It was noted that the main theories to be tested are Meyer and Allen's (1991) Three-Component Model of organizational commitment and the organizational support theory posited by Eisenberger et al. (1986). The research questions were outlined and key terms to be used throughout the study were defined.

## Chapter II

### Literature Review

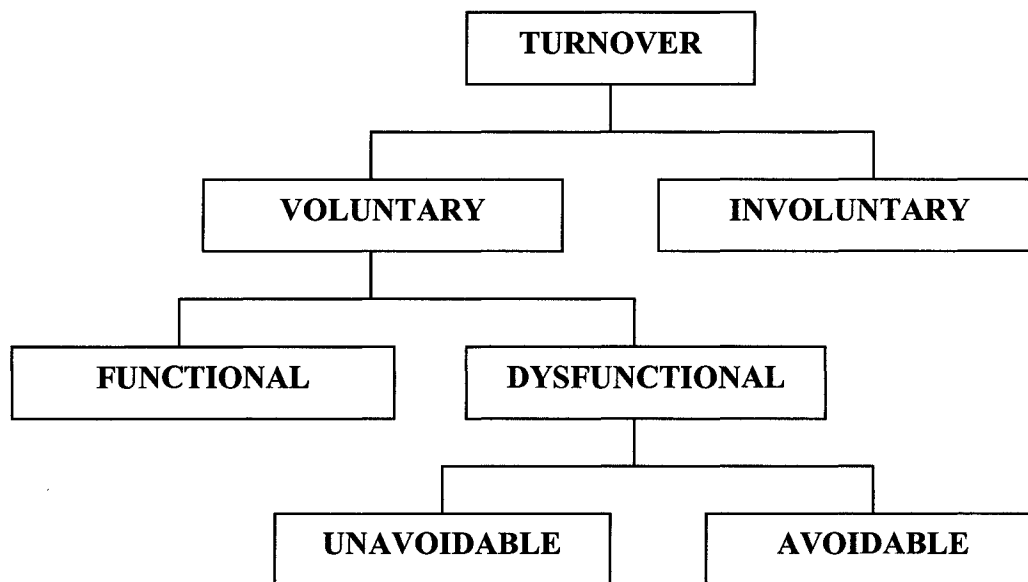
The purpose of this study is to investigate the influence that perceived organizational support, organizational commitment, and professional commitment have on the turnover intentions of nurses, pharmacists, and physicians in a developing country setting. A review of the relevant literature is outlined in this section. Turnover intention, the dependent variable in this study, is discussed first. A general discussion of commitment is followed by specific discussions on organizational commitment, professional commitment, and perceived organizational support. The chapter concludes with a discussion of the theoretical model to be used in this research.

#### *Turnover*

Turnover involves separation of the individual from the organization of employment. The turnover decision facilitates either a job-to-job transition or a job-to-nonemployment transition (Royalty, 1998). Griffeth and Hom (2001) noted that turnover is not always a negative activity as the opportunities for promotion would be severely limited if employees did not leave the organization. Further, replacements from outside the organization can infuse new ideas and technology into the organization (Staw, 1980). It may even be desirable for some marginally productive or overpaid employees to leave the organization (Griffeth & Hom, 2001). Notwithstanding that a certain quit rate might be tolerated as a cost of doing business in a particular industry, organizational-level research and corporate studies report that high exit rates generally worsen organization effectiveness (Alexander, Bloom, & Nuchols, 1994). For example, Alexander et al. (1994) documented that hospitals experiencing higher turnover among registered nurses faced greater operating and personnel costs.

It is useful, for the purposes of this study, to identify clearly what unwanted turnover means. In making such a distinction, Griffeth and Hom (2001) suggested distinguishing initially between voluntary and involuntary quits, as depicted in Figure 2. Voluntary turnover occurs when the employee freely chooses to leave the organization. In contrast, involuntary turnover is job separation initiated by the employer over which the employee has no control (Griffeth & Hom, 2001).

**Figure 2.** Defining Undesirable Turnover (Griffeth & Hom, 2001, p. 4)



Voluntary turnover can be differentiated further into functional and dysfunctional turnover. Functional turnover represents the exit of substandard performers, that is, persons the organization does not feel are of particular benefit to the achievement of the organization's goals. On the other hand, dysfunctional turnover involves the exit of effective performers or highly skilled or trained employees who are not easily replaced and, therefore, their loss is costly for the

organization (Griffeth & Hom, 2001). From the employer's perspective then, unwanted turnover is both voluntary and dysfunctional.

The final level of turnover definition differentiates between avoidable and unavoidable dysfunctional turnover. Unavoidable turnover represents those employee separations that employers cannot control, such as terminations due to childbirth, full-time care of relatives, migration, and death (Griffeth & Hom, 2001). It should be noted that there has been disagreement among turnover researchers about whether some types of unavoidable turnover should be treated as voluntary turnover (Campion, 1991). For example, some investigators have viewed terminations due to poor health and retirement as voluntary departures (Campion, 1991; Hanisch & Hulin, 1990) while others have regarded turnover due to childbirth and family relations as involuntary (Griffeth & Hom, 2001). The designation of avoidable and unavoidable voluntary, dysfunctional turnover has helped to clarify this somewhat. Griffeth and Hom (2001) noted that many companies are attempting to exert some control over quits historically deemed unavoidable by providing various family- and lifestyle-friendly programs such as flextime, job-sharing, telecommuting, lactation rooms, and takeout dinners. To precisely derive the actual rate of undesirable turnover, involuntary, functional, and truly unavoidable turnover specific to the particular organization should not be included in the analysis (Griffeth & Hom, 2001).

Turnover is an individual choice behavior, the final step in a psychological process referred to in the literature as the withdrawal decision process (Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979; Mobley, Horner, & Hollingsworth, 1978; Mowday, Koberg, & McArthur, 1984). Mobley (1977) pioneered a comprehensive explanation for the psychological process underlying withdrawal. According to his formulation of the withdrawal decision, there are a number of possible mediating steps between dissatisfaction and actual quitting. One of the

first consequences of dissatisfaction is that it inspires thoughts of leaving. These thoughts, in turn, stimulate consideration of the expected utility of a job search and the costs of quitting. The next step would be the behavioral intention to search, which then is followed by the actual search. Alternatives, where available, are then evaluated and compared to the present job. If an alternative job is perceived to be more favorable than the present job it will inspire a behavioral intention to quit, followed by actual withdrawal.

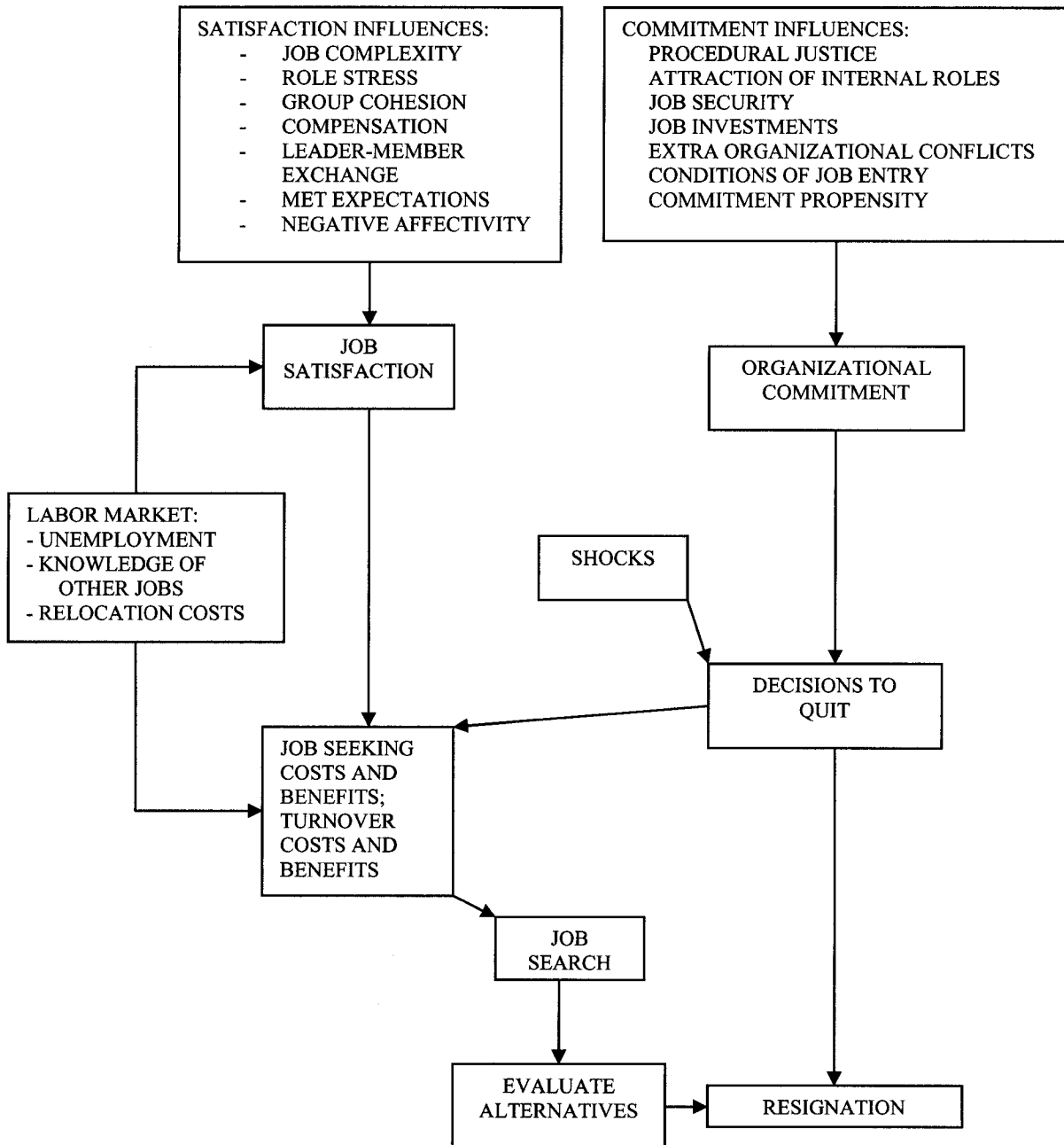
In contrast to Mobley's (1977) model, which focused on job dissatisfaction as the stimulating factor for the initiation of the withdrawal process by employees, turnover researchers have identified many other factors that forecast or cause voluntary resignations (Cotton & Tuttle, 1986; Griffeth et al., 2000; Mathieu & Zajac, 1990; Steel & Ovalle, 1984; Tett & Meyer, 1993). Most research has uncovered these factors and the strength of their effect on turnover by the use of survey methodology. The focus of the discussion now will be turned to the leading causes of turnover identified in the literature, starting with turnover intention, the dependent variable in this study. The bases for the selection of specific independent variables for inclusion in this study also will be highlighted.

### *Turnover Intention*

Turnover intention is defined as a conscious and deliberate willfulness to leave the organization, and often is described as the last in the sequence of withdrawal cognitions (Mobley et al., 1978). In the general framework developed by Hom and Griffeth (1995) to summarize the leading turnover causes documented by research studies over the years, decisions to quit (otherwise referred to as intent to quit, turnover intention, or propensity to leave) and evaluation of alternatives are shown to be the proximal cause of voluntary resignations (Figure 3). Although Kirschenbaum and Weisberg (1990) found that actual turnover and intent were influenced by a



Figure 3. Hom-Griffeth Theory of Turnover (Griffeth & Hom, 2001, p. 120)



separate set of factors, with intent a poor predictor of turnover behavior, most of the turnover research supports overwhelmingly the predictive strength of turnover intention.

Turnover intention was found to have the only direct effect on turnover of all the variables tested by Mobley et al. (1978). As depicted by the Hom-Griffeth Theory of Turnover (Figure 3), Ferris and Aranya (1983), as well as Steel and Ovalle (1984), found turnover intention better in predicting turnover compared with affective variables, such as job satisfaction and organizational commitment. Empirical findings, regarding the turnover process, also have indicated generally that the effect of attitudes on turnover behavior is mediated by turnover intention (Hom & Griffeth, 1991; Mowday et al., 1984; Tett & Meyer, 1993). Furthermore, other researchers have found a strong immediate antecedent relationship between turnover intent and actual turnover behavior (Bluedorn, 1982; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992; Michaels & Spector, 1982; Mobley et al., 1978; Mobley et al., 1979; Parasuraman, 1989; Price & Mueller, 1981; Williams & Hazer, 1986). Jaros (1997) also considered turnover intention to be the strongest and the most direct precursor of actual turnover behavior, while Somers (1999) saw withdrawal intentions emerging as the sole predictor of turnover. In their meta-analysis of 42 turnover studies, Griffeth et al. (2000) found that quit intentions remained the best predictor of turnover, out predicting withdrawal cognitions.

Griffeth et al. (2000) and Mobley et al. (1979) noted that stated intentions are less effective in predicting turnover that transpires in the distant future because people often change their minds about staying or leaving over a long time period. Despite this observation, Griffeth and Hom (2001) still advocated the use of turnover intentions as a surrogate for turnover, as turnover research has shown that employees who express strong intentions to leave eventually do leave. In addition, according to Bluedorn (1982), turnover was deemed to be much more difficult

to predict than intention, due to the impact of many external factors on turnover behavior. Accumulated evidence has concluded, therefore, that the single best predictor of turnover is an employee's decision to quit. On this basis, turnover intention was felt to be an acceptable substitute for actual separation in this study.

#### *Attitudinal Antecedents of Turnover*

According to the Hom-Griffeth Theory of Turnover (Figure 3), in addition to shocks, that is unpredictable life stress events, prompting employees to quit, employees who become dissatisfied with their jobs or lose their organizational commitment form decisions to leave. Some employees leave soon after making this decision, while others go through a process similar to that outlined by Mobley (1977) and depicted by the left hand side of Figure 3.

Many studies affirm that organizational commitment is an attitude distinct from job satisfaction, and that it separately influences turnover (Hom & Griffeth, 1995; Tett & Meyer, 1993). Griffeth and Hom (2001) noted that employees may be dissatisfied with their particular job duties but still remain if they feel committed to the firm. Griffeth et al. (2000), from their meta-analysis of 42 studies, found that organizational commitment predicted turnover better than did overall job satisfaction, thereby reconfirming the relative predictive strength of these turnover determinants found in past meta-analyses, and proposed by existing theoretical perspectives such as Hom and Griffeth (1995); Kim, Price, Mueller, and Watson (1996); Mathieu and Zajac (1990); Mobley et al. (1979); Porter et al. (1974); and Steers and Mowday (1981). Hence, in addition to turnover intention, organizational commitment was selected for inclusion in this study.

The Hom and Griffeth (1995) framework, depicted in Figure 3, also identifies various causal antecedents of job satisfaction and organizational commitment. The discussion will focus

on the causal antecedents of organizational commitment as this is the attitudinal antecedent selected for investigation in this study. The literature points to inequitable distributions of rewards and benefits (unfair procedural justice), job insecurity, and conflicts between work and non-work roles such as the inability to participate in family or other outside pursuits due to work demands and scheduling as undermining feelings of commitment to the organization (Griffeth & Hom, 2001). Alternatively, expectations of securing better positions inside the firm (attractive internal roles), job investments (accumulated pensions and seniority benefits), commitment-enhancing conditions of the original decision to join the firm, and a personal inclination to commit to the firm, all strengthen company commitment (Griffeth & Hom, 2001). Clearly, a wide range of work experience variables are potential antecedents of organizational commitment.

#### *Personal Characteristics and Turnover*

The depiction of the Hom-Griffeth Turnover Theory in Figure 3 does not elucidate the role of demographic variables in predicting turnover, as Griffeth and Hom (2001) observed that the illustration represented an abbreviated form of the overall framework. Hom and Griffeth (1995) found that most demographic predictors, including cognitive ability, education, training, marital status, kinship responsibilities, children, gender, age and tenure, had modest predictive strength for turnover. The meta-analysis conducted by Griffeth et al. (2000) affirmed Hom and Griffeth's (1995) findings, except for virtually no correlation between cognitive ability and turnover, as well as no gender difference in quit rates. Griffeth et al.'s (2000) findings contrasted with past estimates that more intelligent employees are less prone to quit and that females were more prone to quit than males. Due to the professional status of the respondents in this study, the decision was taken not to include cognitive ability as a demographic variable; however, due to

the conflicting findings regarding gender, the decision was taken to include gender in this study, together with the other demographic variables identified by Hom and Griffith (1995).

### *Work Commitment*

Over the years, commitment has been defined and measured in many different ways. A review of the various definitions by Meyer and Herscovitch (2001) reveals both points of agreement and disagreement. In general, all of the definitions of commitment refer to it as a stabilizing or obliging force that gives direction to behavior; that is, it binds the person to a course of action. The differences that exist in the definitions center about the nature or origin of the stabilizing force that gives direction to behavior and has resulted in the treatment of work commitment as a multidimensional construct (Meyer & Herscovitch, 2001).

Morrow (1983) asserted that the organizational commitment construct was potentially redundant with other work commitment constructs such as job involvement, work ethic, and career commitment. The variables identified as potential antecedents and consequences of organizational commitment were found to be similar to those identified for other work commitment variables. Morrow (1983) argued that a commitment construct must be shown to be distinguishable from related constructs, thus making a unique contribution to the understanding of important outcome variables, such as turnover, to be worthy of study in its own right.

Reichers (1985) made a major contribution to the multiple commitment literature by noting that, although traditional organizational commitment was based on a singular and abstract view of the organization, there were, in fact, many constituencies that make up the organization. This work led to other studies that have shown, by factor analysis, that organizational commitment is distinguishable from job satisfaction, job involvement, career salience, occupational commitment, turnover intention, work group attachment, and the Protestant work

ethic (Brooke, Russell, & Price, 1988; Cohen, 1993; Mathieu & Farr, 1991; Meyer et al., 1993; Morrow & McElroy, 1986; Mueller et al., 1992; Randall & Cote, 1991). Additionally, research has identified different antecedents and consequences for organizational commitment than those for other attitude and commitment constructs (Blau & Boal, 1989; Brooke et al., 1988; Mathieu & Farr, 1991; Meyer et al., 1993; Tett & Meyer, 1993).

Based on a review of the literature, Morrow (1993) concluded that organizational commitment was a multidimensional construct clearly distinguishable from other forms of workplace commitment. She found that respondents' discriminant abilities were sufficiently sensitive to allow them to report accurately multiple work commitment attitudes within a single data collection, namely, affective organizational commitment, continuance organizational commitment, career commitment, job involvement, and work ethic endorsement. Cohen (1999) subsequently tested Morrow's (1993) findings and found support for the discriminant validity of the five work commitment constructs. Cohen (1999) emphasized also that the main justification for work commitment research was the assumption that outcomes, such as turnover, were better explained as a function of multiple forms of commitment than of a single form.

Becker and Billings (1993) used distinctions among foci and bases of commitment to develop four profiles of commitment. Cluster analysis of 440 employees suggested the following profiles: the Locally Committed (employees who are attached to their supervisor and work group); the Globally Committed (employees attached to top management and the organization); the Committed (employees attached to both local and global foci); and the Uncommitted (employees attached to neither local nor global foci). Becker and Billings (1993) found that the profiles were differentially related to intent to quit, job satisfaction, prosocial organizational behaviors, and certain demographic and contextual variables.

Meyer and Herscovitch (2001) emphasized the presence of strong empirical evidence that employees can develop multiple work-relevant commitments, including: commitment to organizations (Mathieu & Zajac, 1990; Meyer & Allen, 1984; Mowday, Steers, & Porter, 1979); occupations and professions (Chang, 1999; Ferris & Aranya, 1983; Meyer et al., 1993; Wallace, 1993); teams and leaders (Becker, 1992; Hunt & Morgan, 1994); goals (Locke, Latham & Erez, 1988); and personal careers (Hall, 1996). Research findings suggest that the relations among the various work-related commitments are quite complex and that both compatibility and conflict are to be expected (Meyer & Allen, 1997). Meyer and Herscovitch (2001) argued that commitment's binding force is experienced as a mind-set, that is, a frame of mind or psychological state that compels an individual towards a course of action. The differentiating factor between the various dimensions of commitment was, therefore, the nature of the underlying mind-set.

Although the majority of the earlier organizational commitment research focused on the employee's commitment to the organization (DeCotiis & Summers, 1987; McGee & Ford, 1987; Meyer & Allen, 1984; Mowday et al., 1979; Reichers, 1985; Weiner, 1982), research by Eisenberger et al., (1986) brought the role of the organization's commitment to its employees, that is, perceived organizational support (POS), into the forefront of the organizational behavior literature (Eisenberger et al., 1987; Eisenberger et al., 1990; Shore & Tetrick, 1991).

A more detailed review of the organizational commitment, professional commitment, and perceived organizational support literature follows.

### *Organizational Commitment*

Prior to the 1990s, researchers of organizational commitment viewed the concept as a unidimensional construct. Two main schools emerged during this era of organizational commitment research, behavioral and attitudinal.

Becker (1960) viewed organizational commitment in economic or calculative terms and contributed much to the behavioral school of organizational commitment. Becker described commitment as a process in which employees make “side-bets” with the organization (p. 35). Becker’s side-bet theory has been highly influential in shaping commitment research. This work developed the idea that the investments, or side-bets, employees make in an organization, such as time, job effort, and development of friendships, constitute sunk costs that diminish the attractiveness of external employment alternatives. Other researchers advocating the behavioral commitment approach included Kiesler and Sakumura (1966), Salancik (1977), and Somers (1995). Sociologists have made a case for the behavioral approach by describing commitment as a requirement of system maintenance, with the main foci of the research being on cost-benefit considerations and the maintenance of system membership (Somers, 1995). As a result, the behavioral approach of commitment has been primarily directed towards identifying conditions under which a behavior tends to be repeated, as well as the effects of behavior on the change in attitudes (Meyer & Allen, 1991).

In contrast to the behavioral school, psychologists have supported an attitudinal approach to commitment, viewing it as a product of the specific intra-psychoic state of becoming bound to an object or entity (Somers, 1995). Although the initial definition of organizational commitment, in terms of a psychological or affective attachment to an organization, was given by Kanter (1968) (as cited in Mathieu & Zajac, 1990), Porter et al., (1974) and Mowday et al. (1979) provided the most popularly known definition of organizational commitment, in an attitudinal context. Porter et al., (1974) and Mowday et al. (1979, 1982) regard organizational commitment as the relative strength of an individual’s identification with and involvement in a particular organization. Hence, organizational commitment is regarded as a dispositional state and an



internalized and enduring attitude that affects other attitudes and behavior (Somers, 1995). In fact, much of the interest in organizational commitment has been generated as a result of the positive work attitudes that have been attributed to it, as well as its being a relatively stable attitude over time compared with other variables such as job satisfaction (Chang, 1999).

During the 1990s, organizational commitment continued to be a major focus of research. Considerable attention was also given to theory development. With time, unidimensional views of organizational commitment were found to be lacking in theoretical background and adequate operationalization (Roth, 1992). The multidimensional construct of organizational commitment became well recognized, as well as the variation in antecedents, correlates, and consequences of commitment across dimensions.

The multidimensional approaches were an important step in understanding the nature of commitment, by providing the base for a comprehensive understanding of the employee-organization linkage. They are now commonly recognized as the appropriate theoretical foundation for commitment research (Meyer & Allen, 1990). There has been, however, some disagreement among researchers regarding the nature of the dimensionality. Meyer and Herscovitch (2001) proposed that the differences among the multidimensional frameworks emerged largely from the different motives and strategies involved in their development. Although agreeing that differences do exist, Meyer et al. (2002) noted that there was also considerable overlap of some of the multidimensional conceptualizations. Specific reference is made to similarities between Meyer and Allen's (1991, 1997) Three-Component Model of organizational commitment and the multidimensional constructs of Jaros, Jermier, Koehler, and Sincich (1993) and Mayer and Schoorman (1992).

Meyer and Allen (1991) suggested that organizational commitment has three components – affective commitment, continuance commitment, and normative commitment, whereas Jaros et al. (1993) distinguished between affective, continuance, and moral commitment. Mayer and Schoorman (1992) advocated a two dimensional model of organizational commitment, which they labeled continuance commitment (desire to remain) and value commitment (willingness to exert effort). It is important to note that, although researchers used similar designations for the commitment dimensions, these did not always connote the same meaning. For example, Mayer and Schoorman's (1992) definition of continuance commitment more closely relates to Meyer and Allen's (1991) definition of affective commitment than to their definition of continuance commitment.

Meyer and Herscovitch (2001) observed that the two multidimensional organizational commitment models that have generated the most research were those developed by O'Reilly and Chatman (1986) and Meyer and Allen (1991). O'Reilly and Chatman (1986) hypothesized that commitment could take three distinct forms, which they referred to as compliance, identification, and internalization. Compliance occurs when attitudes, and corresponding behaviors, are adopted in order to gain specific rewards. Identification occurs when an individual accepts influence to establish or maintain a satisfying relationship. Internalization occurs when influence is accepted because the attitudes and behaviors one is being encouraged to adopt are congruent with existing values (O'Reilly & Chatman, 1986).

Although O'Reilly and Chatman (1986) provided support for the three-dimensional structure of their organizational commitment measure, subsequent researchers have experienced some difficulty in distinguishing identification and internalization (Caldwell, Chatman, & O'Reilly, 1990; Oliver, 1990; Vandenberg, Self, & Seo, 1994). The two dimensions tended to

correlate highly with one another and showed similar patterns of correlations with measures of other variables. Exceptions to this were Becker (1992) and Harris, Hirschfeld, Field, and Mossholder (1993). Due to the research disparities, O'Reilly and his colleagues combined the identification and internalization items to form what they called normative commitment, which corresponds more closely to the affective commitment component in Meyer and Allen's (1991) model.

The nature of O'Reilly and Chatman's (1986) compliance commitment dimension was also brought into question. O'Reilly and Chatman (1986) found that compliance correlated positively rather than negatively with turnover. Given that organizational commitment has generally been found to reduce the likelihood of turnover, this finding raised some question about compliance as a form of organizational commitment (Meyer & Herscovitch, 2001). Delobbe and Vandenberghe (2000) found weak reliability for the compliance scale in two samples drawn from various organizations in Belgium. Following an examination of the items used to measure compliance, Meyer and Herscovitch (2001) suggested that rather than measuring commitment to remain, O'Reilly and Chatman's compliance measure might assess commitment to perform. In that case, compliance would share some similarity with continuance commitment dimension in Meyer and Allen's (1991) model, but with a different behavioral focus.

In contrast to O'Reilly and Chatman's (1986) model, Meyer and Allen's (1991) model has withstood much scrutiny. A review of the literature pertaining specifically to the Meyer and Allen (1991) Three-Component Model is outlined in the next section.

*Meyer and Allen's Three Component Model*

Meyer and Allen (1991) developed their Three-Component Model based on observing both similarities and differences in existing unidimensional conceptualizations of organizational commitment. They argued that the belief that commitment binds an individual to an organization, and thereby reduces the likelihood of turnover, was a common theme. The key differences were in the mind-sets presumed to characterize the commitment.

Meyer and Allen (1984) initially proposed that a distinction be made between affective and continuance commitment. Affective commitment was denoted as an emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so. On the other hand, continuance commitment denoted the perceived costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so. Allen and Meyer (1990) later suggested a third distinguishable component of commitment, normative commitment, which reflects a perceived obligation to remain with the organization. Employees with a high level of normative commitment feel that they ought to remain with the organization.

The mind-sets for the three organizational commitment components, therefore, reflected three distinguishable themes: affective attachment to the organization; perceived cost of leaving; and obligation to remain. Meyer and Allen (1991) argued that organizational commitment might be accompanied by one or more of these mind-sets; they believed that one could achieve a better understanding of an employee's relationship with an organization when all three dimensions of commitment are considered together.

An important rationale for the development of the Three-Component Model was the belief that, although all three forms of commitment related negatively to turnover, they related differently to measures of other work-relevant behaviors, such as attendance, in-role performance, and organizational citizenship behavior (Meyer & Allen 1991, 1997; Randall, Fedor, & Longenecker, 1990). Affective commitment was expected to have the strongest positive relation, followed by normative commitment, while continuance commitment was expected to be unrelated, or related negatively, to these desirable work behaviors (Meyer & Allen, 1991, 1997). On this basis, the three dimensions of organizational commitment have been conceptualized as distinct components of one construct, rather than as exclusive types of attitudinal commitment.

To further support the distinctiveness of the three components, research has found that each of the three components has an independent developmental path, due to different antecedents (Meyer et al., 2002). Becker (1960) pointed out that individuals make side-bets when they take an action that increases costs associated with discontinuing another related action. Continuance commitment grows according to the magnitude and/or volume of side-bets an individual makes in addition to the lack of employment alternatives an individual perceives (Meyer & Herscovitch, 2001). Mowday et al. (1982) stated that the dominant antecedents of the affective commitment component were in the areas of work experiences, personal characteristics, structural characteristics, and job characteristics. Shared values and personal involvement were found to be important to the development of affective commitment (Meyer & Herscovitch, 2001). On the other hand, the normative commitment component was influenced by the individual's experience, both prior to and after entry into an organization, and is based heavily

on the psychological contract and the reciprocity norm (Meyer & Herscovitch, 2001; Weiner, 1982).

Meyer et al. (2002) found from their meta-analysis that there were both significant differences and similarities in the level of correlation of the three organizational commitment component scales with personal characteristics variables. The affective commitment scale (ACS) was the only scale to exhibit a correlation with marital status, with married participants showing the greater affective commitment. The continuance commitment scale (CCS) was the only scale to show a significant correlation with education, with continuance commitment decreasing as educational level increased. Age, organization tenure, and position tenure correlated positively with all the commitment scales. On the other hand, none of the commitment scales was found to have a significant correlation with gender.

Allen and Meyer (1996) conducted a narrative review of the organizational commitment research that had included one or more of the organizational commitment scales developed by Meyer and Allen (1991) to evaluate the construct validity of the measures and, by extension, the Three-Component Model. Although Allen and Meyer (1996) argued that the model was generally supported, they identified a few issues that warranted further investigation. Specifically, they recommended that additional attention be given to investigating: the strength of relation between the three components of commitment, most notably affective and normative commitment; the dimensionality of the CCS; and the generalizability of the model outside North America.

At the time that Allen and Meyer (1996) conducted their review, there were too few studies reporting correlations between the commitment scales and many of the antecedent, correlate, or consequence variables to justify the application of meta-analysis (Meyer et al.,

2002). By 2002, however, Meyer et al. were able to conduct a meta-analysis to calculate the estimates of the relations between variables identified in the Three-Component Model, based on the existence of many more studies. Meyer et al. (2002) were also able to address the recommendations made by Allen and Meyer (1996). A discussion of Meyer et al.'s (2002) findings follows under the subheadings: relations among the components; dimensionality of continuance commitment; and generalizability of the model outside North America.

*Relations among the components.* According to Meyer and Allen (1991), affective, continuance, and normative commitment are distinguishable components of organizational commitment. Results of confirmatory factor analyses have generally supported this hypothesis (Dunham et al., 1994; Hackett et al., 1994). Research using the ACS, CCS, and NCS has, however, consistently yielded non-zero correlations between the scales. Most notable has been the strong correlation between the ACS and the NCS, to the extent that some investigators have questioned the utility of retaining normative commitment as a separate scale (Ko et al., 1997). Other researchers have argued that, despite their high correlation, ACS and NCS have demonstrated sufficiently different correlations with other variables purported to be outcomes of commitment to retain both scales (Cohen, 1996; Meyer et al., 1993). Shouksmith (1994) found that health professionals had higher normative than affective commitment, hence indicating the ability of these respondents to differentiate between the two scales.

In their meta-analysis, Meyer et al. (2002) evaluated the conflicting arguments surrounding the distinctiveness of ACS and NCS constructs by estimating the true correlation between affective and normative commitment and comparing their correlations to other variables. Additionally, they conducted separate analyses for studies that used the original and revised versions of the NCS to determine whether revisions made to the scale had any effect on

the strength of the ACS-NCS relationship. Meyer et al. (2002) found that there was considerable overlap in the ACS and NCS constructs. The ACS-NCS correlation was found to be larger for the revised NCS than for the original NCS. Despite this, the researchers concluded that the findings suggested that affective and normative commitment were not identical constructs. Although they showed similar patterns of correlations with antecedent, correlate, and consequence variables, the magnitude of the correlations was often quite different. Further, notable differences in the moderating effects of geographic location on correlations involving affective and normative commitment were also noted. Meyer et al. (2002) felt, however, that more work was needed to understand what normative commitment is, how it develops, and whether it contributes uniquely to the prediction of behavior. This objective, however, falls outside the scope of this study.

*Dimensionality of continuance commitment.* Meyer and Allen (1984) developed an 8-item CCS that they asserted was more appropriate than existing instruments developed by Ritzer and Trice (1969) and Hrebiniak and Alutto (1972) for the measurement of commitment as conceptualized by Becker (1960) in his side-bet theory. Although research findings generally supported the internal consistency of the CCS, a principal components analysis conducted by McGee and Ford (1987) revealed three factors, two of which were interpretable. One factor, labeled CC:LoAlt, was defined by three items reflecting a perceived lack of alternative employment opportunities. A second factor, labeled CC:HiSac, was defined by three items reflecting perceived sacrifices associated with leaving the organization.

Evaluation of the dimensionality of the CCS by other researchers, using confirmatory factor analyses, has yielded mixed results. Some studies have found evidence for a two-dimensional structure (Hackett et al., 1994; Meyer et al., 1990; Somers, 1993), while others have



found the scale to be unidimensional (Dunham et al., 1994; Ko et al., 1997; Shore & Tetrick, 1991). Those researchers finding evidence for a two dimensional structure also reported that the two factors were generally highly correlated.

Meyer et al. (2002) proposed that an important consideration in deciding whether to treat continuance commitment as a one- or two-dimensional construct is how the subscales relate to other constructs. Somers' (1993) found a positive relationship between the sacrifice component of continuance commitment and affective commitment but found no significant relationship between affective commitment and the low alternatives component of continuance commitment. Meyer et al.'s (2002) meta-analytical finding of a significant correlation between the CCS subscales and scores on the ACS, with CC:LoAlt exhibiting a negative correlation and CC:HiSac exhibiting a positive correlation, concurred with the earlier finding reported by McGee and Ford (1987). The same result was found for the correlation of the CCS subscales with normative commitment, but in this case the strength of association was greater for the CC:HiSac component than for the CC:LoAlt component. Even more important was the fact that the CC:HiSac component had a stronger negative correlation with turnover intention and withdrawal cognition than the CC:LoAlt component.

Based on their findings, Meyer et al. (2002) concluded that the CC:HiSac subscale appeared to be a better operations definition of Becker's (1960) side-bet view of commitment than was the CC:LoAlt subscale. Further, they noted that it might be advisable to refine the CCS for future research to include more items that reflect perceived sacrifice.

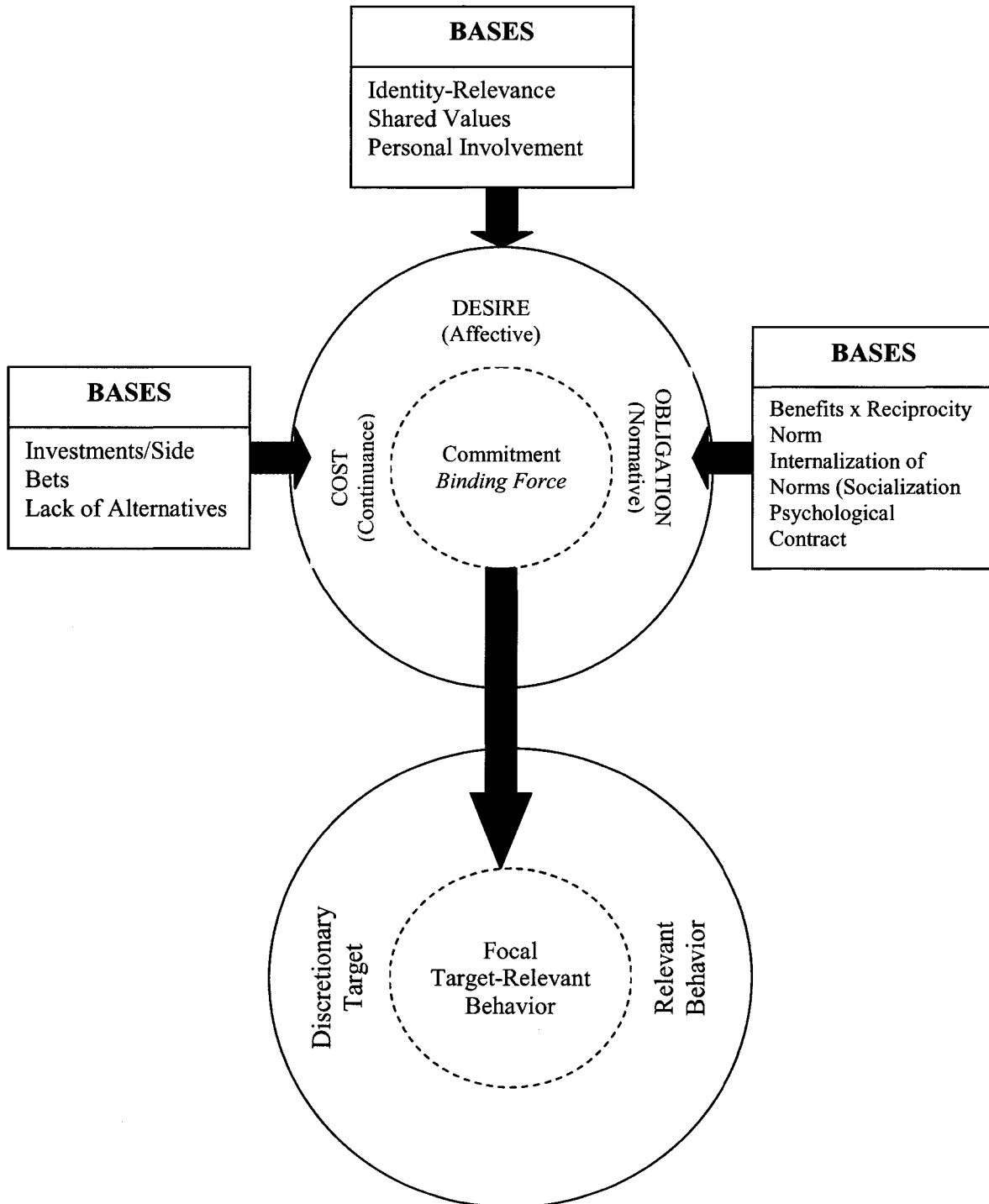
*Generalizability of the Model outside North America.* Meyer et al. (2002) noted that it was not possible to conduct a systematic evaluation of cross-cultural generalizability as the number of studies conducted outside North America was still relatively small, and the number of studies from any particular country was smaller still. Meta-analysis would, however, be able to determine whether geographic location acts as a moderator. Although Meyer et al. (2002) found some differences across geographic locations, for the most part the results were very similar for studies conducted within and outside North America. They noted the importance of these similarities in supporting the generalizability of the Three-Component Model and increasing the significance of any differences observed. The more notable differences, cited by Meyer et al. (2002), were the correlations among the commitment components, particularly between affective and normative commitment. The correlation between these two forms of commitment was greater in studies conducted outside North America. They felt that this might suggest that the difference between desire and obligation was less distinct in other cultures. Alternatively, Meyer et al. (2002) indicated that the differences may also relate to difficulty in translation of the scales. This difficulty with the scales was supported by two studies conducted by Lee, Allen, Meyer, and Rhee (2001) who found that apart from translation problems in the continuance and normative commitment scales, Meyer and Allen's (1991) Three-Component Model of organizational commitment was generalizable to samples in South Korea.

*A General Model of Workplace Commitment.*

Meyer and Herscovitch (2001) proposed the need for the development of a general model of workplace commitment to allay the confusion generated by the existence of different multidimensional frameworks of organizational commitment. As this model comprises much of

the findings from the organizational commitment literature review, it was thought useful to provide an illustration of the model at this point (Figure 4).

Figure 4. A General Model of Workplace Commitment (Meyer & Herscovitch, 2001)



Meyer and Herscovitch (2001) noted that the model could serve as a guide for commitment research, regardless of the study context. Further, they opined that it would perhaps have its greatest value in research conducted to evaluate the combined influence of multiple commitments, as does this study.

### *Professional Commitment*

As noted earlier in the literature review, organizational commitment is just one form of work commitment. Meyer and Herscovitch (2001) emphasized that construct definitions for the different forms of work commitment tend to have the same core definition of commitment with substitution of the relevant target entity (e.g. profession, union, supervisor, team). Consequently, the definition for professional commitment would be similar to that for organizational commitment with the replacement of the word ‘profession’ for the word ‘organization’. Hence, Morrow and Wirth (1989) defined professional commitment as “the relative strength of identification with and involvement in one’s profession” (p. 41). It is important to note that commitment researchers use various terms interchangeably with professional commitment (LaMastro, 2000; Wallace, 1993). Examples include: occupational commitment (Ferris & Aranya 1983; Meyer et al., 1993); career commitment (Blau, 1985, 1988; Chang, 1999); and career salience (Greenhaus, 1973; Morrow & McElroy, 1986; Wiener & Vardi, 1980). The common notion among all these terms is that of being committed to one’s career or occupation. In keeping with the nature of the sample, the focus for this study will be commitment to one’s professional career or occupation.

The study of professional commitment has taken a similar evolutionary pathway to that of organizational commitment, with early research taking a unidimensional perspective (Aranya, Pollock, & Amernic, 1981; Blau, 1989; Morrow & Wirth, 1989). Commitment to occupations

has been typically conceptualized as an affective attachment to the occupation (Meyer et al., 1993). Meyer et al. (1993) noted further that the value of taking a multidimensional approach to the study of occupational commitment, similar to that taken for organizational commitment, lies in the provision of a more complete understanding of a person's bond to his or her occupation.

Meyer et al.'s (1993) study provided preliminary evidence for the generalizability of Meyer and Allen's (1991) Three-Component Model of commitment to occupations; the development of reliable measures of affective, continuance, and normative commitment to occupations; evidence that the three components of occupational commitment are differentially related to variables considered to be antecedents or consequences of commitment; and evidence that organizational and occupational commitment contribute independently to the prediction of important organization-relevant outcome variables, such as turnover intention. The findings of Irving, Coleman and Cooper (1997) also supported the generalizability of the Three-Component Model across a variety of occupational categories. Meyer et al. (1993) noted that although all three forms of commitment might be related to an individual's likelihood of remaining in a profession, the nature of the person's involvement in that occupation might be quite different depending on which form of commitment is predominant. For example, a person who is affectively committed, thereby having a strong desire to remain in the profession, might be more likely to keep up with developments in the profession or to join and participate in relevant professional associations than someone who is not so attached. LaMastro (2000) emphasized that evidence continues to accrue for the validity of a tricomponent approach in conceptualizing professional commitment.

*Professional Commitment and Organizational Commitment*

The literature provides both conceptual and empirical support for a relationship between occupational commitment and organizational commitment (Cohen, 1999). The research findings, however, have been varied (Wallace, 1993). Throughout the 1960s and 1970s, it was argued that professional workers were more likely to be committed to their profession than their employer, especially in bureaucratic types of organizations, due to an inherent conflict between professional and organizational goals (Ben-David, 1958; Hall, 1968; Sorensen, 1967). This approach suggested that professional commitment should have a negative association with organizational commitment. It was argued that the autonomous nature of judgment and decision making required by the professional value system would automatically conflict with an organization's bureaucratic value system that seeks to exert a high level of hierarchical authority and control, as well as conformity to organizational norms and regulations (Hall, 1967, 1968; Sorenson, 1967). Aranya and Ferris (1983) referred to this phenomenon as the organizational-professional conflict.

In more recent times, it is argued that there is no inherent conflict between commitment to the profession and commitment to the organization if the individual's professional work expectations and goals are met by the employing organization (Fielding & Portwood, 1980; Hall, 1967, 1968; Lachman & Aranya, 1986; Miller, 1967; Montagna, 1968; Morrow & Wirth, 1989). Wallace's (1993) meta-analysis, comprising 15 studies with 25 correlations, found only one negative correlation between professional and organizational commitment among staff professionals (Weiner & Vardi, 1980). Based on the findings, Wallace (1993) concluded that there was no empirical support for the early belief that professional and organizational commitments were inherently conflicting and, therefore, negatively correlated. In a more recent

meta-analysis, Meyer et al. (2002) found a strong positive correlation between affective commitment and occupational commitment, emphasizing that this positive correlation did not preclude the possibility of conflict between occupational and affective organizational commitment, but did suggest that conflict might be the exception rather than the rule.

Witt (1993) based an explanation of the relationship between occupational and organizational commitments on Schneider's (1983) attraction-selection-attrition (ASA) framework, which states that people select the organization that fits them. Thus, individuals highly committed to their occupation may have carefully selected an organization as an appropriate workplace and, therefore, would be highly committed to that organization. An alternative explanation was espoused by Vandenberg and Scarpello (1994) who argued that organizational commitment depends, in part, on a perceived match or congruence between a person's own values and those of the organization. As occupational values and expectations characterize a personal value system, the commitment of occupational members to the organization depends on realizing occupational values and expectations within the employment setting. Thus, Vandenberg and Scarpello (1994) concluded that occupationally committed individuals tend to seek employment in settings that encourage them to behave according to the occupational value system.

Morrow (1993) argued that studies investigating the nature of interrelationships among work commitment forms were becoming increasingly necessary, in light of the accumulation of evidence that one form of work commitment can moderate relationships involving other forms. According to Morrow's (1993) findings, continuance commitment was more strongly related to career commitment than was affective commitment. Witt (1993) concurred, stating that among some employees, a specialized occupation may lead to limited alternative opportunities. Witt

(1993) proposed that occupational commitment will be related to continuance commitment more strongly than to affective commitment as the CC:LoAlt subscale of the CCS develops as a result of such low alternatives. In a study conducted among registered nurses and student nurses, Meyer et al. (1993) pointed out that one might expect a strong correlation between continuance commitment to the occupation and to the organization when continued employment in an organization requires continued involvement in the occupation, or where there are relatively few organizations that employ members of a particular occupation. Contrastingly, Cohen (1999) observed a stronger correlation between career commitment and affective commitment than with either of the two subcomponents of continuance commitment among nursing staff in Western Canada. The seeming variability in the findings regarding the degree of correlation between these forms of work commitment supports Meyer et al.'s (1993) recommendation for further research within the nursing profession and across other occupations. The inclusion of physicians and pharmacists, in addition to nurses, in the current study, is thus supported.

Meyer et al. (1993) found that the inclusion of occupational commitment variables into hierarchical regression analyses, after entering organizational commitment variables, added significantly to the prediction of intention to leave the profession, professional activity, and intention to leave the organization; hence, occupational commitment helped in explaining the variance in some outcome variables, over and above that explained by organizational commitment. This result was supported by Chang's (1999) findings that career commitment was a strong moderator of the affective organizational commitment and turnover intention relationship.

Cohen (1999) noted the paucity of research exploring the relationships among the forms of work commitment and emphasized the need to resolve the role of career commitment. Based



on his findings, Cohen (1999) proceeded to suggest two options. First, that career commitment is an endogenous variable in the work commitment model, together with affective organizational commitment and continuance organizational commitment, with job involvement as a mediator as proposed by Randall and Cote (1991). Second, career commitment is an intervening variable between job involvement and organizational commitment. In either case, Cohen (1999) proposed that career commitment was an antecedent of organizational commitment. Meyer et al.'s (2002) meta-analysis to assess relations between Meyer and Allen's (1991) three components of organizational commitment and variables identified as their antecedents, correlates, and consequences, categorized occupational commitment as a correlate of organizational commitment, noting further that there was no consensus concerning causal ordering.

Wallace's (1993) meta-analysis tested four potential moderators that were believed to have an influence on the magnitude and/or direction of the association between professional and organizational commitment – the degree of professionalization of the occupation; the employee's position in the organization; the type of occupation; and the different forms of professional commitment. Wallace (1993) defined professionalization as “the degree to which an occupation is characterized as a profession relative to other occupations” (p. 335). Hall (1968) provides a ranking of occupational groups based on their degree of professionalization. In keeping with this ranking, Wallace (1993) included staff professionals, accountants, nurses, and professional and scientific university employees among the highly professional group. The low professionalization occupation group included personnel managers, business graduates (managers and non-managers), insurance agents, insurance personnel, accountants in nonprofessional organizations, supervisory employees, and newspaper supervisors. Wallace (1993) found that the higher the professionalization of the occupation, the higher the association

between professional and organizational commitment, supporting the conclusion that the degree of professionalization is an important moderator of the degree of association between the two commitments. Additionally, Wallace (1993) found that the employee's position in the authority hierarchy moderated the relation between professional and organizational commitment, with a higher correlation for managers and supervisors compared with non-supervisory staff. Since most of the professional commitment studies included samples comprising accountants, Wallace (1993) also sought to determine whether the association between professional and organizational commitment was a function of the sample being predominantly accountants. It was found that the relationship between professional and organizational commitment was not based on the fact that the respondents were accountants. This was further supported by Gunz and Gunz's (1994) study amongst lawyers, which did not find the high level of organizational-professional conflict expected. Finally, Wallace (1993) found that the specific measure of professional commitment utilized did affect the association between professional and organizational commitment.

#### *Perceived Organizational Support*

Eisenberger et al. (1986) proposed that to determine the organization's readiness to reward increased work effort and to meet needs for praise and approval, employees form global beliefs concerning the extent to which the organization values their contributions and cares about their well-being, and that this perceived organizational support (POS) reduces withdrawal behavior, such as absenteeism. Eisenberger et al. (1986) posited further that POS would be influenced by various aspects of an employee's treatment by the organization and, in turn, would influence the employee's interpretation of organizational motives underlying that treatment. There would, therefore, be agreement in the degree of support that the employee would expect of the organization in a wide variety of situations. These would include the organization's likely

reaction to the employee's future illnesses, mistakes, and superior performance, and the organization's desire to pay a fair salary and make the employee's job meaningful and interesting (Eisenberger et al., 1986).

In a study conducted by Wayne, Shore, Bommer, and Tetrick (2002), procedural justice (perceived fairness in the decision making process) was found to be the strongest predictor of perceived organizational support. Distributive justice, inclusion, recognition, and organizational tenure were found to have moderate predictive value. The evaluative judgments attributed to the organization by the employee, in Eisenberger et al.'s (1986) Survey of Perceived Organizational Support (SPOS), include: satisfaction with the employee as a member of the organization and with the employee's performance; anticipation of the employee's future value; appreciation of the employee's extra effort; consideration of the employee's goals and opinions; and the organization's concerns about fair pay, job enrichment, full use of the employee's talents, the employee's satisfaction on the job, and the employee's well-being. Additionally, the SPOS includes statements referring to actions affecting the employee that the organization would be likely to take in hypothetical situations, including willingness to help with job problems; replacing the employee with a lower paid new employee; responses to the employee's possible complaints, mistakes, worsened performance, improved performance, requested change in working conditions, requested special favor, decision to quit, and failure to complete a task on time; retention of the employee following job obsolescence; rehiring after layoff; and opportunities for promotion (Eisenberger et al., 1986). In 2002, Rhoades and Eisenberger aggregated the findings from a meta-analysis of 70 POS studies to determine the proposed antecedents and consequences of POS. They found that POS should increase based on three

general forms of perceived favorable treatment received from the organization – fairness, supervisor support, and organizational rewards and job conditions.

Rhoades and Eisenberger (2002) can be referred to for a discussion of consequences of POS, including job-related affect, job involvement, performance, strains, and withdrawal behavior. For the purposes of this study, the focus will be on POS' influence on organizational commitment, professional commitment, and turnover intention.

#### *Perceived Organizational Support and Organizational Commitment*

Several studies have investigated particular beliefs by employees about their organization that might contribute to the perception that the organization values their contributions and cares about their well-being (Eisenberger et al. 1986). Buchanan (1974) found among managers in business and government that beliefs that the organization recognized their contributions and could be depended on to fulfill promises were related positively to affective attachment, as measured by Porter et al.'s (1974) Organizational Commitment Questionnaire. Steers (1977) reported similar effects of the same beliefs on the affective attachments of hospital staff, engineers, and scientists.

With regards to Meyer and Allen's (1991) Three-Component organizational commitment model and POS, Shouksmith (1994), in a sample of 1121 health professionals, found that opportunity for growth or self-actualization was related to all three forms of commitment. Affective and normative commitments also were enhanced in organizations with promotion systems perceived as fair. Similarly, Schappe and Doran (1997) found that perceived fairness of the decision making process, rather than the outcomes of decision-making, significantly predicted affective and normative commitment.

Numerous studies have reported that POS and affective commitment are strongly associated yet empirically distinct (Eisenberger et al., 1990; Hutchison, 1997; O'Driscoll & Randall, 1999; Rhoades et al., 2001; Settoon et al., 1996; Shore & Tetrick, 1991; Shore & Wayne, 1993). POS and affective commitment also have been found to have similar antecedents and consequences (Rhoades et al., 2001). In accordance with organizational support theory, the caring, approval, and respect connoted by POS should fulfill socioemotional needs, resulting in workers incorporating organizational membership and role status into their social identity, thereby enhancing employees' affective commitment to the organization (Armeli, Eisenberger, Fasolo, & Lynch, 1998; Eisenberger et al., 1986). POS should thus contribute to employees' sense of purpose and meaning (Rhoades & Eisenberger, 2002).

Although POS was often assumed to contribute to affective commitment, the direction of causality was not empirically tested until Rhoades et al.'s longitudinal study in 2001. Tests were conducted on two samples of employees working for a large electronics and appliance sales organization located in the northeastern United States. The first sample consisted of data collected from 333 employees from nine locations over a 2-year interval and the second sample included data from 226 employees at eight locations over a 3-year interval. In both samples, Rhoades et al. (2001) found that POS was reliably related to temporal changes in affective commitment. In contrast, initial affective commitment was not reliably related to changes in POS. These findings provided evidence that POS leads to affective commitment.

The consistently positive relationship between POS and affective commitment has been ascribed to felt obligation (Eisenberger et al., 2001). Eisenberger et al. (2001) found that POS and felt obligation were causally related, yet conceptually distinct. Whereas, POS is an experience-based attribution concerning the benevolent or malevolent intent of the organization's

policies, norms, procedures, and actions as they affect employees, felt obligation is a “prescriptive belief regarding whether one should care about the organization’s well-being and should help the organization reach its goals” (p. 42). On the basis of the reciprocity norm, it is posited that POS should produce a felt obligation in the affected employee to care about the organization’s welfare and to, therefore, help the organization reach its objectives (Eisenberger et al., 2001).

Insofar as the strength of the relationship between POS and affective attachment to the organization has been found to be influenced by the strength of employee exchange ideology (Eisenberger et al., 1986), it is relevant to include here a brief discourse on exchange ideology. Exchange ideology refers to the belief by employees that it is appropriate and useful to base their concern with the organization’s welfare and their work effort on how favorably they have been treated by the organization. Exchange ideology, therefore, involves employees’ application of the reciprocity norm to their relationship with their work organization (Eisenberger et al., 2001). A strong employee exchange ideology results from a personal history of direct experience, observation, and persuasion by others, concerning the value of reciprocity in the employee-employer relationship. Eisenberger et al. (1986) found that the association between POS and job attendance was greater among teachers having a strong exchange ideology. Eisenberger et al. 2001 went further to investigate exchange ideology’s moderation of the POS-felt obligation association among a sample of 413 employees of a large mail-processing facility in the northeast United States. The relationship between POS and felt obligation was found to be greater for strong exchange ideology employees when compared with those weak in exchange ideology. The fact that there was a positive relationship between POS and felt obligation even among employees with a weak exchange ideology agrees with the view that most employees accept the

reciprocity norm to some degree (Eisenberger et al., 1986). The moderation of the POS-felt obligation relationship by exchange ideology is consistent with organizational support theory's assumption that POS influences affective commitment via the process of reciprocation (Eisenberger et al., 2001).

Only a few studies have assessed the relationship between continuance commitment and POS. Shore and Tetrick (1991) suggested that POS might reduce continuance commitment, by reducing the feeling of entrapment that occurs when employees are forced to stay with an organization because the cost of leaving is too high. The small, negative relationship between POS and continuance commitment, found from the meta-analysis of POS studies conducted by Rhoades and Eisenberger (2002), lends support. It was noteworthy from Rhoades and Eisenberger's (2002) meta-analysis that the POS-continuance commitment relationship was only investigated in 10 individual samples compared with 42 individual samples for the POS-affective commitment relationship. Additionally, it was highlighted by the researchers that the POS-continuance commitment relationships were more variable, ranging from near zero to large and negative, relative to the consistent positive POS-affective commitment relationship across all studies included in the meta-analysis (Rhoades & Eisenberger, 2002). Consequently, the inclusion of an investigation of the POS-continuance commitment relationship in this study should make a valuable contribution to the literature.

#### *Perceived Organizational Support and Professional Commitment*

A review of the literature reveals a lack of research investigating the relationship between POS and other forms of work commitment, besides commitment to the organization (Rhoades & Eisenberger, 2002). The strong relationship that has been found to exist between organizational commitment and professional commitment would naturally invoke an enquiry into the existence

of a POS-professional commitment relationship (Chang, 1999; Ferris & Aranya, 1983; Hall, 1968; LaMastro, 2000; Sorenson, 1967; Wallace, 1993). This relationship would have particular relevance to the degree of importance an organization needs to place on its ability to provide adequate support to its professional staff to ensure that the goals of the profession and those of the organization do not come into conflict.

Cohen (1999), in testing the Randall and Cote's (1991) model of work commitment, inferred a relationship between POS and professional commitment. Cohen (1999) noted that Randall and Cote conceptualized job involvement as a mediator based on the social exchange theory. Job involvement can be perceived as a reflection of work experiences. The more positive these experiences, the higher the job involvement. Higher job involvement in turn will lead to positive attitudes toward both organization and career, insofar as the work experiences are attributed by employees to the organization or their career. Thus, high job involvement should result in high occupational commitment. Hence, POS is deemed to have a positive relationship with professional commitment via job involvement.

#### *Organizational Commitment, Professional Commitment, POS, and Turnover Intention*

The relationship between commitment and turnover intention has been reviewed and examined extensively by researchers and academics over the last 30 years (Angle & Perry, 1981; Bartol, 1979; Blau & Boal, 1987; Chang, 1999; Cohen, 1993; Decotiis & Summers, 1987; Huselid & Day, 1991; Jaros, 1997; Jaros et al., 1993; Meyer & Allen, 1997; Meyer et al., 2002; Somers, 1995; Tett & Meyer, 1993). Somers (1995) examined the relationship between affective commitment, continuance commitment, normative commitment and employee retention among a sample of 422 staff nurses in a large urban hospital in the mid-eastern United States. The



findings of this study suggested that affective commitment was the most consistent predictor of turnover.

Both turnover intention and turnover have been examined in relation to the dimensions of commitment; consistent linkages are promising as the effect on the individual's decision to remain within an organization is considered a central commonality of the different commitment dimensions (Meyer & Allen, 1997). Minimal research, however, has been conducted to test this proposition, and the evidence from those studies that have been done is inconclusive. For example, Cohen (1991) found that continuance commitment had a limited effect on turnover behavior for employees in higher status occupations, such as professionals, because they have more employment opportunities, and they do not rely heavily on the organization to meet their goals and objectives. Further, Whitener and Walz (1993) found in a survey of bank tellers that affective commitment, but not continuance commitment, significantly predicted intent to turnover. Given the importance of these propositions, the conflicting findings reported by the studies up until 1997, and the absence of a comprehensive assessment, further empirical investigation of the relationship between the three-component model of commitment and turnover intention was strongly advocated by Meyer and Allen (1997).

Stanley, Meyer, Topolnytsky, and Herscovitch (1999) conducted a series of meta-analyses to examine the correlations between commitment, as measured by the Meyer and Allen (1991) commitment scales, and turnover intention, among other variables. Stanley et al. (1999) found that all three forms of organizational commitment – affective, continuance, and normative - correlated negatively with turnover intention but that the magnitude of the correlations differed. Affective commitment showed the strongest correlation, followed by normative commitment and then continuance commitment. Correlations with actual turnover

were weaker but showed the same pattern. Chang (1999), in a study of 255 researchers from eight business-related research institutes in Korea, found that both affective commitment and continuance commitment showed significant negative effects on turnover intention, with affective commitment having the stronger effect. Similar findings were noted in the meta-analysis of 155 independent samples conducted by Meyer et al. (2002).

Meyer and Herscovitch (2001) argued that normative and continuance commitments should be better predictors of turnover intention than affective commitment, as they tend to specify continued employment as the focal behavior. In providing a possible explanation for the strength of the affective commitment-turnover intention correlation, Meyer and Herscovitch (2001) proposed that the binding force is not equal for all commitment mind-sets. Individuals who are committed primarily out of desire might have a stronger inclination to follow through on their commitment than those who are committed primarily out of obligation or to avoid costs. They noted that those who are committed primarily to avoid incurring the costs of leaving might be particularly inclined to find ways to get out of their commitment. In a similar manner, an individual who feels a moral obligation to a manager to complete a project might be inclined to find ways to fulfill his or her obligation more quickly or with less effort than would be the case if the commitment was based on a strong belief in the importance of the project. Hence, in considering what Meyer and Herscovitch (2001) refer to as pure cases of affective, continuance, and normative commitment (i.e. where the other forms are weak), it is probable that the tendency for a committed individual to enact the focal behavior will be greatest in the case of affective commitment, followed by normative commitment and then continuance commitment.

Only a few investigators have reported testing for interaction effects involving two or more dimensions of organizational commitment (Allen & Meyer, 1996; Jaros, 1997; Randall,

1990; Somers, 1995). Somers (1995) found a significant interaction of affective and continuance commitment in the prediction of intention to remain. The relation between continuance commitment and intention to remain was stronger when affective commitment was weak, and vice versa. Jaros (1997) found a significant interaction of continuance and normative commitment in the prediction of turnover intention. Again, it was found that the relation between one form of commitment and turnover intention was stronger when the other form of commitment was weak. Hence, the pattern of relations reported in these studies suggests that, when any one form of commitment is strong, it has the potential to attenuate the correlation between turnover intention and any other form of commitment (Meyer & Herscovitch, 2001).

Professional commitment also has been found to be positively related to employees' intention to leave the job and organization; that is, those who were highly committed to their occupations indicated they were more likely to leave their current organizations and job than those with less occupational commitment (Cohen, 1993). Alternatively, Chang (1999) detected a significant negative effect of career commitment on turnover intention, weaker than that of affective organizational commitment but stronger than continuance organizational commitment. Both Cohen (1993) and Chang (1999) used unidimensional constructs of professional commitment in their studies. More relevant to this study are the findings that relate the multidimensional construct of professional commitment and turnover intention. Meyer et al. (1993) found that affective occupational commitment correlated negatively with intention to leave the organization but found no significant relationship between continuance occupational commitment and intention to leave the organization. On the other hand, Irving et al. (1997) found that turnover intention was negatively related to continuance occupational commitment but was not significantly related to affective occupational commitment.

Detailed study of the moderating effects of career commitment on the relationship between affective organizational commitment and turnover intention by Chang (1999) revealed different degrees of turnover intention, depending on the nature of the career commitment-affective commitment relationship. It was observed that when individuals are committed to the organization they are less willing to leave the company, and the degree of relationship between organizational commitment and intention to leave was found to be stronger for those highly committed to their careers. Individuals low in both types of commitment had the highest turnover intentions because they did not care about either the company or their current careers. Individuals with high career commitment and low affective commitment also tended to leave the company because they did not believe that the current company was satisfying their career needs or goals. This result was found to be consistent with the assertion by Bedian, Kemery, and Pizzolatto (1991) that high career committed employees consider leaving the company if growth opportunities are not provided by the current organization. These individuals, however, are not apt to leave, and are likely to contribute to the company, if their organizational commitment is increased.

An important consequence of POS that has been assessed in the literature, and which is relevant to this study, is its relationship to turnover intention (Rhoades & Eisenberger, 2002; Wayne et al., 1997). Retention of organizational membership provides a publicly identifiable way for employees to reciprocate POS. Additionally, the increase in affective commitment resulting from POS also serves to lessen withdrawal behavior (Rhoades & Eisenberger, 2002). Although Rhoades and Eisenberger (2002) found the relationship between POS and intention to leave to be the strongest among the withdrawal behavior variables included in the POS studies, and was in the predicted negative direction, the results were heterogeneous, even after the

removal of outliers. The relationship between POS and turnover intention was, therefore, felt worthy of further investigation.

### *Summary*

The core theoretical frameworks for this study are the Hom-Griffeth Turnover Model, the Meyer and Allen (1991) Three-Component Model of organizational commitment, and Eisenberger et al.'s (1986) organizational support theory. While previous models and theories have viewed turnover as the variable of interest, this study will follow the lead of recent research trends that suggest that turnover intention is better in predicting turnover compared with affective variables, such as job satisfaction and organizational commitment (Ferris & Aranya, 1983; Steel & Ovalle, 1984). Another benefit of using turnover intention is that turnover intention is under more individual control than actual turnover (Bluedorn, 1982).

The relationship between POS, affective commitment, continuance commitment, professional commitment and turnover intention, based on the foregoing literature review, is depicted in Figure 1. The personal characteristics and the moderating variables – exchange ideology, degree of professionalization, and position in the organizational hierarchy - have been omitted to allow for a simplified depiction of the proposed model.

This chapter has provided a review of the relevant literature relating to the constructs – perceived organizational support, organizational commitment, professional commitment, and turnover intention - and the other important variables involved in this study. On the basis of the foregoing literature review, Chapter III will outline the research design methodology for this dissertation.

## Chapter III

### Methodology

This chapter describes the research methods used in this study. Specifically, it describes the research design, population and sample, study variables, measurement of variables, reliability and validity of measures, research questions and hypotheses, data collection procedures, and statistical analysis.

#### *Research Design*

This study utilizes an analytic survey design (Abramson, 1997). In this type of research design, the researcher does not manipulate any of the variables of interest, and data relating to all variables are collected simultaneously, in contrast to the experimental research design (Bryman & Cramer, 2003). An undergirding feature of the analytic survey design is the formulation and testing of hypotheses; that is, suppositions that are tested by collecting facts that lead to their acceptance or rejection (Abramson, 1997). Survey designs often are referred to as correlational designs, to denote the tendency for such research to be able to reveal relationships between variables and to draw attention to their limited capacity in connection with the elucidation of causal processes (Bryman & Cramer, 2003).

#### *Population and Sample*

The population for this study consists of 517 full-time physicians, registered nurses, pharmacists, and clerical/administrative staff employed to four state owned hospitals in Jamaica. The four hospitals comprise two regional hospitals and two specialist hospitals. The study was confined to state owned hospitals, as this is where the problem of staff shortages is being experienced. In addition, the privately operated hospitals do not employ physicians but confer admitting and operating theatre privileges on physicians for their patients, which would result in

the exclusion of this professional group from such a study as this. Details of the composition of the population are outlined in Table 1.

Table 1

Population Composition

	Regional Hospitals	Specialist Hospitals	TOTAL
Physicians	70	25	95
Registered Nurses	175	100	275
Pharmacists	16	6	22
Clerical/Administrative Staff	80	45	125
TOTAL	341	176	517

*Study Variables*

The independent variables for this research are: perceived organizational support (Eisenberger et al., 1986); affective and continuance commitment, two components of the Meyer and Allen (1991) organizational commitment model; and professional commitment. The single dependent variable is turnover intention. In addition, felt obligation is an intervening variable and employee exchange ideology, degree of professionalization, and position in the organizational hierarchy are three moderating variables included in the study. Finally, the inclusion of the following demographic variables was deemed to be relevant to the study: age, gender, marital status, children, kinship responsibilities, organizational tenure, education, work experience, and professional tenure.

### *Measurement of Variables*

The survey instrument for this study appears in Appendix A. Details of the contents are described below. Permission was obtained from the developers for use of the Survey of Perceived Organizational Support, the Felt Obligation questionnaire, the Exchange Ideology questionnaire, and Meyer and Allen's three-component commitment model for this study (Appendix C).

*Perceived Organizational Support.* The 12 items exhibiting the highest factor loading from Eisenberger et al.'s (1986) 36-item Survey of Perceived Organizational Support (SPOS) was used to measure perceived organizational support. Respondents were required to indicate their extent of agreement with each item, using a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). For ease of reference, the 12 items are designated as POS1 to POS12 in this research. An overall indicator for POS was derived by averaging the scores for all 12 items.

*Organizational Commitment.* The revised affective and continuance commitment scales (ACS & CCS) developed by Meyer et al. (1993) were used to assess organizational commitment. Justification for the exclusion of the normative commitment scale (NCS), the third organizational commitment component identified by Meyer and Allen (1991), from the operationalization of organizational commitment for this study, is discussed in the section dealing with reliability and validity. The six items of the ACS and CCS are referred to as AC1 to AC6 and CC1 to CC6 for the purposes of this study. Responses were measured on a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). To arrive at an overall indicator for each commitment dimension, the scores for the items of each scale were averaged.



*Professional Commitment.* The same 12 items representing the revised affective and continuance commitment scales from Meyer and Allen's (1991) multidimensional construct for commitment were used to measure professional commitment. The only change was the replacement of the word "organization" with the statement "profession/occupation". Occupation was included to facilitate responses from the clerical/administrative staff grouping. Responses to the six-item professional affective scale (PACS) and the six-item professional continuance commitment scale (PCCS) were measured on a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The items for the two professional commitment scales are referred to as PAC1 to PAC6 and PCC1 to PCC6 in this research. The scores for the six items of each scale were averaged to arrive at an overall indicator.

*Turnover Intention.* The dependent variable was measured with the four item Staying or Leaving Index (SLI) (Bluedorn, 1982). Respondents were requested to rate their chances of quitting the company within the next three months, six months, one year, and two years. The scores for the four items, for each respondent, were summed to form the index.

*Felt Obligation.* This mediating variable was measured using the seven-item Felt Obligation Questionnaire developed by Eisenberger et al. (2001) to measure the employee's felt obligation to care about the organization and to help it reach its goals. The respondents were asked to indicate the extent of their agreement with each item on a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The score for all items were summed and the average score derived to obtain an overall indicator of felt obligation for each respondent.

*Exchange Ideology.* The five-item Employee Exchange Ideology Questionnaire (Eisenberger et al., 1986) was used to measure employees' beliefs concerning the appropriateness of helping the organization achieve its goals in exchange for favorable treatment.

Again, the respondents were required to indicate the extent of their agreement with each item on a seven-point Likert-type scale (1= strongly disagree to 7 = strongly agree), and an overall Exchange Ideology Index was derived for each respondent by obtaining an average of the scores for the five items.

*Degree of Professionalization.* Respondents were asked to indicate their occupation and job title to determine their profession. Physicians were coded 1, pharmacists 2, nurses 3, and clerical/administrative staff 4. Physicians were deemed to have the highest degree of professionalization, followed by pharmacists and nurses, and lastly the clerical/administrative group, based on the five criteria used in the literature for assessing the degree of professionalization – autonomy, collegial maintenance of standards, ethics, professional commitment, and professional identification (Hall,1968; Kerr, Von Glinow, & Schriesheim,1977).

Autonomy refers to a perceived right to make decisions about both the means and goals associated with one's work, as well as the authority to do so. Collegial maintenance of standards refers to the belief that standards should be enforced by fellow professionals who are the only ones properly equipped to evaluate work adequately in the field. Ethics refers to a felt responsibility to avoid self-interest and emotional involvement with clients in the course of rendering services, as well as a dedication to high quality service to the client. Professional commitment, in the context of the professionalism scale, refers to a dedication to the work and the long term career aspirations of the profession. Finally, professional identification refers to use of the profession and fellow professionals as major referents.

*Position in the Organizational Hierarchy.* Respondents were asked to indicate whether they occupy a managerial/supervisory position or a non-managerial/non-supervisory position.

Managerial/supervisory was coded 1 and non-managerial/non-supervisory was coded 2. Job title was also used as an indicator of position in the organizational hierarchy.

*Demographic Variables.* Age, gender, marital status, number of children, kinship responsibilities, education, organizational tenure, work experience, and professional tenure were the demographic variables included in the study, to determine work and personal characteristics of the respondents. Each was measured on the basis of a single question, except for work experience where four questions were asked.

Age had five categories, coded from 1 to 5: 1 = 18 – 24; 2 = 25 – 34; 3 = 35 – 44; 4 = 45 – 54; 5 = 55 years old and over. Gender was coded 1 if the respondents were male and coded 2 if they were female. To determine marital status, respondents were asked to indicate whether they are married, common-law, single, separated, divorced, or widowed. For the purposes of the analysis, the categories were combined to form a dichotomous variable: married (married or common-law), which was coded 1 and unmarried (single, separated, divorced, or widowed), which was coded 0. Respondents were asked to indicate the number of children they have, with the actual number being represented in the analysis. The variable, kinship responsibilities, was operationalized by asking respondents to indicate the number of dependents they have, with the actual number of dependents being represented in the analysis. Education level comprised five categories, coded as follows: 1 = High School; 2 = Tertiary Diploma; 3 = Bachelor's Degree; 4 = Masters; 5 = Doctorate. Organizational tenure consisted of five categories, coded as follows: 1 = 0 to 4 years; 2 = 5 to 9 years; 3 = 10 to 14 years; 4 = 15 to 19 years; 5 = 20 years and over. Various aspects of the respondents' work experience were determined by the following four questions: the total number of years of worked; the number of organizations worked for; the shortest time spent at any organization; and the longest time spent at any organization. Based on

the responses to these questions, the researcher determined whether the current organization was the respondent's first employer and the respondent's average organizational tenure. Finally, to measure professional tenure, respondents were asked to indicate the number of years they have been in their current profession.

To summarize, the survey instrument had a total of 70 questions, comprising six multiple item scales, as well as questions that sought to determine specific work characteristics and personal characteristics of the respondents.

### *Reliability and Validity of Measures*

It is generally accepted that when a concept has been operationally defined, in that a measure of it has been proposed, the ensuing measurement device should be both reliable and valid (Bryman & Cramer, 2003). The reliability of a measure refers to its consistency. This notion is often taken to entail two separate aspects: external and internal reliability. External reliability is the more common, and refers to the degree of consistency of a measure over time. Internal reliability is particularly important in connection with multiple-item scales. It raises the question of whether the items that make up the scale are internally consistent, that is, whether each scale is measuring a single idea. There are a number of procedures for estimating internal reliability, the most popular and widely used being Cronbach's alpha. Bryman and Cramer (2003) state that the "rule of thumb" for reliability is that the result should be 0.8 or above, while some researchers report 0.7 as acceptable (Allen & Meyer, 1996). When a concept and its associated measure are deemed to comprise underlying dimensions, it is normal to calculate reliability estimates for each of the constituent dimensions rather than for the measure as a whole. Indeed, if a factor analysis confirms that a measure comprises a number of dimensions

the overall scale will probably exhibit a low level of internal reliability (Bryman & Cramer, 2003).

Validity draws attention to how far a measure really measures the concept that it purports to measure. Researchers are usually interested in determining that the measure exhibits both convergent and discriminant validity. Convergent validity refers to the measure harmonizing with another measure as expected, while discriminant validity looks for low levels of correspondence between a measure and other measures that are supposed to represent other concepts (Bryman & Cramer, 2003).

As Schwab (1980) noted, several quite different kinds of evidence can be used to evaluate the construct validity of a set of conceptually related measures. The discussion in this section focuses on three forms of evidence for the measures used in this study: factor analytic results, reliability of the measures, and patterns of correlations to determine discriminant validity.

*Perceived Organizational Support.* Exploratory and confirmatory factor analyses, with employees from diverse occupations and organizations, provide evidence for the unidimensionality and high internal reliability of Eisenberger et al.'s (1986) SPOS, both in its original 36-item form and subsequent shorter versions (e.g., Armeli et al., 1998; Eisenberger et al., 1986; Eisenberger et al., 1990; Lynch, Eisenberger, & Armeli, 1999; Meyer et al., 2002; Shore & Tetrick, 1991; Shore & Wayne, 1993). Eisenberger et al. (1986) reported that the 17-item short form of the SPOS exhibited a reliability coefficient (Cronbach's alpha) of .93. Eisenberger et al. (1990) found that the internal reliability of the SPOS was generally high, but greater for the 17-item version than for the nine-item version. Alpha coefficients across six occupations ranged from .74 to .95. Eisenberger et al. (2001), using a six-item SPOS, reported a

coefficient alpha of .77. Meyer et al. (2002) found that the average weighted reliability for organizational support across 15 studies, consisting of 5,619 respondents, was .90.

POS has been found to be related to, yet distinct from, affective organizational commitment (Eisenberger et al., 1990; Rhoades et al., 2001; Settoon et al., 1996; Shore & Tetrick, 1991), and continuance organizational commitment (Shore & Tetrick, 1991). Eisenberger et al. (1986) obtained a two-factor solution with oblique rotation for the SPOS and the exchange ideology questionnaire. Each questionnaire formed its own factor, with items on one factor producing negligible factor loadings on the other factor. The low correlation of  $-.10$  between the survey results for both questionnaires confirmed their independence. Rhoades and Eisenberger (2002), in their meta-analysis of the POS literature, also reported that POS was found to be distinct from effort-reward expectancies, leader-member exchange, supervisor support, perceived organizational politics, procedural justice, and job satisfaction, thereby concluding that POS is a distinctive construct that the SPOS measures with high reliability.

Rhoades and Eisenberger (2002) noted further that the majority of POS studies used a short form of the SPOS developed from the 17 highest loading items in the SPOS (Eisenberger et al., 1986). However, for practical reasons, many studies used fewer items, the use of which does not appear to be problematic, as the original scale is unidimensional and has high internal reliability (Rhoades & Eisenberger, 2002). Nonetheless it was recommended that prudence be exercised by ensuring that both facets of the definition of POS (valuation of employees' contribution and care about employees' well-being) are represented in short versions of the questionnaire.

*Organizational commitment.* Confirmatory factor analyses have demonstrated that the ACS and CCS load on separate factors (Dunham et al., 1994; Hackett et al., 1994; Meyer et al.,

1990; Meyer et al., 1993; Shore & Tetrick, 1991; Somers, 1993). The factor analytic studies of the CCS reveal conflicting findings with regard to the unidimensionality of the construct. The dimensionality of this measure was examined first by McGee and Ford (1987), who reported results from two exploratory factor analyses of the same data set. In the first analysis, two factors were specified, with the results supporting an ACS/CCS distinction. In the second analysis, the number of factors to be extracted was not specified. Four factors were produced in this latter analysis, three of which were interpretable, supporting two “dimensions” of the CCS and their distinction from the ACS. The first CCS dimension, designated as CC:LoAlt, was based on “perceptions that few employment alternatives exist” and the second dimension, designated as CC:HiSac, on “high personal sacrifice associated with leaving the organization” (McGee & Ford, 1987, p. 640). Meyer et al. (1990) used confirmatory factor analysis to compare several models describing the CCS data taken from three independent samples. Although the one-factor model provided a good fit to the data, the best fit was provided by an oblique two-factor model, that is, the CCS:LoAlt and CCS:HiSac items representing separate factors. Allen and Meyer (1996) reported, from their review of the commitment literature, that a model hypothesizing a two-dimensional CCS structure clearly provided a better fit to the data than did a unidimensional model. They noted, however, that across all studies this superiority was modest and the factors were highly related. Allen and Meyer (1996), although noting the importance of the issue of relative fit, emphasized that the question of whether the two subscales of the CCS correlate differently with variables of interest was equally important. From their review it was found that the factors were differentially related to the ACS (McGee & Ford, 1987; Meyer et al., 1990), job performance and absenteeism (Hackett et al., 1994), and turnover intention (Somers 1993).

Allen and Meyer (1996) conducted a narrative review of research using one or more of the ACS, CCS, and NCS to evaluate the internal consistency and construct validity of the measures. Table 2 provides some of the coefficient alpha reliabilities for the ACS and CCS derived from the review. Table 3 outlines the average weighted reliability for the ACS and the CCS reported from the meta-analysis conducted by Meyer et al. (2002). Meyer et al. (2002) also reported median reliabilities for the eight-item and six-item versions of the ACS and the CCS as .85 and .73, respectively. It should be noted that, with very few exceptions, all reliability estimates exceeded .70.

Reliability coefficients derived by McGee and Ford (1987) for the two subscales of the CCS were reported to be .72 for CC:LoAlt and .71 for CC:HiSac. As the two subscales contained only three items each, these internal consistency reliability estimates were deemed to be acceptable. In a sample of nurses, Somers (1993) found reliabilities of .59 and .57 for CC:LoAlt and CC:HiSac, respectively. Cohen (1999) also found relatively low reliabilities for the two CCS subscales, with a reliability of .65 for 'low alternatives' and .60 for 'high sacrifices'. In their meta-analysis, Meyer et al. (2002) reported average weighted reliabilities for CC:LoAlt and CC:HiSac of .70 in each case.



Table 2

Internal Consistency Reliabilities for Affective and Continuance Commitment Scales

<u>ACS</u>	<u>CCS</u>	<u>Reference/Sample</u>
.87	.75	Allen and Meyer (1990). Sample 1
.86	.82	Allen and Meyer (1990). Sample 2
.82	.81	Allen and Smith (1987)
.79	.69	Cohen (1993)
.86	.79	Hackett et al. (1994). Sample 1
.84	.75	Hackett et al. (1994). Sample 2
.89	.85	Konovsky and Cropanzano (1991)
.88	.70	McGee and Ford (1987)
.82	.74	Meyer et al. (1993)
.74	.69	Meyer, Paunonen, Gellatly, Goffin, and Jackson (1989)
.88	.83	Randall et al. (1990)
.84	.80	Reilly and Orsak (1991)
.81	.74	Somers (1993)

Source: Allen and Meyer (1996)

Table 3

Average Weighted Reliabilities for ACS and CCS

<u>Scale</u>	<u>Average N-weighted reliability</u>	<u>Number of studies in analysis</u>	<u>Total number of respondents</u>
ACS	.82	144	47,073
CCS	.76	102	34,424

Source: Meyer et al. (2002)

Shore and Tetrick (1991) provided evidence for the distinction between the ACS, the CCS, job satisfaction, and perceived organizational support. Exploratory analyses have shown that the ACS items are distinct from related measures assessing career, job, and work value constructs (Blau et al., 1993). ACS items were also found to be distinct from CCS items (Cohen, 1993; McGee & Ford, 1987). Meyer et al.'s (1993) study of organizational and occupational commitment not only provided further evidence of the distinction among the ACS and CCS but also that the measures were sensitive to the particular foci in question. Allen and Meyer (1996) found that the CCS correlated weakly with other attitude measures, thus providing further evidence of discriminant validity. Allen and Meyer's (1996) review also found evidence of convergent validity between Porter et al.'s (1974) Organizational Commitment Questionnaire (OCQ) and the ACS, in keeping with the focus of both on emotional attachment to the organization. Allen and Meyer (1996) noted, however, that there was nothing in the data to address the issue of convergent validity, based on the existence of few comparable measures for the CCS.

Meyer et al. (2002), in their meta-analysis of studies utilizing the Meyer and Allen commitment constructs, found that the weighted average corrected correlation between affective and normative commitment was substantial ( $\rho = .63$ ), suggesting that there is considerable overlap in the two constructs. When analyses were conducted separately for the eight- and six-item measures, the correlation was considerably larger for the six-item measure ( $\rho = .77$ ) than for the eight-item measure ( $\rho = .54$ ). Analyses conducted separately for studies conducted within and outside North America revealed a higher correlation outside ( $\rho = .69$ ) compared to within ( $\rho = .59$ ) North America. In explaining this strong correlation between affective and normative commitment, Meyer et al. (2002) argued that perhaps positive experiences that contribute to

strong affective commitment also contribute to a feeling of obligation to reciprocate. If this is so, they conclude that this might help to explain why most of the work experience variables that correlate with affective commitment also correlate positively, albeit less strongly, with normative commitment. Ultimately, Meyer et al. (2002) noted that the findings suggest that affective and normative commitment are not identical constructs; but recognize that more work is needed to understand what normative commitment is, how it develops, and whether it contributes uniquely to the prediction of behavior. For this, and other reasons, normative commitment was excluded from the organizational commitment construct used in this study. Other reasons were: this study's inclusion of felt obligation, a similar construct to normative commitment; and the desire to keep the survey instrument as concise as possible, to maximize the potential response rate.

*Professional commitment.* Confirmatory factor analyses conducted by Meyer et al. (1993) on a sample of nurses demonstrated that Meyer and Allen's three-component model of organizational commitment could be extended to occupations and that organizational commitment and occupational commitment were distinguishable constructs. Meyer et al.'s (1993) 18-item measure of affective, continuance, and normative occupational commitment among nurses showed coefficient alphas for these measures ranging from .73 to .87. Meyer et al.'s (1993) results also indicated differential relations between the three forms of occupational commitment and other variables. For example, age was positively correlated with affective occupational commitment but uncorrelated with continuance occupational commitment, while turnover intentions were negatively related to continuance occupational commitment but were not significantly related to affective occupational commitment.

The results of Irving et al.'s (1997) study provide further evidence for the validity of Meyer et al.'s (1993) multidimensional model of occupational commitment. Confirmatory factor

analysis revealed that the three-component model holds when tested across divergent occupational groupings. Irving et al. (1997) found coefficient alphas of .79 and .83 for affective and continuance occupational commitment, respectively. Irving et al. (1997) also found differential relations between the various forms of occupational commitment and other study variables. Gender and turnover intentions were significantly correlated with continuance occupational commitment, being -.28 and -.29, respectively, while neither was significantly correlated with affective occupational commitment.

*Turnover Intention.* Sager, Griffeth, and Hom (1998) noted that Bluedorn's (1982) Staying Leaving Index (SLI) was one of the few measures of intention to quit that had been validated. Bluedorn (1982), and Hom and Griffeth (1991), recommended incorporating temporal elements into intention to leave measures, to improve correspondence between the measures of quit decisions and turnover. Internal validity of the SLI was determined by Sager et al. (1998), with factor loadings for the four items of the index showing loadings ranging from .80 to .99. Bluedorn's (1982) longitudinal study revealed reliabilities of the SLI for two samples, as measured by Cronbach's alpha coefficient, to be .85 and .95. Intent to leave was found to be a distinct construct from other withdrawal cognitions, such as job search, thoughts of quitting, and intention to search (Bluedorn, 1982; Sager et al., 1998).

*Felt Obligation.* A principal-components analysis on the combined item set, conducted by Eisenberger et al. (2001), produced a single factor, with loadings ranging from .61 to .82. Confirmatory factor analysis, also conducted by Eisenberger et al. (2001), indicated that felt obligation was a distinct construct from perceived organizational support, exchange ideology, affective organizational commitment, and withdrawal behavior. Eisenberger et al. (2001) reported a coefficient alpha of .88 for the felt obligation scale.

*Exchange Ideology.* Eisenberger et al. (1986) found factor loadings for the five-item exchange ideology questionnaire that ranged from .60 to .80. Principal-components analysis of the eight-item exchange ideology survey conducted by Eisenberger et al. (2001) produced a single factor, with loadings ranging from .50 to .75. Eisenberger et al. (1986) reported the exchange ideology questionnaire as having a reliability coefficient (Cronbach's alpha) of .80. Eisenberger et al. (1986) also conducted a two-factor solution with oblique rotation for the combined set of SPOS and exchange ideology questions and found that each questionnaire formed its own factor, with items on one factor producing negligible factor loadings on the other factor. The low correlation (-.10) between the surveys confirmed their independence. Confirmatory factor analysis conducted by Eisenberger et al. (2001) indicated that exchange ideology was a distinct construct from perceived organizational support, felt obligation, affective organizational commitment, and withdrawal behavior.

#### *Research Questions and Hypotheses*

This research study examined the extent to which perceived organizational support, organizational commitment, and professional commitment impact turnover intention among healthcare professionals in a developing country. Statistical testing of an association requires the formulation of a null hypothesis, which is tested against a specific alternative, called the research hypothesis (Abramson, 1997). The research questions and the related hypotheses follow.

*Research Question 1.* Are POS, organizational commitment, professional commitment, and turnover intention related as outlined in the proposed turnover model (Figure 1)?

The first 12 hypotheses relate to the first research question. Eisenberger et al. (2001) reported a significant direct association between POS and withdrawal behavior, in the negative direction, with a path coefficient of -.12 ( $p < .05$ ). The meta-analytic study of the POS research

conducted by Rhoades and Eisenberger (2002) found a negative relationship between POS and intention to leave, with an average weighted correlation of  $-.45$  ( $p < .001$ ), although the results were reported to be heterogeneous.

Previous research, mainly in the U.S., consistently demonstrated that there is a direct, negative relationship between the two types of organizational commitment (affective and continuance) and turnover intention (e.g. Chang, 1999; Hom & Griffeth, 1991; Jaros et al., 1993; Meyer et al., 2002; Michaels & Spector, 1982; Mowday et al., 1984; Stanley et al., 1999; Tett & Meyer, 1993).

There have been conflicting findings regarding the relationship between professional commitment and turnover intention. Meyer et al. (1993) found that affective occupational commitment correlated negatively with intention to leave the organization, but found no significant relationship between continuance occupational commitment and intention to leave the organization. On the other hand, Irving et al. (1997) found that turnover intention was negatively related to continuance occupational commitment, but was not significantly related to affective occupational commitment.

Based on the foregoing, hypothesis 1 is outlined as follows:

- H<sub>1o</sub>: POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have no relationship with turnover intention.
- H<sub>1a</sub>: POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have a relationship with turnover intention.

Numerous studies have reported that POS and affective organizational commitment are strongly and positively associated (Eisenberger et al., 1990; Hutchison, 1997; O'Driscoll & Randall, 1999; Rhoades et al., 2001; Settoon et al., 1996; Shore & Tetrick, 1991; Shore & Wayne, 1993). POS has been found to enhance employees' affective commitment to the organization (Armeli et al., 1998; Eisenberger et al., 1986).

Eisenberger et al. (2001) reported a significant indirect association of POS with affective organizational commitment via felt obligation, with a path coefficient of .20 ( $p < .05$ ). Examination of the path coefficients revealed that POS was uniquely related to felt obligation in the positive direction (.38,  $p < .05$ ) and felt obligation was positively related to affective organizational commitment (.45,  $p < .05$ ). Additionally, Rhoades et al. (2001) found that POS was reliably related to temporal changes in affective organizational commitment. In contrast, initial affective organizational commitment was not reliably related to changes in POS. These findings provided evidence that POS leads to affective commitment and not vice versa. Accordingly, hypotheses two, three, and four are stated as follows.

H<sub>2o</sub>: POS is not correlated or is negatively correlated with affective organizational commitment.

H<sub>2a</sub>: POS is positively correlated with affective organizational commitment.

H<sub>3o</sub>: Felt obligation is not an intervening variable in the relationship between POS and affective organizational commitment.

H<sub>3a</sub>: Felt obligation is an intervening variable in the relationship between POS and affective organizational commitment.

H<sub>4o</sub>: Affective organizational commitment is not an intervening variable in the relationship between POS and turnover intention.

H<sub>4a</sub>: Affective organizational commitment is an intervening variable in the relationship between POS and turnover intention.

Shore and Tetrick (1991) suggested that POS reduces continuance organizational commitment. This is supported by the small, negative relationship between POS and continuance commitment found from the meta-analysis of POS studies conducted by Rhoades and Eisenberger (2002). It was highlighted by Rhoades and Eisenberger (2002), however, that the POS-continuance commitment relationships were variable, ranging from near zero to large and negative, relative to the consistent positive POS-affective commitment relationship across all studies included in the meta-analysis.

Rhoades et al. (2001) found that POS was reliably related to temporal changes in affective organizational commitment. In contrast, initial affective organizational commitment was not reliably related to changes in POS. These findings provided evidence that POS leads to affective commitment and not vice versa. However, there was no evidence in the literature that similar studies were conducted with POS and continuance organizational commitment. It would be expected that the temporal relationship between POS and continuance organizational commitment would be similar to that of POS and affective organizational commitment.

On the basis of the foregoing, hypotheses five and six are stated as follows.

H<sub>5o</sub>: POS is not related or is positively related to continuance organizational commitment.

H<sub>5a</sub>: POS is negatively related to continuance organizational commitment.



H<sub>60</sub>: Continuance organizational commitment is not an intervening variable in the relationship between POS and turnover intention.

H<sub>6a</sub>: Continuance organizational commitment is an intervening variable in the relationship between POS and turnover intention.

In keeping with social exchange theory and the reciprocity norm, it can be argued that a professional employee's perception of organizational support of that employee's professional goals and standards strengthens professional commitment, which would in turn result in an increase in the employee's desire to remain with the organization (Eisenberger et al., 1986). Accordingly, hypothesis seven is stated below.

H<sub>70</sub>: POS is not correlated or is negatively correlated with the dimensions of professional commitment.

H<sub>7a</sub>: POS is positively correlated with the dimensions of professional commitment.

Rhoades et al. (2001) found that POS was reliably related to temporal changes in affective organizational commitment. In contrast, initial affective organizational commitment was not reliably related to changes in POS. These findings provided evidence that POS leads to affective commitment and not vice versa. However, there was no evidence that similar studies were conducted with POS and the dimensions of professional commitment. It would be expected that the temporal relationship between POS and the dimensions of professional commitment would be similar to that of POS and affective organizational commitment. Hypothesis eight is, therefore, stated as follows.

H<sub>8o</sub>: The dimensions of professional commitment are not intervening variables in the relationship between POS and turnover intention.

H<sub>8a</sub>: The dimensions of professional commitment are intervening variables in the relationship between POS and turnover intention.

Wallace's (1993) meta-analysis found only one negative relationship between professional and organizational commitment among staff professionals (Weiner & Vardi, 1980). Additional studies also have reported a positive relationship between professional commitment and both affective organizational commitment and continuance organizational commitment, although there is no agreement on which is the stronger relationship (Cohen, 1999; Meyer et al., 1993; Morrow, 1993; Witt, 1993). In a more recent meta-analysis, Meyer et al. (2002) also found a strong positive correlation between affective organizational commitment and occupational commitment.

Cohen (1999) proposed career commitment to be an antecedent of organizational commitment. Although both professional commitment and organizational commitment have been reported to have an effect on turnover intention, of the two, organizational commitment is expected to be the more proximal predictor of turnover intention.

H<sub>9o</sub>: The dimensions of professional commitment have no relationship or have a negative relationship with the dimensions of organizational commitment.

H<sub>9a</sub>: The dimensions of professional commitment have a positive relationship with the dimensions of organizational commitment.

H<sub>10o</sub>: The dimensions of organizational commitment are not intervening variables in the relationship between the components of professional commitment and turnover intention.

H<sub>10a</sub>: The dimensions of organizational commitment are intervening variables in the relationship between the components of professional commitment and turnover intention.

A principal-components analysis of Meyer and Allen's (1984) eight-item continuance commitment scale (CCS) conducted by McGee and Ford (1987), revealed two interpretable factors. One factor, labeled CC:LoAlt, was defined by three items reflecting a perceived lack of alternative employment opportunities. The second factor, labeled CC:HiSac, was defined by three items reflecting perceived sacrifices associated with leaving the organization. Attempts by other researchers to evaluate the dimensionality of the CCS, using confirmatory factor analyses, have yielded mixed results. Hypothesis eleven is stated, accordingly.

H<sub>11o</sub>: The continuance commitment scale does not consist of two interpretable factors, CC:LoAlt and CC:HiSac.

H<sub>11a</sub>: The continuance commitment scale consists of two interpretable factors, CC:LoAlt and CC:HiSac.

Using meta-analysis, Meyer et al. (2002) found that the correlation between the full scale CCS and affective commitment was found to be modest, with a weighted average correlation of -.04 for the six-item CCS and .03 for the eight-item CCS. Based on the use of the 6-item CCS in this study, Hypothesis 12 is stated, accordingly.

H<sub>12o</sub>: Continuance organizational is not correlated or is positively correlated with affective organizational commitment.

H<sub>12a</sub>: Continuance organizational commitment is negatively correlated with affective organizational commitment.

*Research Question 2.* Does affective organizational commitment have the strongest relationship with turnover intention when compared with perceived organizational support, continuance organizational commitment, and professional commitment?

Eisenberger et al. (2001) found a stronger correlation between POS and withdrawal behavior ( $r = -.22, p < .05$ ) than between affective commitment and withdrawal behaviors ( $r = -.16, p < .05$ ). Although the meta-analysis conducted by Rhoades and Eisenberger (2002) found the relationship between POS and intention to leave to be in the predicted negative direction, the results were heterogeneous, with a correlation coefficient ranging from  $-.69$  to  $-.23$ .

Stanley et al. (1999) conducted a series of meta-analyses to examine the correlations between commitment, as measured by the Meyer and Allen (1991) commitment scales, and turnover intention, among other variables. It was found that all three forms of organizational commitment – affective, continuance, and normative - correlated negatively with turnover intention, but that affective commitment showed the strongest correlation, followed by normative and then continuance commitment, respectively. Chang (1999) found in a study of Korean researchers that both affective organizational commitment ( $-.66, p < .01$ ) and continuance organizational commitment ( $-.39, p < .01$ ) showed significant negative effects on turnover intention, with affective organizational commitment having the stronger effect. Similar findings were noted in the meta-analysis conducted by Meyer et al. (2002) – affective organizational commitment ( $-.51$ ) and continuance organizational commitment ( $-.17$ ).

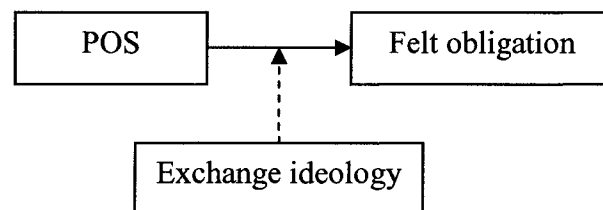
Chang (1999) detected a significant negative effect of career commitment on turnover intention, weaker than that of affective organizational commitment, but stronger than continuance organizational commitment.

Based on the foregoing, hypothesis 13 is derived as follows:

H<sub>13o</sub>: Affective organizational commitment does not make a greater contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.

H<sub>13a</sub>: Affective organizational commitment makes a stronger contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.

*Research Question 3.* Is the relationship between perceived organizational support and felt obligation moderated by exchange ideology?



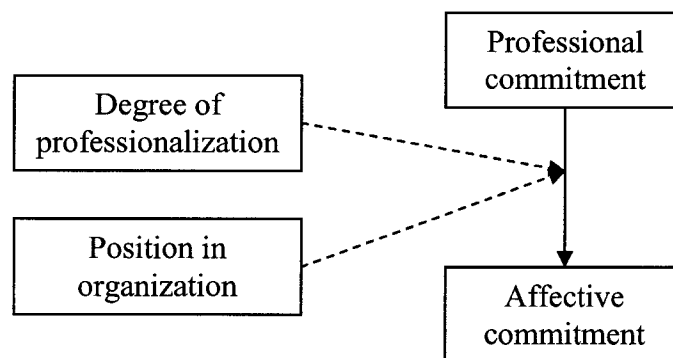
Hypothesis 14 relates to research question 3. Eisenberger et al. (1986) reported that the strength of the relationship between POS and affective attachment to the organization is influenced by the strength of employee exchange ideology. Eisenberger et al. (2001) also investigated exchange ideology's moderation of the POS-felt obligation association and found

that the relationship between POS and felt obligation was greater for strong exchange ideology employees compared to those weak in exchange ideology.

H<sub>14o</sub>: Exchange ideology does not moderate the relationship between perceived organizational support and felt obligation.

H<sub>14a</sub>: Exchange ideology moderates the relationship between perceived organizational support and felt obligation.

*Research Question 4.* Is the relationship between professional commitment and affective organizational commitment moderated by the degree of professionalization and the employee's position within the organization?

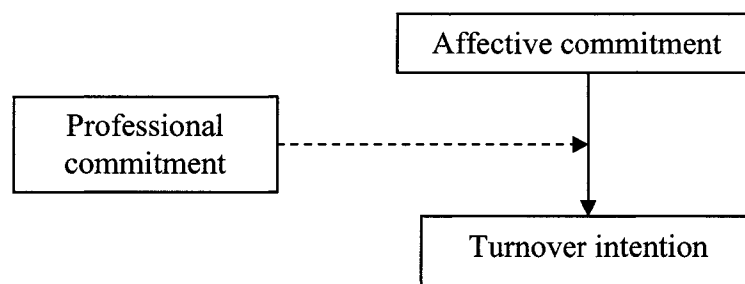


Wallace (1993) found that the higher the professionalization of the occupation, the higher the association between professional and organizational commitment, supporting the conclusion that the degree of professionalization is an important moderator of the degree of association between the two commitments. Wallace (1993) also found that the employee's position in the authority hierarchy moderated the relation between professional and organizational commitment, with a higher correlation for managers and supervisors compared with non-supervisory staff. Hence, hypothesis 15 is expressed accordingly.

H<sub>15b</sub>: The relationship between professional commitment and affective organizational commitment is not moderated by the degree of professionalization and the employee's position in the organizational hierarchy.

H<sub>15a</sub>: The relationship between professional commitment and affective organizational commitment is moderated by the degree of professionalization and the employee's position in the organizational hierarchy.

*Research Question 5.* Is the relationship between affective organizational commitment and turnover intention moderated by professional commitment?



Detailed study of the moderating effects of career commitment on the relationship between affective organizational commitment and turnover intention by Chang (1999) revealed different degrees of turnover intention, depending on the nature of the career commitment-affective commitment relationship. This leads us to hypothesis 16.

H<sub>16b</sub>: The dimensions of professional commitment do not moderate the relationship between affective organizational commitment and turnover intention.

H<sub>16a</sub>: The dimensions of professional commitment moderate the relationship between affective organizational commitment and turnover intention.

*Research Question 6.* Do the levels of perceived organizational support, organizational commitment, professional commitment and turnover intention differ between nurses, pharmacists, physicians and clerical/administrative employees?

Meyer et al. (1993) advocated further research of the different forms of work commitment – occupational and organizational - within the nursing profession and across other occupations based on the seeming variability in the research findings regarding the degree of correlation between these forms of work commitment. Irving et al. (1997) noted significant difference in affective organizational commitment between individuals in different occupations.

H<sub>17o</sub>: The levels of perceived organizational support, organizational commitment, professional commitment and turnover intention do not differ between nurses, pharmacists, physicians and clerical/administrative employees.

H<sub>17a</sub>: The levels of perceived organizational support, organizational commitment, professional commitment and turnover intention differ between nurses, pharmacists, physicians and clerical/administrative employees.

*Research Question 7.* Are the demographic variables age, gender, organizational tenure, children, marital status, kinship responsibilities, educational level, work experience, and professional tenure related to the variables POS, organizational commitment, professional commitment and turnover intention?



Rhoades and Eisenberger's (2002) meta-analysis of POS research studies found age, education, gender, and organizational tenure to be significantly related ( $p < .001$ ) to POS, with average weighted correlations of .09, .05, -.07, and .02, respectively. Meyer et al. (2002) found significant correlations among the affective organizational commitment component scale and marital status, age, gender, and organizational tenure, while the CCS showed a significant correlation with age and organizational tenure. Irving et al. (1997) only found a significant correlation between professional continuance commitment and age, and no significant correlation between professional affective commitment and any demographic variable included in this study. Hom and Griffeth (1995) found that most demographic predictors had modest predictive strength for turnover. These included education, marital status, kinship responsibilities, children, gender, age and organizational tenure. Hypotheses 18, 19, and 20 are stated accordingly.

- H<sub>18a</sub>: The demographic variables age, gender, organizational tenure, professional tenure, and educational level are not related to POS.
- H<sub>18o</sub>: The demographic variables age, gender, organizational tenure, professional tenure, and educational level are related to POS.
- H<sub>19o</sub>: The demographic variables age, gender, marital status, organizational tenure, and professional tenure are not related to AC; age, organizational tenure, and professional tenure are not related to CC; and age is not related to PCC.
- H<sub>19a</sub>: The demographic variables age, gender, marital status, organizational tenure, and professional tenure are related to AC; age, organizational

tenure, and professional tenure are related to CC; and age is related to PCC.

H<sub>20o</sub>: The demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are not related to turnover intention.

H<sub>20a</sub>: The demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are related to turnover intention.

### *Data Collection Procedures*

Permission to conduct the survey in the four state owned hospitals was obtained from the Regional Directors for the three public sector health regions where the hospitals are located (Appendix D). The survey instrument, together with the consent form and the accompanying letter (Appendix B) were distributed to employees of the participating health facilities by liaison persons selected by the Chief Executive Officers at the participating hospitals. There were four liaison persons per institution, in accordance with the number of occupational groups included in the study. The accompanying letter and consent form described the purpose of the study, requested participation, and assured respondents of anonymity and privacy. Questionnaires were distributed to all available physicians, registered nurses, pharmacists, and clerical/administrative staff employed to the four participating state owned hospitals. The number of employees available to complete questionnaires was less than the employee population, based on the temporary absence of some employees who were either on sick leave, vacation leave, or study leave, and the permanent absence of others who had either resigned or been terminated from

their posts subsequent to the researcher receiving the population data. Details of the number of questionnaires distributed to the four categories of employees, relative to the population data, are outlined in Table 4.

Table 4

Questionnaire Distribution Data

<u>Employee Category</u>	<u>Population</u>	<u>Questionnaires Distributed</u>
Physicians	95	91
Nurses	275	268
Pharmacists	22	22
Clerical/Administrative	125	114
TOTAL	517	495

Respondents were requested to submit completed questionnaires to the relevant liaison person within their institution. Contact numbers for the researcher were provided to facilitate inquiries or alternative arrangements for the collection of questionnaires.

*Statistical Analysis*

The SPSS Version 11.5 for Windows statistical software package was used to analyze the data. Various statistical techniques were used, depending on the question or information sought and the form of the hypothesis to be tested. Most importantly, all the negatively worded statement responses (POS2, POS6, POS9, POS11, AC3, AC4, AC5, FO7, EI3, EI4, EI5, PAC3, PAC4, and PAC5) were reverse scored, to be comparable to the positively worded items, before any statistical analyses were run on the survey data.

It is important to note that the type of variable determines the type of statistical analyses that can be performed. Bryman and Cramer (2003) noted that, although strictly speaking, measures like organizational commitment, perceived organizational support, and other measures which derive from multiple-item scales, are ordinal variables, most are treated by researchers as though they were interval variables because these measures permit a large number of categories to be stipulated. Hence, in accordance with Bryman and Cramer (2003) the multiple-item questionnaire measures were assumed to have similar properties to 'true' interval variables for the purpose of this study.

The alpha risk describes the chance of rejecting a research hypothesis. The confidence level is determined from 1 minus alpha and was set to .95 for this research. The beta risk is the chance of making the wrong decision based on incorrect data. This risk relates to the sample size and the method of the collection of data from the sample. Generally, it can be stated that the larger the sample, the lower the beta risk (Babbie, 2001).

The dimensionality, reliability, and validity of the eight multiple-item measurement scales were investigated.

*Dimensionality.* An underlying assumption and essential requirement for creating a summated scale is that the items are unidimensional, that is, they are strongly associated with each other and represent a single concept. Unidimensionality tests are suggested before reliability testing is applied (Hair, Anderson, Tatham & Black, 1998). Factor analysis plays a pivotal role in making an empirical assessment of the dimensionality of a set of items by determining the number of factors and the loadings of each variable on the factors (Hair et al., 1998). With factor analysis, the researcher can identify the separate dimensions of the structure, and then determine the extent to which each variable is explained by each dimension. For

unidimensionality to be present, each summated scale should consist of items loading highly on a single factor. For this study, unidimensionality was assessed using exploratory factor analysis, and more specifically principal-components analysis. Exploratory factor analysis was deemed to be the appropriate factor analysis technique as the primary concern was about prediction or the minimum number of factors needed to account for the maximum portion of the variance represented in the original set of variables, and there was prior knowledge suggesting that the specific and error variance represented a relatively small proportion of the total variance. The factor loadings were calculated, one after the other, in a way that the corresponding factor explains a maximum of the variance. Using this approach, the estimation of factor loadings is reduced to the calculation of eigenvalues of the correlation matrix. The resulting set of identified principal components forms a set of uncorrelated variables. The percentage of variation indicates the actual percentage of variation explained by each factor. The factor loading relates the variables to the respective factors. In a later step, a redistribution of the variance from earlier factors to later factors, in order to achieve a simpler factor pattern and to increase the interpretability of the factors, was performed by rotating the factor matrix using the VARIMAX-method. This procedure was conducted on the eight scale constructs – POS scale, ACS, CCS, PACS, PCCS, FOS, EIS, and the SLI.

In general, the meaning of a factor is determined by the items that load most highly on it. In accordance with convention, items or variables that correlated less than 0.3 with a factor were omitted from consideration, since they account for less than nine per cent of the variance and so are not very important (Bryman & Cramer, 2003).

*Reliability.* The scale constructs resulting from the principal-components analysis were analyzed for reliability, to ensure their appropriateness, before proceeding to an assessment of

their validity (Hair et al., 1998). The reliability of a test refers to the likelihood that the test will lead to the same description of a given phenomenon when a test is repeated (Babbie, 2001). Internal reliability is particularly important in connection with multiple-item scales (Bryman & Cramer, 2003). It raises the question of whether each scale is measuring a single idea. One of the most commonly used reliability measures is Cronbach's alpha, which gives a reliability estimate based on the observed correlation or covariance of the items in the scale with each other (Bryman & Cramer, 2003). The coefficient is a summary measure for the homogeneity among a set of items and Cronbach's alpha is interpreted as a correlation coefficient between the items. Values between 0 and 1 are expected; the closer the value of alpha is to 1 the greater the internal consistency of items in the instrument being assessed. A negative value, or a value not significantly different from 0, implies that the reliability model is violated. Hair et al. (1998) noted that the generally agreed upon lower limit for Cronbach's alpha is .70, although it may decrease to .60 in exploratory research. According to Nunnally (1967), the accepted reliability estimates of .50 to .60 are considered as sufficient for basic research. Hair et al.'s (1998) criterion of .70 was used for this study.

*Validity.* Validity is the extent to which a scale or set of measures accurately represents the concept of interest (Hair et al., 1998). Discriminant validity is the degree to which two conceptually similar concepts are distinct. The empirical test is the correlation among the measures, which should be low, demonstrating that the summated scale is sufficiently different from the other similar concept. In this research, correlation was used to examine the discriminant validity of the scale constructs – POS scale, ACS, CCS, PACS, PCCS, FOS, EIS, and SLI.

Where correlations were deemed to be relatively high between pairs of scale constructs, the relevant scale constructs were together subjected to exploratory factor analysis, with

VARIMAX oblique rotation, to confirm that they were, in fact, loading on separate factors and were therefore distinct constructs.

*Descriptive Statistics.* Descriptive statistical analyses were computed using SPSS Version 11.5 for Windows. The means, standard deviations, percentages, and frequency distributions were compiled and reported. Descriptive analysis allows a researcher to describe variables in a general fashion. Babbie (2001) explains that the procedures also allow for summarization, organization, and graphic representation of quantitative data or information.

*Hypothesis Testing.* The statistical technique for analyzing each hypothesis follows. Hypotheses 1, 2, 5, 7, 9, and 12 were tested using Pearson's product moment correlation, or as it is more commonly referred to, the Pearson's  $r$ . Correlation analysis is generally considered a descriptive statistic because it describes interrelationships between any two variables under consideration (Babbie, 2001). However, correlation statistics can also be employed to explore and predict relationships between study characteristics. Correlation matrices of the study variables were constructed to set the stage for examination of subsequent hypotheses. Correlation analysis is helpful in identifying multicollinearity between independent variables, which if present can be problematic in multiple regression analysis (Bryman & Cramer, 2003).

Partial correlation was used to test hypotheses 3, 4, 6, 8, and 10. An intervening variable is one that is both a product of the independent variable and a cause of the dependent variable. The partial correlation coefficient test allows the researcher to examine the relationship between two variables while holding other variables constant. The intervening variable is referred to as the test variable and its effect on the relationship between the initial and criterion variables was investigated by determining whether there was a decrease in the strength of the zero-order

correlation when compared with the correlation obtained whilst controlling for the intervening variable, that is, the first-order correlation.

Hypothesis 11 was tested using principal-components analysis to determine the nature of the dimensionality of the CCS, followed by reliability analysis using Cronbach's alpha to test for internal consistency of the factors.

Hypothesis 13 was tested using multiple regression analysis. Regression coefficients express the unique contribution of the relevant independent variables to the dependent variable. Bryman and Cramer (2003) noted that the strength of multiple regression analysis lies primarily in its use as a means of establishing the relative importance of independent variables to the dependent variable. To compare two or more independent variables, and thereby determine which is the more important in relation to the dependent variable, the standardized regression coefficient or beta weights were determined.

To assess the moderating effects of variables, as proposed in hypotheses 14 to 16, Bryman and Cramer (2003) advocate the use of contingency tables or correlation. The use of contingency tables is recommended when the analysis involves one or more variables that are nominal. As all the variables in hypotheses 14 to 16 were either index or ordinal in nature, Pearson's  $r$  was calculated for the initial variable and the criterion variable for different levels of the test or moderator variable. To facilitate the testing of hypothesis 14, the exchange ideology scores were collapsed to form two groups as follows: weak = 1.00 - 3.50; strong = 3.51 and above.

For the testing of hypothesis 15, the participants were grouped into three subsets labeled high, moderate, and low professionalization. The high professionalization group consisted of the physicians, pharmacists and registered nurses were placed in the moderate professionalization



group, and all levels of clerical/administrative staff were assigned to the low professionalization group. This deviated somewhat from Hall's (1968) ranking of occupational groups into two groups, high and low professionalization, with nurses being assigned to the high professionalization group. It was noted by Wallace (1993), however, that professional occupations at the higher end of the professionalization continuum, such as law, medicine, and the clergy, were not included in Hall's (1968) study. The inclusion of physicians in this study accounted for the shift in the rankings, and the inclusion of an intermediate grouping.

To accommodate testing of Hypothesis 16, the scores for the PACS and the PCCS were grouped into three levels as follows: low = below 3; moderate = 3-5; and high = above 5.

Hypothesis 17 was tested using analysis of variance (ANOVA) for three or more unrelated means, as four unrelated groups – physicians, pharmacists, nurses, and clerical/administrative employees - were being investigated. This is essentially an *F* test in which an estimate of the between-groups mean-square is compared with an estimate of the within-groups mean-square, by dividing the former by the latter (Bryman & Cramer, 2003).

In keeping with the literature, Hypotheses 18 to 20 were tested using Pearson's *r*, even though some of the variables are nominal (gender, marital status) and ordinal (age, tenure, educational level) (Bluedorn, 1982; Chang, 1999; Cohen, 1999; Eisenberger et al., 2001; Irving et al., 1997; Meyer et al., 2002).

### *Summary*

This chapter described the research methods used in the study. Specifically, it described the research design, population and sample, study variables, measurement of variables, reliability and validity of measures, research questions and hypotheses, data collection procedures, and statistical analysis. Chapter IV outlines the research findings and results of hypothesis testing.

## Chapter IV

### Analysis and Presentation of Findings

The purpose of this study was to investigate the relationships between the turnover antecedents - perceived organizational support, affective organizational commitment, continuance organizational commitment, professional affective commitment, and professional continuance commitment – and turnover intention. The questionnaire is presented in Appendix A. The scales used in this study were the 12-item SPOS (Eisenberger et al., 1986), the six-item ACS and the six-item CCS - of Meyer et al.'s (1993) revised organizational commitment scale, the six-item PACS and six-item PCCS (Meyer and Allen, 1991), the seven-item FOS to measure felt obligation (Eisenberger et al., 2001), the five-item exchange ideology scale (EIS) (Eisenberger et al., 2001), and the four-item Staying or Leaving Index (SLI) to measure turnover intention (Bluedorn, 1982). Nineteen items requested work and personal characteristics of respondents. The items POS2, POS6, POS9, POS11, AC3, AC4, AC5, FO7, EI3, EI4, EI5, PAC3, PAC4, and PAC5 were reverse scored. This chapter presents the results in the following sections: description of responses, the analysis of scales, hypothesis testing, and summary.

#### *Description of Responses*

A total of 495 questionnaires were distributed among physicians, pharmacists, nurses, and clerical/administrative staff employed by four state owned hospitals located in Jamaica. The 226 questionnaires returned provided a 46 percent response rate. Details of the response rates by occupation are outlined in Table 5. Physicians had the lowest response rate (15 percent) and pharmacists the highest response rate (100 percent). The response rate for nurses compares with previous commitment studies conducted among nurses by Meyer, Allen, and Smith (1993) of 61.8 percent and two samples of nurses investigated by Cohen (1999) with response rates of 52

percent and 40 percent. There were no studies found in the literature investigating commitment, perceived organizational support or turnover among physicians or pharmacists. A review of the perceived organizational support literature by Rhoades and Eisenberger (2002) revealed overall response rates of 46 percent or less for 15 of 58 samples. Irving et al. (1997), investigating occupational commitment among employees of a Canadian governmental agency, had a 20 percent response rate.

Table 5

Response Rates by Occupation

Occupations	Questionnaires		Response Rate
	Distributed	Returned	
Physicians	91	14	15%
Nurses	268	118	44%
Pharmacists	22	22	100%
Clerical/Administrative	114	72	63%
<b>TOTAL</b>	<b>495</b>	<b>226</b>	<b>46%</b>

Table 6 depicts the frequency distribution of occupations among the respondents and compares this with the distribution of occupations among the population of employees in the hospitals included in the study. The relative proportions of the professional/occupational groupings among the respondents varied from the relative proportions within the population to whom questionnaires were distributed. Physicians were under represented, while the pharmacists and clerical/administrative group were over represented. The most extensive difference was the low number of participating physicians. The proportion of nurses did not vary appreciably.

Table 6

Frequency Distribution of Occupations

Occupations	<u>Respondents</u>		<u>Population</u>	
	Frequency	Percent	Frequency	Percent
Physicians	14	6.2	91	18.4
Nurses	118	52.2	268	54.2
Pharmacists	22	9.7	22	4.4
Clerical/Administrative	72	31.9	114	23.0
<b>TOTAL</b>	<b>226</b>		<b>495</b>	

The frequency distributions of the remaining occupational and professional characteristics of the respondents are outlined in Table 7. Cross tabulations of these characteristics with the occupational groupings are shown in Appendix E.

The ratio of managerial/supervisory staff to non-managerial staff was 1:2.3, higher than would be expected in the normal organizational setting. This was an indication that the managerial staff was generally more cooperative in responding to the survey than the non-managerial staff.

The majority of the respondents were employed with their current organization between 0 and 9 years (70.9 percent), with 12.7 percent of respondents having tenure of 10 to 14 years, and 11.7 percent with tenure of 20 years and over. The lowest number of persons had organizational tenure between 15-19 years. As shown in the Years of Working Experience and Occupation/Profession Crosstabulation table in Appendix E, the pharmacist group was the only group in which the highest number of respondents had organizational tenure of 20 years and over. The highest proportion of respondents, for all other occupational groups, had organizational tenure of 0 – 4 years.

Table 7

Composite Occupational and Professional Data of Respondents

Occupational/Professional Variables	Frequency	Percent
<b>Position in Organization</b>		
Managerial/Supervisory	63	30.4
Non-managerial	144	69.6
<b>Current Organizational Tenure</b>		
0-4 years	96	45.1
5-9 years	55	25.8
10-14 years	27	12.7
15-19 years	10	4.7
20 years and over	25	11.7
<b>Total Work Experience</b>		
0-4 years	73	35.6
5-9 years	49	23.9
10-14 years	30	14.6
15-19 years	9	4.4
20 years and over	44	21.5
<b>Number of Organizations</b>		
1	66	33.8
2	63	32.3
3	44	22.6
4	12	6.2
5	6	3.1
6	2	1.0
8	1	.5
9	1	.5
<b>Average Organizational Tenure</b>		
0-4 years	107	57.2
5-9 years	44	23.5
10-14 years	20	10.7
15-19 years	2	1.1
20 years and over	14	7.5
<b>Professional/Occupational Tenure</b>		
0-4 years	81	39.9
5-9 years	55	27.1
10-14 years	26	12.8
15-19 years	9	4.4
20 years and over	32	15.8

The responses for total years of working experience showed almost the same pattern as those for current organizational tenure. The exception was the higher level of frequency for 20 years and over than for 10 – 14 years. Thirty-three percent of pharmacists had 20 years and over

of total working experience, the highest proportion among the occupational groups represented.

Two-thirds of the respondents had worked for other organizations beside their current employer, with the majority (54.9 percent) having worked for no more than two other organizations. The results for average tenure showed a similar pattern to those for current organizational tenure, with the majority of respondents having an average tenure between 0-9 years (80.7 percent) and the lowest frequency being the 15-19 years level (1.1 percent), comprising only two nurses (Appendix E).

The results for professional/occupational tenure show the same decreasing frequency of respondents with upward movement from 0-4 years to 10-14 years, with the majority (67.0 percent) of respondents having tenure of 0-9 years. The 15-19 years level of tenure had the least number of respondents (4.4 percent), with 15.8 percent of respondents having professional/occupational tenure of 20 years or more. The professional/occupational tenure level of 20 years and over represented the second highest level of tenure for the pharmacists (22.7 percent) and the third highest for nurses (17.0 percent) (Appendix E). A comparison of the results for total years of working experience and professional/occupational tenure reveals that most, but not all, respondents have spent all of their working life in their current profession.

Table 8 outlines the demographic data of the respondents, describing the respondents by age, gender, marital status, number of children, number of dependents (kinship responsibilities), and level of education attained. Crosstabulations of these demographic characteristics and the occupational groupings appear in Appendix E.

Table 8

Composite Demographic Data of Sample

Demographic Variables	Frequency	Percent
<b>Age</b>		
18-24 years	24	11.3
25-34 years	100	47.2
35-44 years	50	23.6
45-54 years	24	11.3
55 years and over	14	6.6
<b>Gender</b>		
Male	33	15.3
Female	182	84.7
<b>Marital Status</b>		
Unmarried	93	44.3
Married	117	55.7
<b>Number of Children</b>		
0	68	32.9
1	67	32.4
2	39	18.8
3	23	11.1
4	3	1.4
5	7	3.4
<b>Number of Dependents</b>		
0	57	28.2
1	53	26.2
2	42	20.8
3	21	10.4
4	18	8.9
5	7	3.5
6 and over	4	2.0
<b>Education Level</b>		
High School	38	18.4
Tertiary Diploma	120	58.3
Bachelor's Degree	41	19.9
Master's Degree	3	1.5
Doctorate	4	1.9

The majority (70.8 percent) of respondents were between the ages 25 to 44 years. This was the result across all occupational groupings. The highest number of respondents 18-24 years of age belonged to the Clerical/Administrative group, while no physicians were found to belong to this age group.

The ratio of male respondents to female respondents was 1:5.5. This was expected due to the predominance of females in the nursing and pharmacy professions. The physicians were the only occupational group with predominantly male respondents, showing a ratio of males to females of 2.5:1. The ratio of males to females for the other occupational groups in the sample were 1:3.4 for pharmacists, 1:21.6 for nurses, and 1:4.1 for the clerical/administrative staff.

Fifty-six percent of the respondents were married, 65.3 percent had either no children or one child, 18.8 percent had two children, and 15.9 percent had three or more children. The majority (75.2 percent) of respondents had between zero and two dependents, 22.8 percent had between three and five dependents, and two percent or four respondents had between six and ten dependents. Marital status results across occupational groups showed no marked differences from the composite data results. Physicians and pharmacists had the highest proportion of their respondents having no children, while nurses and clerical/administrative staff had the highest proportion of their respondents having one child. The clerical/administrative group was the occupational group that contributed most respondents to the three or more children category. The results for number of dependents across occupational groups were similar to the composite data results for the sample.

Level of education attained was highly dependent on the occupational group to which respondents belonged. All respondents who had attained education to the high school level belonged to the clerical/administrative staff group and all respondents who had attained doctoral



level education belonged to the physician group. The majority (88.8 percent) of nurses had a tertiary diploma, with 10.3 percent having a Bachelor's degree, and .9 percent or one respondent having attained a Master's degree. The majority (81.0 percent) of pharmacists in the sample had a Bachelor's degree, with the minority (19.0 percent) having a tertiary diploma. The majority (71.4 percent) of the physicians in the sample had attained the Bachelor's degree level of education and 28.6 percent had attained education at the doctoral level. The only other respondents, besides nurses, at the Master's degree level were two persons from the clerical/administrative group, with three persons from that group attaining the Bachelor's degree level, and 21 persons having a tertiary diploma level of education.

#### *Analysis of the Scales*

The results of the tests for dimensionality, reliability, and validity for each of the eight multiple-item scales are presented in this section.

The unidimensionality of the multiple-item scales were tested using principal-components analysis with oblique rotation using the VARIMAX method. Items with a loading of less than 0.3 with a factor were omitted from consideration, in accordance with Bryman and Cramer (2003). Cronbach's alpha was used to measure the internal consistency of the remaining items in each scale. Hair et al.'s (1998) criterion of a lower limit of .70 for Cronbach's alpha was applied. Correlation was used to determine the discriminant validity of the resulting scale constructs. In cases where the correlation between two constructs in the study was deemed to be relatively high the constructs were together subjected to further exploratory factor analysis with VARIMAX oblique rotation to confirm that they were distinct constructs, with further revisions made to the constructs, where necessary.

*Perceived Organizational Support (POS) Scale.* The results of the principal-components analysis of the 12-item POS scale are depicted in Table 9. POS2, POS6, POS9 and POS11 were omitted from the POS scale, based on loadings below .30. The revised eight-item scale demonstrated a high level of reliability, with a Cronbach's alpha of .859, compared with .858 for the original 12-item POS scale. The revised eight-item POS scale showed a relatively high Pearson's  $r$  with the ACS (.424,  $p < .001$ ) and the PCCS (.815,  $p < .001$ ), as shown in the correlation matrix in Appendix F. However, exploratory factor analysis confirmed that the POS scale items and the ACS items loaded only on their relevant factors. The distinctiveness of the POS scale and the PCCS was also confirmed, with loadings on two separate factors. The exploratory factor analysis results are displayed in Appendix F.

Table 9

Perceived Organizational Support Factor Loadings

Item	Factor Loading
POS1	.680
POS2	.231
POS3	.737
POS4	.775
POS5	.764
POS6	.110
POS7	.659
POS8	.697
POS9	.088
POS10	.567
POS11	.281
POS12	.655

*Affective Organizational Commitment Scale (ACS).* The results of the principal-components analysis of the 12-item organizational commitment scale confirmed the

distinctiveness of the ACS and the CCS. Having determined this, the two scales were treated as separate constructs. The results of the principal-components analysis of the ACS are depicted in Table 10. AC1, AC2, and AC6 were omitted from the ACS, based on factor loadings below .30. The revised three-item scale demonstrated an acceptable level of reliability, with a Cronbach's alpha of .781, compared with an alpha of .751 for the original six-item ACS. The revised three-item ACS showed a relatively high Pearson's  $r$  with the felt obligation scale (FOS) (.442,  $p < .001$ ), the PACS (.438,  $p < .001$ ), and the PCCS (.384,  $p < .001$ ), as displayed in the correlation matrix in Appendix F. Exploratory factor analysis confirmed that the POS scale items and the FOS, PACS, and PCCS items loaded on separate factors, thereby being distinct constructs (Appendix F).

Table 10

ACS Factor Loadings

Item	Factor Loading
AC1	.271
AC2	.008
AC3	.830
AC4	.800
AC5	.855
AC6	.165

*Continuance Organizational Commitment Scale (CCS)*. The results of the principal-components analysis for the CCS are depicted in Table 11. CC2, CC3, CC4, CC5, and CC6 were retained in the CCS, based on exhibiting factor loadings above .30. The revised five-item scale demonstrated an acceptable level of reliability, with a Cronbach's alpha of .793, compared with

an alpha of .775 for the original six-item CCS. The revised five-item CCS showed no high correlation with any of the other scale constructs, confirming its distinctiveness (Appendix F).

Table 11

CCS Factor Loadings

Item	Factor Loading
CC1	-.088
CC2	.368
CC3	.599
CC4	.603
CC5	.796
CC6	.853

*Felt Obligation Scale (FOS)*. Table 12 depicts the results of the principal-components analysis for the FOS seven-item scale. All items were retained in the scale, having factor loadings above .30 and a Cronbach's alpha of .804. The FOS exhibited a relatively high Pearson's  $r$  with the ACS (.442) and the PACS (.496) (Appendix F). The distinctiveness of the FOS and the ACS was discussed in the ACS section. Exploratory factor analysis also revealed that the FOS items and the PACS items loaded only on their relevant factors (Appendix F).

*Exchange Ideology Scale (EIS)*. Table 13 outlines the results of the principal-components analysis of the five-item EIS. The EIS was revised to a three-item scale, by omitting EI1 and EI2, with factor loadings well below .30. The Cronbach's alpha for the revised three-item EIS was .714, compared with an alpha of .614 for the original five-item EIS. The revised three-item EIS

showed no high correlation with any of the other scale constructs, confirming its distinctiveness (Appendix F).

Table 12

FOS Factor Loadings

Item	Factor Loading
FO1	.761
FO2	.811
FO3	.856
FO4	.833
FO5	.581
FO6	.662
FO7	.353

Table 13

EIS Factor Loadings

Item	Factor Loading
EI1	.080
EI2	.033
EI3	.792
EI4	.784
EI5	.812

*Professional Affective Commitment Scale (PACS)*. Principal-components analysis of the 12-item professional commitment scale loaded on four factors and showed a low level of reliability (.697). This result confirmed the need to treat the professional commitment scale as

two separate six-item constructs - PACS (PAC1 to PAC6) and PCCS (PCC1 to PCC6). The six-item PACS was revised to a four-item scale, following the omission of PAC1 and PAC2 with factor loadings below .30. The factor loadings for the PACS are exhibited in Table 14. The Cronbach's alpha for the revised four-item scale was .781, compared with .725 for the original six-item PACS. No further exploratory factor analysis was conducted, as earlier analysis had already confirmed the PACS, ACS, and FOS constructs to be distinct, despite the relatively high Pearson's  $r$  between the PACS and both the ACS and the FOS, shown in Appendix F.

Table 14

PACS Factor Loadings

Item	Factor Loading
PAC1	.236
PAC2	-.041
PAC3	.858
PAC4	.842
PAC5	.819
PAC6	.437

*Professional Continuance Commitment Scale (PCCS)*. The principal-components analysis of the six-item PCCS resulted in the omission of items PCC5 and PCC6, with factor loadings of less than .30, as shown in Table 15. However, the Cronbach's alpha for the four-item PCCS was .691, below the required .70. On this basis, PCC1 was also omitted from the PCCS, resulting in an increased Cronbach's alpha of .744 for the new three-item scale. Evidence was presented in earlier sections that the PCCS and the POS scale, as well as the PCCS and ACS, are distinct constructs, based on exploratory factor analysis.

Table 15

PCCS Factor Loadings

Item	Factor Loading
PCC1	.340
PCC2	.720
PCC3	.850
PCC4	.792
PCC5	.175
PCC6	.175

*Staying Leaving Index (SLI).* The four-item SLI was retained, based on the results of the principal-components analysis outlined in Table 16. The Cronbach's alpha was .909, reflecting a high level of reliability.

Table 16

SLI Factor Loadings

Item	Factor Loading
TI1	.880
TI2	.938
TI3	.934
TI4	.809

*Summary.* The items retained in the scale constructs, with the Cronbach Coefficient Alpha for each scale, are outlined in Table 17. They range from a high of .909 for the Staying Leaving Index to a low of .714 for the EIS. The scales appear to have sufficiently high internal consistency estimates and to be reliable measures. Each coefficient alpha derived from this study was comparable to results of previous studies presented in Chapter III.

Table 17

Revised Scale Constructs and Reliabilities

Scale Constructs	Scale Items	Cronbach's Alpha
POS Scale (8 items)	POS1 POS3 POS4 POS5 POS7 POS8 POS10 POS12	.8593
ACS (3 items)	AC3 AC4 AC5	.7811
CCS (5 items)	CC2 CC3 CC4 CC5 CC6	.7934
FOS (7 items)	FO1 FO2 FO3 FO4 FO5 FO6 FO7	.8035
EIS (3 items)	EI3 EI4 EI5	.7141
PACS (4 items)	PAC3 PAC4 PAC5 PAC6	.7813
PCCS (3 items)	PCC2 PCC3 PCC4	.7440
SLI (4 items)	TI1 TI2 TI3 TI4	.9092

In summary, the analysis of the scales resulted in all scale constructs, except the FOS and the SLI, having to be revised by omitting those items with factor loadings below .30. The resulting scale constructs were deemed to have acceptable levels of validity and reliability.



### *Hypothesis Testing*

This research examines the extent to which perceived organizational support, organizational commitment, and professional commitment impact turnover intention among healthcare employees in four state owned hospitals in Jamaica. The study sought to answer seven research questions, by testing 20 hypotheses.

*Hypothesis 1.* The first hypothesis was stated as follows:

H<sub>1o</sub>: POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have no relationship with turnover intention.

H<sub>1a</sub>: POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have a relationship with turnover intention.

The means, standard deviations, minimum and maximum scores for the main variables are presented in Table 18. The highest mean score of 4.99, for the independent variables, was for the PACS. The means for all the independent variables, except the CCS, reflect an average response by the respondents of 'Neither Disagree nor Agree'. The lowest mean score of 3.33, for the CCS, reflects an average response of 'Slightly Disagree' by the respondents. The mean of 14.07 for the SLI is indicative of an average response ranging between 'Not So Good' to 'So-So' with regards to the respondents' turnover intention within the next two years. The highest level of response variability, among the independent variables, was for the ACS.

Table 18

Descriptive Statistics for Major Variables

Variable	Mean	Standard Deviation	Minimum	Maximum
POS Scale (Perceived Organizational Support)	4.20	1.3901	1.00	7.00
ACS (Affective Commitment)	4.02	1.9055	1.00	7.00
CCS (Continuance Commitment)	3.33	1.5702	1.00	7.00
PACS (Professional Affective Commitment)	4.99	1.6040	1.00	7.00
PCCS (Professional Continuance Commitment)	4.01	1.4890	1.00	7.00
SLI (Turnover Intention)	14.07	6.8075	4.00	28.00

Pearson's product moment correlation was used to test the first hypothesis. The results are contained in the correlation matrix in Table 19. A negative Pearson's  $r$  was found for POS-TI ( $-.300, p < .001$ ), ACS-TI ( $-.213, p < .01$ ), PCCS-TI ( $-.180, p < .01$ ), CCS-TI ( $-.137, p < .05$ ), and PACS-TI ( $-.133, p < .05$ ). Given that the significance level for each of the correlations is less than alpha (.05),  $H_{10}$  is rejected, therefore, there is support for the hypothesis that POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have a relationship with turnover intention.

Table 19

Correlation (Pearson) between POS, ACS, CCS, PACS, PCCS and Turnover Intention

		POS Scale	ACS	CCS	PACS	PCCS	Turnover Intention
POS Scale	Pearson Correlation	1	.424**	.208**	.199**	.815**	-.300**
	Sig. (1-tailed)	.	.000	.001	.002	.000	.000
ACS	Pearson Correlation	.424**	1	.033	.438**	.384**	-.213**
	Sig. (1-tailed)	.000	.	.315	.000	.000	.001
CCS	Pearson Correlation	.208**	.033	1	-.226**	.187**	-.137*
	Sig. (1-tailed)	.001	.315	.	.001	.003	.024
PACS	Pearson Correlation	.199**	.438**	-.226**	1	.165**	-.133*
	Sig. (1-tailed)	.002	.000	.001	.	.009	.029
PCCS	Pearson Correlation	.815**	.384**	.187**	.165**	1	-.180**
	Sig. (1-tailed)	.000	.000	.003	.009	.	.004
Turnover Intention	Pearson Correlation	-.300**	-.213**	-.137*	-.133*	-.180**	1
	Sig. (1-tailed)	.000	.001	.024	.029	.004	.

\*\* Correlation is significant at the 0.01 level (1-tailed).

\* Correlation is significant at the 0.05 level (1-tailed).

*Hypothesis 2.* The second hypothesis was stated as follows:

H<sub>20</sub>: POS is not correlated or is negatively correlated with affective organizational commitment.

H<sub>2a</sub>: POS is positively correlated with affective organizational commitment.

The respondents gave an average response of 'Neither Disagree nor Agree' for both the POS scale and the ACS. The responses by occupation are depicted in Table 20. Physicians had the highest mean response for both POS and ACS, while nurses had the lowest mean response for both variables.

Table 20

Descriptive Statistics for POS and ACS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>POS</b>				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
<b>ACS</b>				
Mean	5.43	4.80	3.79	3.86
Standard Deviation	1.4701	1.8363	1.9763	1.7314
Minimum	2.67	1.00	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	72

The results of the Pearson's product moment correlation test for Hypothesis 2 are displayed in Table 19. Given that the significance of .001 for the correlation between the POS scale and the ACS ( $r = .424$ ) is less than alpha (.05),  $H_{2o}$  is rejected. Hence, there is support for the hypothesis that POS is positively correlated with affective organizational commitment.

*Hypothesis 3.* The third hypothesis to be tested was as follows:

$H_{3o}$ : Felt obligation is not an intervening variable in the relationship between POS and affective organizational commitment.

$H_{3a}$ : Felt obligation is an intervening variable in the relationship between POS and affective organizational commitment.

Of the scales measured using a seven-point Likert type scale, felt obligation had the highest mean score of 5.72. The mean for FOS reflects an average response of 'Slightly Agree' by the respondents, contrasting with average responses of 'Neither Disagree nor Agree' for both the POS scale and the ACS. The mean score for the FOS for each occupational group is displayed in Table 21. Whereas physicians had the highest means for POS and ACS (Table 20), they had the second highest mean for the FOS. The pharmacists gave the highest mean response

for the FOS. On the other hand, the nurses who had the lowest mean for both the POS and ACS (Table 20), had the second lowest mean for the FOS. The clerical/administrative group gave the lowest mean response for the FOS.

Table 21

Descriptive Statistics for FOS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
FOS				
Mean	5.98	6.04	5.84	5.36
Standard Deviation	1.1671	.9860	1.1000	1.1844
Minimum	3.00	3.43	1.86	1.43
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	71

The output for the partial correlation test for Hypothesis 3 is displayed in Appendix G. The zero-order correlation coefficient for POS-ACS was .425 ( $p < .001$ ) and the first-order correlation coefficient, after controlling for FOS, was .368 ( $p < .001$ ). Given that the first-order correlation coefficient was less than the zero-order correlation coefficient, and the significance of .001 is less than the alpha (.05),  $H_{30}$  is rejected. Thus, there is support for the hypothesis that felt obligation is an intervening variable in the relationship between POS and affective organizational commitment.

*Hypothesis 4.* The fourth hypothesis was as stated below.

$H_{40}$ : Affective organizational commitment is not an intervening variable in the relationship between POS and turnover intention.

$H_{4a}$ : Affective organizational commitment is an intervening variable in the relationship between POS and turnover intention.

The highest mean scores for POS and ACS among the physicians was combined with the lowest mean score for turnover intention, as depicted in Table 22. Similarly, the lowest mean scores for POS and ACS for the nurses was combined with the highest mean score for turnover intention.

Table 22

Descriptive Statistics for POS, ACS, and Turnover Intention by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>POS</b>				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
<b>ACS</b>				
Mean	5.43	4.80	3.79	3.86
Standard Deviation	1.4701	1.8363	1.9763	1.7314
Minimum	2.67	1.00	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	72
<b>Turnover Intention</b>				
Mean	11.76	12.84	15.39	12.76
Standard Deviation	5.1302	6.3815	6.7745	6.9750
Minimum	4.00	4.00	4.00	4.00
Maximum	24.50	24.50	28.00	28.00
N	14	22	111	67

The partial correlation test output for hypothesis four is displayed in Appendix G. The zero-order correlation coefficient for POS-TI was  $-.300$  ( $p < .001$ ) and the first-order correlation coefficient for POS-TI, controlling for ACS, was  $-.237$  ( $p < .001$ ). Given that the first-order correlation coefficient was less than the zero-order correlation coefficient, and the significance of  $.001$  is less than the alpha ( $.05$ ),  $H_{40}$  is rejected. There is, therefore, support for the hypothesis that affective organizational commitment is an intervening variable in the relationship between POS and turnover intention.

*Hypothesis 5.* The fifth hypothesis was stated as follows:

H<sub>5o</sub>: POS is not related or is positively related to continuance organizational commitment.

H<sub>5a</sub>: POS is negatively related to continuance organizational commitment.

There was little difference in the mean CCS scores for the physicians and the nurses who produced the highest and lowest mean scores for POS, respectively (Table 23). There was, however, an appreciable difference between the mean CCS scores for the pharmacists and the clerical/administrative group, in the same direction as the difference in the mean POS scores.

Table 23

Descriptive Statistics for POS and CCS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>POS</b>				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
<b>CCS</b>				
Mean	3.20	2.55	3.21	3.81
Standard Deviation	1.6134	1.5055	1.5647	1.4773
Minimum	1.00	1.00	1.00	1.00
Maximum	6.40	6.20	7.00	6.80
N	14	22	113	70

The Pearson's product moment correlation coefficient test for hypothesis 5 resulted in a Pearson's  $r$  of .208 ( $p < .01$ ) for POS-CCS, as shown in the correlation matrix at Table 19. Given that POS and CCS are positively correlated and the significance of .01 is less than the alpha (.05), H<sub>5o</sub> cannot be rejected. Hence, there is no support for the hypothesis that POS is negatively related to continuance organizational commitment.

*Hypothesis 6.* The null and alternative hypotheses for hypothesis 6 were as follows:

H<sub>6o</sub>: Continuance organizational commitment is not an intervening variable in the relationship between POS and turnover intention.

H<sub>6a</sub>: Continuance organizational commitment is an intervening variable in the relationship between POS and turnover intention.

The mean scores for POS, CCS, and turnover intention for each occupational group are outlined in Table 24. Whereas the mean scores for POS and turnover intention proceed in opposite directions across all the occupational groupings, the CCS and turnover intention mean scores move in opposite directions only for the pharmacists and the clerical/administrative group.

Table 24

Descriptive Statistics for POS, CCS, and Turnover Intention by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>POS</b>				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
<b>CCS</b>				
Mean	3.20	2.55	3.21	3.81
Standard Deviation	1.6134	1.5055	1.5647	1.4773
Minimum	1.00	1.00	1.00	1.00
Maximum	6.40	6.20	7.00	6.80
N	14	22	113	70
<b>Turnover Intention</b>				
Mean	11.76	12.84	15.39	12.76
Standard Deviation	5.1302	6.3815	6.7745	6.9750
Minimum	4.00	4.00	4.00	4.00
Maximum	24.50	24.50	28.00	28.00
N	14	22	111	67

Partial correlation was used to test for CC as an intervening variable in the relationship between POS and turnover intention. The test results, outlined in Appendix G, indicate a zero-



order correlation coefficient for POS-TI of  $-.300$  ( $p < .001$ ) and a first-order correlation coefficient for POS-TI, after controlling for CCS, of  $-.289$  ( $p < .001$ ). Given that the first-order correlation coefficient is lower than the zero-order correlation coefficient, and the significance  $.001$  is less than the alpha ( $.05$ ),  $H_{60}$  is rejected. Thus, there is support for the hypothesis that continuance organizational commitment is an intervening variable in the relationship between POS and turnover intention.

*Hypothesis 7.* The null and alternative hypotheses for hypothesis 7 were stated as follows:

- $H_{70}$ : POS is not correlated or is negatively correlated with the dimensions of professional commitment.
- $H_{7a}$ : POS is positively correlated with the dimensions of professional commitment.

The mean scores for POS, PACS, and PCCS for the four occupational groupings are displayed in Table 25. The mean scores for POS and PCCS move in the same direction across all the occupational groups, with physicians having the highest mean and the nurses the lowest mean. The mean scores for the PACS also move in the same direction as those for POS and PCCS for the physicians and the nurses but in the opposite direction for the pharmacists and the clerical/administrative group.

Pearson's  $r$  was the statistical test used for hypothesis 7, with test results displayed in Table 19. The POS-PACS correlation ( $r = .199$ ,  $p < .01$ ) was weaker than the POS- PCCS correlation ( $r = .815$ ,  $p < .001$ ). Given that the levels of significance,  $.01$  and  $.001$ , are less than the alpha ( $.05$ ),  $H_{70}$  is rejected, therefore, there is support for the hypothesis that POS is positively correlated with the dimensions of professional commitment.

Table 25

Descriptive Statistics for POS, PACS, and PCCS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
POS				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
PACS				
Mean	5.80	6.01	5.19	4.20
Standard Deviation	.9912	.8891	1.6184	1.5089
Minimum	4.25	4.25	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	21	105	69
PCCS				
Mean	4.56	3.97	3.85	4.20
Standard Deviation	1.7234	1.6295	1.5294	1.3058
Minimum	1.33	1.00	1.00	1.00
Maximum	7.00	6.67	7.00	7.00
N	13	22	116	70

*Hypothesis 8.* The eighth hypothesis was as follows:

$H_{8o}$ : The dimensions of professional commitment are not intervening variables in the relationship between POS and turnover intention.

$H_{8a}$ : The dimensions of professional commitment are intervening variables in the relationship between POS and turnover intention.

The partial correlation test output is displayed in Appendix G. The zero-order correlation coefficient for POS-TI was  $-.300$  ( $p < .001$ ) and the first-order correlation coefficient for POS-TI, when controlling for PACS, was  $-.282$  ( $p < .001$ ). Correspondingly, the first-order correlation coefficient for POS-TI was  $-.269$  ( $p < .001$ ), when controlling for PCCS. Given that the first-order correlation coefficients are less than the zero-order correlation coefficients, and the significance  $.001$  is less than the alpha  $(.05)$ ,  $H_{8o}$  is rejected. Hence, there is support for the

hypothesis that the dimensions of professional commitment are intervening variables in the relationship between POS and turnover intention.

*Hypothesis 9.* The null and alternative hypotheses for the ninth hypothesis were stated as:

H<sub>90</sub>: The dimensions of professional commitment have no relationship or have a negative relationship with the dimensions of organizational commitment.

H<sub>9a</sub>: The dimensions of professional commitment have a positive relationship with the dimensions of organizational commitment.

Descriptive statistics for ACS, CCS, PACS, and PCCS, across the four occupational groups, are displayed in Table 26. Physicians had the highest mean scores, while nurses had the lowest mean scores, for ACS and PCCS. Pharmacists had the highest mean for PACS and the lowest mean for CCS, while the reverse was true for the clerical/administrative group.

Pearson's product moment correlation was used to test hypothesis 9. The test results are displayed in Table 19. The PACS-ACS correlation ( $r = .438, p < .001$ ) and that for PACS-CCS ( $r = -.226, p < .01$ ) are in opposite directions. On the other hand, the PCCS-ACS correlation ( $r = .384, p < .001$ ) and the PCCS-CCS correlation ( $r = .187, p < .01$ ) were both positive, with the PCCS-ACS being the stronger relationship. The ACS had a stronger correlation with both dimensions of professional commitment than did the CCS. Given that the significance .01 for the negative PACS-CCS relationship is less than the alpha (.05), H<sub>90</sub> cannot be rejected. There is, therefore, no support for the hypothesis that the dimensions of professional commitment have a positive relationship with the dimensions of organizational commitment.

Table 26

Descriptive Statistics for ACS, CCS, PACS, and PCCS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>ACS</b>				
Mean	5.43	4.80	3.79	3.86
Standard Deviation	1.4701	1.8363	1.9763	1.7314
Minimum	2.67	1.00	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	72
<b>CCS</b>				
Mean	3.20	2.55	3.21	3.81
Standard Deviation	1.6134	1.5055	1.5647	1.4773
Minimum	1.00	1.00	1.00	1.00
Maximum	6.40	6.20	7.00	6.80
N	14	22	113	70
<b>PACS</b>				
Mean	5.80	6.01	5.19	4.20
Standard Deviation	.9912	.8891	1.6184	1.5089
Minimum	4.25	4.25	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	21	105	69
<b>PCCS</b>				
Mean	4.56	3.97	3.85	4.20
Standard Deviation	1.7234	1.6295	1.5294	1.3058
Minimum	1.33	1.00	1.00	1.00
Maximum	7.00	6.67	7.00	7.00
N	13	22	116	70

*Hypothesis 10.* The tenth hypothesis was stated as follows:

H<sub>10c</sub>: The dimensions of organizational commitment are not intervening variables in the relationship between the components of professional commitment and turnover intention.

H<sub>10a</sub>: The dimensions of organizational commitment are intervening variables in the relationship between the components of professional commitment and turnover intention.

Details of the partial correlation test output are displayed in Appendix G. The partial correlation coefficient was computed by first calculating the Pearson's product moment correlation coefficient ( $r$ ) for the zero-order correlation between PACS and turnover intention.

Next, the first-order correlation or partial correlation coefficient for PACS and turnover intention was determined, controlling for ACS. This procedure was repeated for PCCS and turnover intention, controlling for ACS; PACS and turnover intention, controlling for CCS; and PCCS and turnover intention, controlling for CCS. The results are displayed in Table 27. Given that the first-order correlation coefficients are either not less than the zero-order correlation coefficients, or are less than the zero-order correlation coefficients at a significance level that is not less than the alpha (.05),  $H_{10}$  cannot be rejected. Hence, there is no support for the hypothesis that the dimensions of organizational commitment are intervening variables in the relationship between the components of professional commitment and turnover intention.

Table 27

Partial Correlation Coefficients for Dimensions of Organizational Commitment as intervening variables in the relationship between Dimensions of Professional Commitment and TI

Initial and Criterion Variables	Intervening Variable	Zero-order correlation coefficient ( $r$ )	First-order correlation coefficient ( $r$ )
PACS-TI	ACS	-.133*	-.045
PCCS-TI	ACS	-.180**	-.109
PACS-TI	CCS	-.133*	-.170**
PCCS-TI	CCS √	-.180**	-.159*

\*\* . Correlation is significant at the 0.01 level (1-tailed)

\* . Correlation is significant at the 0.05 level (1-tailed)

√ . Role as intervening variable supported

Based on the results of the test for hypothesis ten, partial correlation tests were conducted to test for the reverse of hypothesis ten, that is, whether the dimensions of professional commitment are intervening variables in the relationship between the dimensions of organizational commitment and turnover intention. The output is displayed in Appendix G and a summary of the results is displayed in Table 28. The summary of the results suggests that the

dimensions of professional commitment are intervening variables in the relationship between ACS and turnover intention. The conclusions from these findings, for the sample in this study, are that: CC is a more proximal predictor of turnover intention than is PCC; the dimensions of professional commitment are more proximal predictors of turnover intention than AC; and that PAC and CC have no temporal relationship.

Table 28

Partial Correlation Coefficients for Dimensions of Professional Commitment as intervening variables in the relationship between Dimensions of Organizational Commitment and TI

Initial and Criterion Variables	Intervening Variable		Zero-order correlation coefficient ( <i>r</i> )	First-order correlation coefficient ( <i>r</i> )
ACS-TI	PACS	√	-.213**	-.174**
CCS-TI	PACS		-.137*	-.173**
ACS-TI	PCCS	√	-.213**	-.158*
CCS-TI	PCCS		-.137*	-.107

\*\* . Correlation is significant at the 0.01 level (1-tailed)

\* . Correlation is significant at the 0.05 level (1-tailed)

√ . Role as intervening variable supported

Having determined that the dimensions of professional commitment were more proximal predictors of turnover intention than AC, an additional partial correlation coefficient test was performed to determine which, if any, of the dimensions of professional commitment in the AC-TI relationship was the most proximal indicator of TI. The output is displayed in Appendix G. The zero-order correlation coefficient for ACS-PACS was .438 ( $p < 0.01$ ) and the first-order correlation coefficient, when controlling for PCCS, was .411 ( $p < 0.01$ ). The ACS-PCCS zero-order correlation coefficient was .384 ( $p < 0.01$ ) and the first-order correlation coefficient, when controlling for PACS, was .352 ( $p < 0.01$ ). It was, therefore, determined that there was no

temporal order for the dimensions of professional commitment as intervening variables in the AC-TI relationship. Additionally, there was support for both dimensions intervening together, as the zero-order correlation coefficient of  $-.213$  ( $p < .01$ ) for ACS-TI decreased to  $-.126$  ( $p < .05$ ) when controlling simultaneously for PACS and PCCS. The resulting first-order correlation coefficient of  $-.126$  ( $p < .05$ ) was less than when controlling for either PACS alone ( $r = .174$ ,  $p < .01$ ) or PCCS alone ( $r = .158$ ,  $p < .05$ ) alone, as depicted in Table 28.

*Hypothesis 11.* The null and alternative hypotheses were as follows:

- H<sub>11o</sub>: The continuance commitment scale does not consist of two interpretable factors, CC:LoAlt and CC:HiSac.
- H<sub>11a</sub>: The continuance commitment scale consists of two interpretable factors, CC:LoAlt and CC:HiSac.

Factor analysis, using principal components analysis, was used to test the dimensionality of the CCS. This was followed by reliability analysis using Cronbach's alpha to test for internal consistency of the resulting factors.

McGee and Ford (1987) determined from their research that the CCS consisted of two interpretable factors each consisting of three items as follows: CC:HiSac (CC2, CC5, CC6) and CC:LoAlt (CC1, CC3, CC4). The principal components analysis, with oblique rotation using the VARIMAX method, resulted in the six items of the CCS loading on two factors. The output is displayed in Appendix G. Based on an acceptable factor loading of  $.30$ , it was noted that CC2, CC3, and CC4 loaded on both factors. CC3 and CC4 had the heavier loading on the first factor, while CC2 had the heavier loading on the second factor.

Three two-factor sets were derived using three different assignment criteria for the items, namely: heavier loading across the two factors; loading of  $>.30$ ; and interpretable assignment

based on CC:HiSac and CC:LoAlt. The CC:HiSac items (CC2, CC5 and CC6) produced acceptable loadings of  $>.30$  on the first factor and the CC:LoAlt items (CC1, CC3, and CC4) produced acceptable loadings of  $>.30$  on the second factor. Reliability analysis was conducted on all six factors and the output is displayed in Appendix G. Cronbach's alpha coefficients were as follows: Factor 1 – heavier loading (CC3, CC4, CC5, CC6) = .772; Factor 2 – heavier loading (CC1, CC2) = .539; Factor 1 – loadings  $>.30$  (CC2, CC3, CC4, CC5, CC6) = .793; Factor 2 – loadings  $>.30$  (CC1, CC2, CC3, CC4) = .727; CC:HiSac (CC2, CC5, CC6) = .682; and CC:LoAlt (CC1, CC3, CC4) = .634. Only Factor 1 – heavier loading and the two factors derived based on loadings  $>.30$  had acceptable internal consistency, based on a minimum Cronbach's alpha coefficient of .70. Given that the CC:HiSac and CC:LoAlt factors had Cronbach's alphas less than .70,  $H_{11o}$  cannot be rejected, therefore there is not support for the hypothesis that the continuance commitment scale consists of two interpretable factors, CC:LoAlt and CC:HiSac.

*Hypothesis 12.* The null and alternative hypotheses were as stated below.

$H_{12o}$ : Continuance organizational is not correlated or is positively correlated with affective organizational commitment.

$H_{12a}$ : Continuance organizational commitment is negatively correlated with affective organizational commitment.

Mean scores for ACS and CCS for the four occupational groups indicate minimal difference in the mean CCS scores for the physicians and the nurses, who produced the highest and lowest mean scores for ACS, respectively (Table 29). There was, however, an appreciable difference between the mean CCS scores for the pharmacists and the clerical/administrative group in the opposite direction to the difference in the mean ACS scores for these two occupational groups.



Table 29

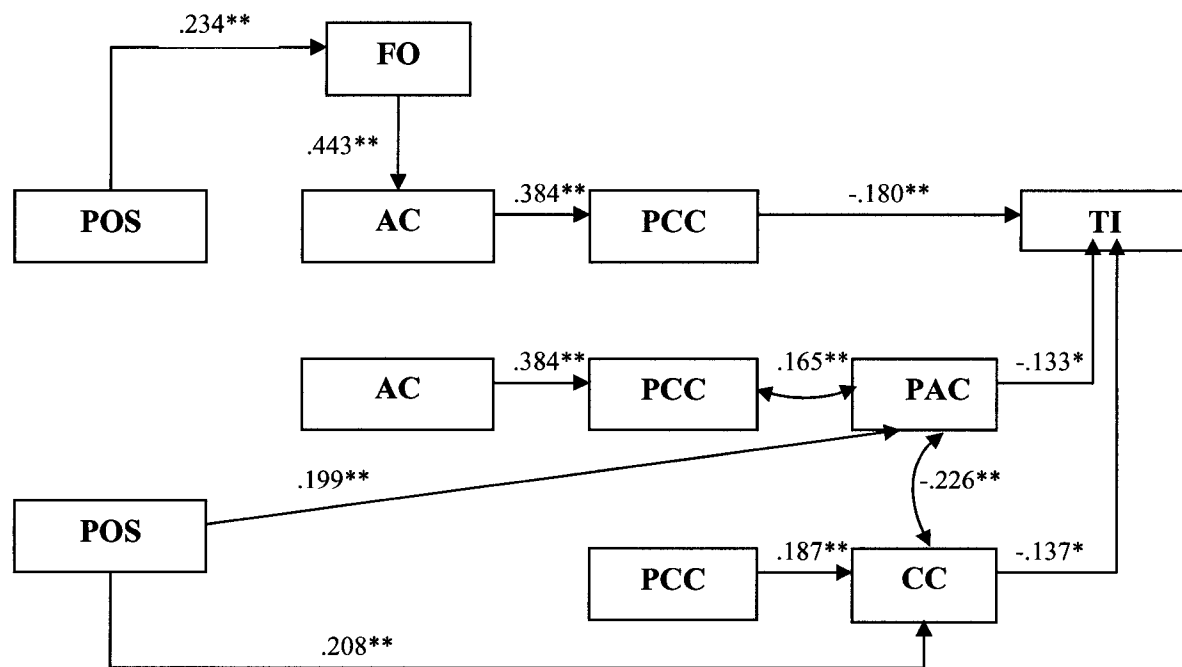
Descriptive Statistics for ACS and CCS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
ACS				
Mean	5.43	4.80	3.79	3.86
Standard Deviation	1.4701	1.8363	1.9763	1.7314
Minimum	2.67	1.00	1.00	1.00
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	72
CCS				
Mean	3.20	2.55	3.21	3.81
Standard Deviation	1.6134	1.5055	1.5647	1.4773
Minimum	1.00	1.00	1.00	1.00
Maximum	6.40	6.20	7.00	6.80
N	14	22	113	70

The results of the Pearson's product moment correlation analysis to test Hypothesis 12 are displayed in Table 19. Given that the significance .315 is less than the alpha (.05),  $H_{12o}$  cannot be rejected, therefore, there is no support for the hypothesis that continuance organizational commitment is negatively correlated with affective organizational commitment.

Hypotheses 1 to 12 were tested to provide an answer for the first research question, which sought to determine whether the relationships between variables in the study were in accordance with the proposed turnover model depicted in Figure 1. Based on the test results for hypotheses 1 to 12, as outlined above, the revised turnover model is depicted in Figure 5.

Figure 5. Revised Turnover Model



*Hypothesis 13.* The null and alternative hypotheses were stated as follows:

- H<sub>13o</sub>: Affective organizational commitment does not make a greater contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.
- H<sub>13a</sub>: Affective organizational commitment makes a stronger contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.

Detailed results of the multiple regression analysis used to test hypothesis 13 are outlined in Appendix G. The stepwise procedure was used for inclusion of the variables in the regression equation. The CCS and PACS were eliminated from the equation because they failed to meet the program's statistical criteria for inclusion. The regression equation derived from the output was:

$$\text{Turnover Intention} = 20.797 - 2.348\text{POS} + 1.299\text{PCCS} - 0.555\text{ACS}.$$

Each of the three regression coefficients expresses the unique contribution of the relevant variable to turnover intention, with the effect, in each case, of the two other variables removed. Thus, every extra unit of perceived organizational support decreases the level of turnover intention by 2.348 units, with a similar interpretation for affective organizational commitment. On the other hand, every extra unit of professional continuance commitment increases the level of turnover intention by 1.299 units.

To facilitate a comparison of the level of contribution of each of the three variables to turnover intention, and thus determine which of them has the greatest relative importance to turnover intention, it was necessary to standardize the units of measurement involved to obtain the standardized regression coefficient or beta weight for each variable. The standardized regression coefficient essentially tells us by how many standard deviation units the dependent variable will change for a one standard deviation change in the independent variable. The table headed Coefficients in Appendix G shows the standardized coefficients for each of the three variables retained in the regression equation. POS was shown to have the greatest impact on turnover intention, followed by PCCS, and then ACS, having beta weights of -.475, .280, and -.157, respectively. Given that the ACS did not produce the largest beta weight, H<sub>13o</sub> could not be

rejected, therefore, there is no support for the hypothesis that affective organizational commitment makes a stronger contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.

Further analysis of the multiple regression output was performed. The table headed Model Summary, in Appendix G, shows the multiple coefficient of determination ( $R^2$ ) that represents the collective effect of all of the independent variables. In other words,  $R^2$  indicates how well the independent variables explain the dependent variable. The  $R^2$  value of .138 for the equation as a whole (model 3) indicates that 13.8 percent of the variance in turnover intention is explained by the three independent variables POS, PCCS, and ACS. The change in  $R^2$  for each model indicates the increased contribution that each additional variable makes to the explanatory power of the equation in the stepwise procedure used. Hence, POS explains 9.7 percent of the variance in turnover intention, and PCCS and ACS contributed an additional 2.1 percent and 2.0 percent, respectively. The adjusted  $R^2$ , a more conservative estimate than the ordinary  $R^2$  of the amount of variance that is explained, was derived by adjusting the equation to take the number of independent variables into account. The result was a decrease from 13.8 percent to 12.4 percent in the amount of the variance in turnover intention explained by the equation.

The last column in the Model Summary Table (Appendix G) shows the significance of the change in the value of  $R^2$  as a result of the inclusion of each additional variable in the equation. With  $p < .05$ , the  $R^2$  change for each coefficient is significant. The  $F$  ratio of 10.156, for the equation as a whole, in the ANOVA Table (Appendix G) is significant at  $p < .01$ , suggesting that the coefficients for POS, PCCS, and ACS are highly unlikely to be zero in the population.

Additionally, information about multicollinearity is given in the table headed Coefficients in Appendix G. More specifically, this information can be gleaned from the column headed Tolerance, under Collinearity Statistics. The tolerances for POS, PCCS, and ACS are 0.303, 0.312, and 0.806, suggesting that multicollinearity is unlikely as they are not close to zero. Multicollinearity is usually regarded as a problem because it means that the regression coefficients may be unstable, and therefore are likely to be subject to considerable variability from sample to sample. The results of the collinearity diagnostics do not suggest that this is a problem in the case of this sample.

*Hypothesis 14.* Hypothesis 14 was stated as follows:

- H<sub>14o</sub>: Exchange ideology does not moderate the relationship between perceived organizational support and felt obligation.
- H<sub>14a</sub>: Exchange ideology moderates the relationship between perceived organizational support and felt obligation.

The mean scores for POS, FOS, and EIS, for the four occupational groups, are shown in Table 30. With the exception of pharmacists having the highest mean scores for both FOS and EIS, there was no discernible pattern among the mean scores for the three variables across the occupational groups.

To assess the moderating effect of exchange ideology, as proposed in hypothesis 14, Pearson's  $r$  was calculated for POS-FOS for respondents with weak exchange ideology and for respondents with strong exchange ideology. The results are shown in Table 31. Given that the significance .001 is less than the alpha (.05) for respondents with strong exchange ideology and the significance .081 is not less than the alpha (.05) for respondents with weak exchange

ideology,  $H_{140}$  is rejected. There is, therefore, support for the hypothesis that exchange ideology moderates the relationship between perceived organizational support and felt obligation.

Table 30

Descriptive Statistics for POS, FOS, and EIS by Occupation

Variable Statistics	Physicians	Pharmacists	Nurses	Clerical/Admin.
<b>POS</b>				
Mean	4.84	4.17	3.97	4.48
Standard Deviation	1.6063	1.4843	1.4213	1.1879
Minimum	2.25	1.38	1.00	1.00
Maximum	7.00	6.50	7.00	6.25
N	14	22	118	70
<b>FOS</b>				
Mean	5.98	6.04	5.84	5.36
Standard Deviation	1.1671	.9860	1.1000	1.1844
Minimum	3.00	3.43	1.86	1.43
Maximum	7.00	7.00	7.00	7.00
N	14	22	115	71
<b>EIS</b>				
Mean	3.02	4.27	3.80	3.98
Standard Deviation	1.5551	2.0642	1.6873	1.8541
Minimum	1.00	1.00	1.00	1.00
Maximum	6.00	7.00	7.00	7.00
N	14	22	108	69

Table 31

Correlations (Pearson's) for POS scale and FOS at different levels of Exchange Ideology

		Weak EI		Strong EI	
		POS Scale	FOS	POS Scale	FOS
POS Scale	Pearson Correlation	1	.148	1	.274**
	Sig. (1-tailed)	.	.081	.	.001
FOS	Pearson Correlation	.148	1	.274**	1
	Sig. (1-tailed)	.081	.	.001	.

\*\* . Correlation is significant at the 0.01 level (1-tailed)

*Hypothesis 15.* The null and alternative hypotheses were stated as follows:

H<sub>15o</sub>: The relationship between professional commitment and affective organizational commitment is not moderated by the degree of professionalization and the employee's position in the organizational hierarchy.

H<sub>15a</sub>: The relationship between professional commitment and affective organizational commitment is moderated by the degree of professionalization and the employee's position in the organizational hierarchy.

The Pearson's product moment correlation results for PAC-ACS, and PCC-ACS, for the three levels of professionalization: low professionalization = clerical/administrative group; moderate professionalization = pharmacists and nurses; and high professionalization = physicians, are depicted in Table 32 and Table 33, respectively.

Table 32

Correlations (Pearson's) for AC and PAC at different degrees of professionalization

	Low Professionalization		Moderate Professionalization		High Professionalization	
	AC	PAC	AC	PAC	AC	PAC
AC Pearson Correlation	1	.333**	1	.471**	1	.309
Sig. (1-tailed)	.	.003	.	.000	.	.142
PAC Pearson Correlation	.333**	1	.471**	1	.309	1
Sig. (1-tailed)	.003	.	.000	.	.142	.

\*\* . Correlation is significant at the 0.01 level (1-tailed)

Table 33

Correlations (Pearson's) for AC and PCC at different degrees of professionalization

	Low Professionalization		Moderate Professionalization		High Professionalization	
	AC	PCC	AC	PCC	AC	PCC
AC Pearson Correlation	1	.008	1	.463**	1	.825**
Sig. (1-tailed)	.	.473	.	.000	.	.000
PCC Pearson Correlation	.008	1	.463**	1	.825**	1
Sig. (1-tailed)	.473	.	.000	.	.000	.

\*\* . Correlation is significant at the 0.01 level (1-tailed)

In Table 32 there is a positive significant correlation between ACS and PACS at low and moderate levels of professionalization, with a slightly stronger correlation at the moderate level of professionalization. There was no significant correlation between ACS and PACS for respondents with a high degree of professionalization. In the case of ACS and PCCS, there was no significant correlation between ACS and PCCS at the low degree of professionalization. Contrastingly, at moderate professionalization and high professionalization there was a positive significant correlation between ACS and PCCS. The strongest correlation between ACS and PCCS was seen at the high degree of professionalization.

The Pearson's  $r$  for PAC and ACS, and PCC and ACS, for the managerial/supervisory group and the non-managerial group, are depicted in Table 34 and Table 35, respectively. There were positive significant correlations within the managerial/supervisory group and the non-managerial groups for both ACS-PACS and ACS-PCCS. In both instances, the correlations were lower for the non-managerial group than for the managerial/supervisory group.

Given that the significance for the relationship between the ACS and the dimensions of professional commitment varies from the alpha (.05), based on the degree of professionalization and position in the organizational hierarchy,  $H_{150}$  is rejected. There is, therefore, support for the



hypothesis that the relationship between professional commitment and affective organizational commitment is moderated by the degree of professionalization and the employee's position in the organizational hierarchy.

Table 34

Correlations (Pearson's) for AC and PAC based on position in the organizational hierarchy

	Managerial/Supervisory Group		Non-managerial Group	
	AC	PAC	AC	PAC
AC Pearson Correlation	1	.578**	1	.349**
Sig. (1-tailed)	.	.000	.	.000
PAC Pearson Correlation	.578**	1	.349**	1
Sig. (1-tailed)	.000	.	.000	.

\*\* . Correlation is significant at the 0.01 level (1-tailed)

Table 35

Correlations (Pearson's) for AC and PCC based on position in the organizational hierarchy

	Managerial/Supervisory Group		Non-managerial Group	
	AC	PCC	AC	PCC
AC Pearson Correlation	1	.577**	1	.252**
Sig. (1-tailed)	.	.000	.	.001
PCC Pearson Correlation	.577**	1	.252**	1
Sig. (1-tailed)	.000	.	.001	.

\*\* . Correlation is significant at the 0.01 level (1-tailed)

*Hypothesis 16.*

H<sub>16o</sub>: The dimensions of professional commitment do not moderate the relationship between affective organizational commitment and turnover intention.

H<sub>16a</sub>: The dimensions of professional commitment moderate the relationship between affective organizational commitment and turnover intention.

To test hypothesis 16, the Pearson's  $r$  for AC and turnover intention was determined for the three levels of PAC and then the three levels of PCC. The results are outlined in Table 36 and Table 37. The results in Table 36 reveal that the correlation for AC-TI was only significant at the low PAC level ( $p < .05$ ). There was no significant correlation of AC-TI at moderate PAC and high PAC levels. Contrastingly, the results in Table 37 show that there was no significant correlation for AC-TI at the low PCC level ( $p < .05$ ). Importantly, there were negative significant correlations for AC-TI at moderate PCC and high PCC levels. The level of correlation for AC-TI was higher at the high PCC level than the moderate PCC level. Given that the significance for the relationship between the ACS and turnover intention varies from the alpha (.05), based on the level of professional commitment,  $H_{160}$  is rejected, and therefore there is support for the hypothesis that the dimensions of professional commitment moderate the relationship between affective organizational commitment and turnover intention.

Table 36

Correlations (Pearson's) for AC and Turnover Intention at different levels of PAC

	Low PAC		Moderate PAC		High PAC	
	AC	TI	AC	TI	AC	TI
AC Pearson Correlation	1	-.370*	1	-.115	1	-.157
Sig. (1-tailed)	.	.022	.	.158	.	.063
TI Pearson Correlation	-.370*	1	-.115	1	-.157	1
Sig. (1-tailed)	.022	.	.158	.	.063	.

\*. Correlation is significant at the 0.05 level (1-tailed)

Table 37

Correlations (Pearson's) for AC and Turnover Intention at different levels of PCC

	Low PCC		Moderate PCC		High PCC	
	AC	TI	AC	TI	AC	TI
AC Pearson Correlation	1	.014	1	-.171*	1	-.357*
Sig. (1-tailed)	.	.462	.	.028	.	.012
TI Pearson Correlation	.014	1	-.171*	1	-.357*	1
Sig. (1-tailed)	.462	.	.028	.	.012	.

\*. Correlation is significant at the 0.05 level (1-tailed)

*Hypothesis 17.* Hypothesis 17 was stated as follows:

H<sub>17b</sub>: The levels of perceived organizational support, organizational commitment, professional commitment, and turnover intention do not differ between nurses, pharmacists, physicians, and clerical/administrative employees.

H<sub>17a</sub>: The levels of perceived organizational support, organizational commitment, professional commitment, and turnover intention differ between nurses, pharmacists, physicians, and clerical/administrative employees.

The mean scores for POS, ACS, CCS, PACS, PCCS, and turnover intention, across the four occupational groups, are presented in Table 18. The range of the mean scores for the PCCS was the lowest, with nurses having the lowest mean score of 3.85 and physicians the highest mean score of 4.56, a range of 0.71. The ranges of the mean scores for the other variables that were measured on a seven-point Likert-type scale were 0.87, 1.64, 1.26, and 1.81 for POS, ACS, CCS, and PACS, respectively.

Hypothesis 17 was tested using One-Way ANOVA to compare the means for POS, ACS, CCS, PACS, PCCS, and TI for the four occupational groups. The resulting F test or ratio indicates whether there is a significant difference between one or more of the occupational groups. The output from this procedure is displayed in Table 38.

Table 38

One-Way ANOVA for Occupational Groups

		Sum of Squares	df	Mean Square	F	Sig.
POS Scale	Between Groups	17.413	3	5.804	3.088	.028
	Within Groups	413.528	220	1.880		
	Total	430.940	223			
ACS	Between Groups	46.276	3	15.425	4.203	.006
	Within Groups	803.801	219	3.670		
	Total	850.077	222			
CCS	Between Groups	31.254	3	10.418	4.425	.005
	Within Groups	506.226	215	2.355		
	Total	537.480	218			
PACS	Between Groups	78.659	3	26.220	11.792	.000
	Within Groups	455.811	205	2.223		
	Total	534.470	208			
PCCS	Between Groups	9.718	3	3.239	1.470	.224
	Within Groups	478.028	217	2.203		
	Total	487.746	220			
Turnover Intention	Between Groups	414.350	3	138.117	3.067	.029
	Within Groups	9456.573	210	45.031		
	Total	9870.923	213			

Given that the significance was not less than the alpha (.05) for all the variables,  $H_{170}$  cannot be rejected, and therefore there is no support for the hypothesis that the levels of

perceived organizational support, organizational commitment, professional commitment, and turnover intention differ between nurses, pharmacists, physicians, and clerical/administrative employees.

As noted previously, the F test or ratio only indicates whether there is a significant difference between one or more of the occupational groups. It does not indicate where the difference lies. To determine this, a post hoc multiple comparisons test was conducted. The Scheffé test was selected, as it is the most conservative, being the least likely to find significant differences between groups or, in other words, to make a Type I error. It is also exact for unequal numbers of participants in the groups (Bryman & Cramer, 2003). The output for the Scheffé test is displayed in Appendix G. The significant differences between the occupational groups, detected by the test, are outlined in Table 39.

Table 39

Scheffé Test for Significant Differences in Means Between Occupational Groups

Dependent Variable	Occupation/ Profession (I)	Occupation/ Profession (J)	Mean Difference (I-J)	Significance
ACS	Physician	Nurse	1.6344*	.024
	Physician	Clerical/Admin	1.5721*	.041
CCS	Pharmacist	Clerical/Admin	-1.2540*	.012
PACS	Physician	Clerical/Admin	1.6043*	.004
	Pharmacist	Clerical/Admin	1.8126*	.000
	Nurse	Clerical/Admin	.9936*	.000

\*. The mean difference is significant at the .05 level

*Hypothesis 18.* The null and alternative hypotheses were stated as follows:

- H<sub>18a</sub>: The demographic variables age, gender, organizational tenure, professional tenure, and educational level are not related to POS.
- H<sub>18o</sub>: The demographic variables age, gender, organizational tenure, professional tenure, and educational level are related to POS.

Pearson's product moment correlation was used to test the relationship between the demographic variables and POS. The resulting correlation matrices have been presented in Table 40 and Table 41. Age, gender, and number of dependents were found to have a significant correlation with POS ( $p < .01$ ), with years of working experience and average tenure having a significant correlation with POS ( $p < .05$ ). As males were coded 1 and females coded 2, the negative relationship between gender and POS suggests that the male respondents have a higher perception of organizational support than do the female respondents. Given that the significance for the relationship between all of the demographic variables and POS was not less than the alpha (.05), H<sub>18o</sub> cannot be rejected. There is, therefore, no support for the hypothesis that the demographic variables age, gender, organizational tenure, professional tenure, and educational level are related to POS.

Table 40

Correlations (Pearson's) for Age, Gender, Marital Status, POS, ACS, CCS, PACS, PCCS and TI

		POS Scale	ACS	CCS	PACS	PCCS	TI
Age	Pearson Correlation	.221**	.308**	.034	.340**	.208**	.014
	Sig. (1-tailed)	.001	.000	.311	.000	.001	.419
Gender	Pearson Correlation	-.165**	-.181**	.042	.004	-.108	.135*
	Sig. (1-tailed)	.008	.004	.274	.476	.060	.027
Marital Status	Pearson Correlation	.072	.181**	.025	.174**	.074	-.005
	Sig. (1-tailed)	.152	.004	.361	.007	.145	.473
Number of Children	Pearson Correlation	.104	.230**	.024	.209**	.133*	.012
	Sig. (1-tailed)	.070	.000	.370	.002	.030	.433
Number of Dependents	Pearson Correlation	.119**	.191**	-.148	.166*	.155*	.117
	Sig. (1-tailed)	.047	.003	.019	.011	.015	.052

\*\* . Correlation is significant at the 0.01 level (1-tailed).

\* . Correlation is significant at the 0.05 level (1-tailed).

Table 41

Correlations (Pearson's) for Organizational Tenure, Years of Working Experience, Average Tenure, Professional Tenure, Educational Level, POS, ACS, CCS, PACS, PCCS and TI

		POS Scale	ACS	CCS	PACS	PCCS	TI
Organizational Tenure	Pearson Correlation	.082	.235**	.099	.170**	.147*	.125*
	Sig. (1-tailed)	.118	.000	.076	.008	.017	.036
Years of Working Experience	Pearson Correlation	.150*	.326**	.012	.293**	.172**	.099
	Sig. (1-tailed)	.016	.000	.435	.000	.007	.084
Average Tenure	Pearson Correlation	.146*	.292**	.064	.279**	.128*	.091
	Sig. (1-tailed)	.023	.000	.195	.000	.042	.112
Professional Tenure	Pearson Correlation	.111	.270**	.040	.244**	.125*	.116
	Sig. (1-tailed)	.059	.000	.290	.000	.039	.053
Educational Level	Pearson Correlation	-.028	.130*	-.161*	.276**	.016	.000
	Sig. (1-tailed)	.345	.032	.011	.000	.408	.498

\*\* . Correlation is significant at the 0.01 level (1-tailed).

\* . Correlation is significant at the 0.05 level (1-tailed).

*Hypothesis 19.* The null and alternative hypotheses were stated as follows:

H<sub>19o</sub>: The demographic variables age, gender, marital status, organizational tenure, and professional tenure are not related to AC; age, organizational tenure, and professional tenure are not related to CC; and age is not related to PCC and PAC.

H<sub>19a</sub>: The demographic variables age, gender, marital status, organizational tenure, and professional tenure are related to AC; age, organizational tenure, and professional tenure are related to CC; and age is related to PCC.

Pearson's product moment correlation was used to test the relationship between the demographic variables and ACS, CCS, and PCCS. The results in Table 40 and Table 41 reveal that all of the demographic variables showed a significant correlation with ACS ( $p < .05$ ). The relationship between gender and ACS was negative, suggesting a higher level of affective organizational commitment among male respondents than female respondents. Contrastingly, there was only a significant relationship between CCS and educational level ( $r = -.161, p < .05$ ). This result suggests that there is an inverse relationship between educational level and continuance organizational commitment. The stronger relationship exhibited between educational level and CCS than educational level and ACS suggests that respondents with a lower level of education tend to remain with the organization out of need rather than desire.

There was a significant correlation between age and PCCS ( $p < .01$ ). In addition, there were also significant correlations between PACS and all other demographic variables, except gender, and between PCCS and years of working experience, number of children, number of dependents, organizational tenure, average tenure, and professional tenure.



Given that the significance for the relationship of CCS with age, organizational tenure, and professional tenure was not less than the alpha (.05),  $H_{190}$  cannot be rejected, therefore, there is no support for the hypothesis that the demographic variables age, gender, marital status, organizational tenure, and professional tenure are related to AC; age, organizational tenure, and professional tenure are related to CC; and age is related to PCC.

*Hypothesis 20.* The final hypothesis, Hypothesis 20, was stated as follows:

$H_{200}$ : The demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are not related to turnover intention.

$H_{20a}$ : The demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are related to turnover intention.

Pearson's product moment correlation was used to test the relationship between the demographic variables and turnover intention. As shown in Table 40 and 41, only gender ( $r = .135$ ,  $p < .05$ ) and organizational tenure ( $r = .125$ ,  $p < .05$ ) showed a significant but weak correlation with turnover intention. Given that the significance for all of the relationships between the demographic variables and turnover intention was not less than the alpha (.05),  $H_{200}$  cannot be rejected, and therefore, there is no support for the hypothesis that the demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are related to turnover intention.

### *Summary*

This chapter presented the results of a study conducted to examine the relationship of perceived organizational support, organizational commitment, and professional commitment

with turnover intention. The survey instrument consisted of 70 items, comprised of eight scales: the 12-item POS scale (Eisenberger et al., 1986); the six-item ACS and the six-item CCS (Meyer et al., 1993); the six-item PACS and six-item PCCS (Meyer and Allen, 1991); the seven-item felt obligations scale (Eisenberger et al., 2001); the five-item exchange ideology scale (Eisenberger et al., 2001); and the four-item Staying or Leaving Index to measure turnover intention (Bluedorn, 1982).

There were 226 questionnaires analyzed, which represented a 46 percent response rate. The analysis consisted of statistical techniques to provide a description of the responses, analyze the scales, provide descriptive statistics, and test hypotheses. The factor analysis resulted in revised constructs of acceptable validity and reliability.

A summary of the hypothesis test results are presented in Table 42. The major findings include: a negative significant correlation between POS, AC, CC, PAC, and PCC with turnover intention; POS as the greatest contributor to turnover intention; the CCS not being comprised of two interpretable subscales; no significant correlation between the two dimensions of organizational commitment; a revised turnover model; and a significant difference across the four occupational groups in their level of POS, AC, CC, PAC, and turnover intention, but not in their PCC.

The detailed discussion, conclusions, and the implications of the results are presented in Chapter V.

Table 42

Summary of Hypothesis Test Results

Hypothesis	Results
H <sub>1</sub>	Null rejected
H <sub>2</sub>	Null rejected
H <sub>3</sub>	Null rejected
H <sub>4</sub>	Null rejected
H <sub>5</sub>	Null not rejected
H <sub>6</sub>	Null rejected
H <sub>7</sub>	Null rejected
H <sub>8</sub>	Null rejected
H <sub>9</sub>	Null not rejected
H <sub>10</sub>	Null not rejected
H <sub>11</sub>	Null not rejected
H <sub>12</sub>	Null not rejected
H <sub>13</sub>	Null not rejected
H <sub>14</sub>	Null rejected
H <sub>15</sub>	Null rejected
H <sub>16</sub>	Null rejected
H <sub>17</sub>	Null not rejected
H <sub>18</sub>	Null not rejected
H <sub>19</sub>	Null not rejected
H <sub>20</sub>	Null not rejected

## Chapter V

### Discussion and Conclusions

This chapter presents the research conclusions of this study, which include an overview of the study, summary and interpretation of results, implications of the findings, limitations of the study, and recommendations for future research.

#### *Overview of the Study*

The purpose of this study was to empirically examine employees in the healthcare sector in Jamaica with regard to: (1) the relationship between POS, organizational commitment, professional commitment, and turnover intention; (2) the strongest contributor to turnover intention among the independent variables included in the study; (3) the relationship between the independent variables – POS, AC, CC, PAC, and PCC; (4) the variables that moderate relationships within the turnover model; (5) the difference in the levels of POS, organizational commitment, professional commitment, and turnover intention among physicians, pharmacists, nurses, and clerical/administrative staff; and (6) the relationship of selected demographic variables with POS, organizational commitment, professional commitment, and turnover intention.

The study sought to answer seven research questions, comprising 20 hypotheses. Ten null hypotheses were rejected and ten were not rejected.

#### *Summary and Interpretation of Results*

An analysis of the descriptive statistics by occupation revealed that physicians had the highest perception of organizational support and affective organizational commitment, with an above average feeling of obligation to help the organization achieve its goals but not particularly in agreement with exchange ideology. Physicians showed the lowest turnover intention, with the

majority ranging from bad to so-so. Physicians also exhibited above average scores for both dimensions of professional commitment. Hospitals tend to revolve around physicians and management will tend to cater to their needs above other staff members, which could contribute to the high level of perceived organizational support exhibited by physicians in the sample. Physicians would tend to see the hospital outcomes as a reflection of their stewardship, more than that of any other employee, and would therefore have a vested interest in ensuring that the hospital's objectives are achieved. Physicians would tend to revert to part-time employment with the hospital than to leave altogether, as reflected by the lowest turnover intention.

Pharmacists had an average level of POS, with the second highest level of affective organizational commitment, and the highest average for felt obligation to the organization. Pharmacists also exhibited the highest level of belief in exchange ideology. Pharmacists showed the lowest level of need to remain with their organization. Pharmacists' turnover intention was below average, with most ranging from bad to good, showing a slightly higher intent than the physicians. Pharmacists were strongly committed to their profession, having the highest professional affective commitment and an average need to remain with the profession. Pharmacists have a wide scope of job opportunities that makes them less dependent on remaining with the organization. Most pharmacists who continue to work in the public sector do so for professional self actualization, as evidenced by this group having the highest level of affective commitment to the profession. This would also lend support for the high level of affective commitment to the organization, although not sensing a high level of support from the organization.

The results for the nursing group were almost at the other end of the spectrum when compared to the physician group. Nurses had the lowest average score for perceived

organizational support, which was also associated with the lowest average affective commitment to the organization, an average level of continuance commitment, and the highest turnover intention. Nurses probably remain with the organization due to the higher than average feeling of obligation to the organization. Nurses, like physicians, recognize that patients perceive the hospital's performance as highly dependent on the level of service delivered by them and this will motivate them to help the hospital to perform well, despite not feeling that the hospital is giving good support to them. Although nurses showed above average affective commitment to their profession, this was lower than both the physicians and the pharmacists. In addition, nurses indicated the lowest continuance commitment to their profession. This could be due to the training requirements being less onerous than that experienced by the pharmacists and physicians, making it less of a sacrifice to leave the profession.

The clerical/administrative group had the highest mean for continuance commitment to the organization, probably on the basis of less job alternatives being available to them than for the health professional groups. In keeping with their low degree of professionalization, the clerical/administrative group showed the lowest level of affective commitment to their occupation and the lowest level of felt obligation to the organization.

In summary, the three healthcare professional groups showed a higher level of affective commitment than continuance commitment to their profession. All occupational groups in the study showed a higher level of affective commitment than continuance commitment to the organization. Physicians had the highest mean scores for POS, AC, and PCC together with the lowest mean for turnover intention. It is also worthy of note that the lowest mean for POS, AC, and PCC, that is the same set of variables, was among the nurses who also exhibited the highest mean for turnover intention. This relationship is consistent with POS, PCC, and AC being the

only three independent variables that were selected in the multiple regression analysis, thereby indicating them to be the three most significant contributors to turnover intention.

A summary of the results of hypotheses testing for research question 1 are outlined in Table 43. The majority of the findings were in keeping with previous studies, resulting in the rejection of null hypotheses  $H_{10}$ ,  $H_{20}$ ,  $H_{30}$ ,  $H_{40}$ ,  $H_{60}$ ,  $H_{70}$ , and  $H_{80}$ .

The meta-analytic study of the POS research conducted by Rhoades and Eisenberger (2002) found a negative relationship between POS and intention to leave, with an average weighted correlation of  $-.45$  ( $p < .001$ ), although the results were reported to be heterogeneous. This compares with  $-.300$  ( $p < .001$ ) for this study. Although this research was conducted in a developing country in the Caribbean, the findings regarding the negative relationship between the two types of organizational commitment (affective and continuance) and turnover intention, agreed with previous studies that were conducted mainly in the U.S. (Chang, 1999; Hom & Griffeth, 1991; Jaros et al., 1993; Meyer et al., 2002; Michaels & Spector, 1982; Mowday et al., 1984; Stanley et al., 1999; Tett & Meyer, 1993).

The findings in the literature, regarding the relationship between the dimensions of professional commitment and turnover intention, have been conflicting. The negative correlation for PAC and turnover intention ( $r = -.133$ ,  $p < .05$ ) is in accordance with Meyer et al. (1993) and the negative correlation for PCC and turnover intention ( $r = -.180$ ,  $p < .01$ ) agreed with the findings of Irving et al. (1997). It should be noted that neither Meyer et al. (1993) nor Irving et al. (1997) found a significant relationship between turnover intention and both dimensions of professional commitment simultaneously.

Table 43

Hypothesis Test Results for Research Question 1

<u>Research Question: Are POS, organizational commitment, professional commitment, and turnover intention related as outlined in the proposed turnover model?</u>		
		Results
H <sub>10</sub>	POS, affective organizational commitment, continuance organizational commitment, and the dimensions of professional commitment have no relationship with turnover intention.	Rejected
H <sub>20</sub>	POS is not correlated or is negatively correlated with affective organizational commitment.	Rejected
H <sub>30</sub>	Felt obligation is not an intervening variable in the relationship between POS and affective organizational commitment.	Rejected
H <sub>40</sub>	Affective organizational commitment is not an intervening variable in the relationship between POS and turnover intention.	Rejected
H <sub>50</sub>	POS is not related or is positively related to continuance organizational commitment.	Not rejected
H <sub>60</sub>	Continuance organizational commitment is not an intervening variable in the relationship between POS and turnover intention.	Rejected
H <sub>70</sub>	POS is not correlated or is negatively correlated with the dimensions of professional commitment.	Rejected
H <sub>80</sub>	The dimensions of professional commitment are not intervening variables in the relationship between POS and turnover intention.	Rejected
H <sub>90</sub>	The dimensions of professional commitment have no relationship or have a negative relationship with the dimensions of organizational commitment.	Not rejected
H <sub>100</sub>	The dimensions of organizational commitment are not intervening variables in the relationship between the components of professional commitment and turnover intention.	Not rejected
H <sub>110</sub>	The continuance commitment scale does not consist of two interpretable factors, CC:LoAlt and CC:HiSac.	Not rejected
H <sub>120</sub>	Continuance organizational is not correlated or is positively correlated with affective organizational commitment.	Not rejected



Hypotheses 2 to 8 studied the relationship between POS and the dimensions of organizational and professional commitment. All of the findings, except for the positive POS-CC relationship ( $r = .208, p < .01$ ), are consistent with the POS literature. Rhoades and Eisenberger (2002) observed that significantly fewer studies have been conducted to investigate the POS-CC relationship than have been performed to elucidate the POS-AC relationship. Shore and Tetrick (1991) suggested that POS might reduce CC by reducing the feeling of entrapment that occurs when employees are forced to stay with an organization because the cost of leaving is too high. On the other hand, in the case of professionals operating in a hospital setting in the Jamaican context, a significant portion of the POS takes the form of training scholarships, accompanied by a bonding agreement with the hospital. This is part of the strategy being used by Jamaica's state owned hospitals to upgrade and retain its healthcare professionals (Ministry of Health, 2003). In this scenario, it is not unreasonable to expect that an increase in POS could be accompanied by an increase in the need to remain with the organization (CC). Other retention methods being employed by the hospitals include increased health insurance and pension benefits, and attractive leave benefits, which may induce employees to stay because they do not anticipate that these benefits will be matched by another employer. It is evident, therefore, that the nature of the POS-CC relationship is highly dependent on the type of support being given by the organization.

The strong positive relationship between POS and PCC ( $r = .815, p < .001$ ), particularly when contrasted to the substantially weaker relationship of POS with PAC ( $r = .199, p < .01$ ), requires further commentary. The three items of the revised PCCS focused on: (1) another profession/occupation not being able to match the overall benefits of the respondent's current profession/occupation; (2) the existence of too few options to consider leaving the profession/occupation; and (3) the constraints on available job alternatives that may result from a

change of profession/occupation. Contrastingly, the three items of the revised PACS focused, quite narrowly, on a sense of belonging to the profession/occupation. It is clear that the employee who has high PCC will need to sense a high level of organizational support so they do not feel trapped by the profession.

Research findings for this study regarding the relationship between the dimensions of organizational commitment and professional commitment were consistent with the literature, with the exception of the negative relationship that was found between CC and PAC ( $r = -.226$ ,  $p < .01$ ). Whereas the literature provides conceptual, as well as empirical, support for a relationship between professional commitment and organizational commitment, the research findings have been varied (Cohen, 1999; Wallace, 1993). In fact, researchers have argued that there may be an inherent conflict between commitment to the profession and commitment to the organization if the individual's professional work expectations and goals are not met by the employing organization (Fielding & Portwood, 1980; Hall, 1967, 1968; Lachman & Aranya, 1986; Miller, 1967; Montagna, 1968; Morrow & Wirth, 1989). Wallace (1993) found the specific measure of professional commitment utilized did affect the association between professional and organizational commitment. Very few of the professional commitment studies have utilized a multidimensional measure of professional commitment as has been used in this study. Observing the variability in the research findings, regarding the degree of correlation between the dimensions of organizational commitment and professional commitment, Meyer et al. (1993) advocated that further research be done within the nursing profession and across other occupations, as has been done in this study. Meyer and Allen (1997) noted the need to learn much more about the conflicts among multiple commitments that people face in the workplace and how they handle them.

Cohen (1999) proposed that professional commitment was an antecedent of organizational commitment and, as a consequence, organizational commitment was a more proximal predictor of turnover intention than professional commitment. In this study, the opposite result was found. Both dimensions of professional commitment were found to be intervening variables in the AC-TI relationship, indicating that, for this sample, professional commitment is a more proximal predictor of turnover intention than AC. The fact that Cohen (1999) utilized an 8-item unidimensional measure of career commitment developed by Blau (1985), which contrasts with the multidimensional measure used in this study, can affect the association between professional and organizational commitment (Wallace, 1993). Meyer et al's (2002) meta-analysis, to assess relations between Meyer and Allen's (1991) three components of organizational commitment and variables identified as their antecedents, correlates, and consequences, categorized professional commitment as a correlate of organizational commitment, noting that there was no consensus concerning causal ordering.

There was no evidence in this study to support two interpretable subcomponents of the CCS, as identified by McGee and Ford (1987). In fact, attempts by other researchers to evaluate the dimensionality of the CCS have yielded mixed results. Whereas some studies have found evidence for a two-dimensional structure (Hackett et al, 1994; Meyer et al., 1990; Somers, 1993), others, like this study, have found the scale to be unidimensional (Dunham et al., 1994; Ko et al., 1997, Shore & Tetrick, 1991). Reliability analyses of the two subcomponents have also produced mixed results. McGee and Ford (1987) reported reliabilities of .72 for CC:LoAlt and .71 for CC:HiSac. In a sample of nurses, Somers (1993) found reliabilities of .59 and .57 for CC:LoAlt and CC:HiSac, respectively. Cohen (1999) also found relatively low reliabilities for the two CCS subscales, with a reliability of .65 for 'low alternatives' and .60 for 'high sacrifices'. In their

meta-analysis, Meyer et al, (2002) reported average weighted reliabilities for CC:LoAlt and CC:HiSac of .70 in each case.

McGee and Ford (1987) noted that the Meyer and Allen (1984) eight-item CCS showed no significant correlation with the ACS. Cohen (1999) also found no significant correlation between the six-item CCS and scores of the ACS. The findings of McGee and Ford (1987) and Cohen (1999) are consistent with the lack of significant correlation between AC and CC found in this study.

With regards to research question 2, null hypothesis  $H_{130}$  was not rejected, as shown in Table 44. POS, and not AC, was found to make the greater contribution to turnover intention, followed by PCC. This finding is in contrast to Chang (1999), who detected a significant negative effect of career commitment on turnover intention that was weaker than that of affective organizational commitment. Chang (1999), however, used a unidimensional measure for career commitment. Additionally, a review of the literature revealed a lack of research investigating the relationship between POS and professional commitment. The inclusion of both professional commitment and AC, together with POS, in this study, as well as the use of a multidimensional measure of professional commitment, could contribute to the difference in the findings. The revised turnover model for the sample in this study, as depicted in Figure 5, shows that POS has various indirect pathways by which it is able to impact turnover intention. In addition, AC is an intervening variable in the relationship between POS and turnover intention. On this basis, the addition of AC to the pathway enhances the strength of the POS-turnover intention relationship.

Table 44

Hypothesis Test Result for Research Question 2


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Research Question: Does affective organizational commitment have the strongest relationship with turnover intention when compared with perceived organizational support, continuance organizational commitment, and professional commitment?

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		Result
H <sub>130</sub>	Affective organizational commitment does not make a greater contribution to turnover intention than do perceived organizational support, continuance organizational commitment, and professional commitment.	Not rejected

---

As outlined in Table 45, the null hypothesis H<sub>140</sub>, associated with research question 3, was rejected. Exchange ideology was found to moderate the relationship between POS and felt obligation. Eisenberger et al. (2001) found that the relationship between POS and felt obligation was greater for strong exchange ideology employees compared to those weak in exchange ideology. The research findings agree with Eisenberger et al. (2001), in that only respondents with strong exchange ideology showed a significant relationship between POS and felt obligation. This implies that only those employees who strongly believe that it is appropriate and useful to base their concern with the organization's welfare and their work effort on how favorably they have been treated by the organization will feel an obligation to the organization in response to the perceived support they receive from the organization.

Table 45

Hypothesis Test Result for Research Question 3


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Research Question: Is the relationship between perceived organizational support and felt obligation moderated by exchange ideology?

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		Result
H <sub>140</sub>	Exchange ideology does not moderate the relationship between perceived organizational support and felt obligation.	Rejected

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Table 46 displays  $H_{150}$  for research question 4, which was rejected. Both degree of professionalization and position in the organizational hierarchy moderated the relationship between professional commitment and AC. Wallace (1993) found that the higher the professionalization of the occupation, the higher the association between professional and organizational commitment. The findings of this study agree with the findings of Wallace (1993), for the PCC-AC relationship. However, the pattern of moderation of the PAC-AC relationship by degree of professionalization was not consistent with the findings of Wallace (1993). Physicians showed no significant correlation between PAC and AC. Nurses and pharmacists had a significant correlation for PAC-AC that was stronger than that for the clerical/administrative group. Although the difference between this study and the findings of Wallace (1993) may be due to the difference in the dimensionality of the professional commitment measures used, it is more probable that the difference in the rankings of the professions between this study and those used in previous studies may be even more significant. Previous studies did not include, what are referred to in the literature as, the traditional professions, such as medicine, law, and the clergy. If we were to treat nurses and pharmacists as comprising the high professionalization group, in accordance with Wallace (1993), the findings for the effects of degree of professionalization on the PAC-AC relationship would be consistent with Wallace (1993). In the case of physicians, it is clear from the findings that, whereas an increase in affective attachment to the organization does not necessarily result in an increased sense of belonging to the profession, an increase in affective attachment to the organization does result in an increased need to remain in the profession. The increased sense of belonging to the organization, and the desire to do so, means that remaining in the profession takes on greater importance, as the profession is the vehicle by which the physician will remain with the hospital.

The results for the moderating effects of position in the organizational hierarchy on the relationship between professional commitment and AC were consistent with the findings of Wallace (1993). For both PAC and PCC the relationship with AC was stronger among the managerial/supervisory group when compared with the non-managerial group. This implies that there is a stronger relationship between commitment to the organization and commitment to the profession among managers.

Table 46

Hypothesis Test Result for Research Question 4

<u>Research Question: Is the relationship between professional commitment and affective organizational commitment moderated by the degree of professionalization and the employee's position within the organization?</u>		Result
H <sub>150</sub>	The relationship between professional commitment and affective organizational commitment is not moderated by the degree of professionalization and the employee's position in the organizational hierarchy.	Rejected

Table 47 outlines research question 5 and the associated null hypothesis. The research findings resulted in H<sub>160</sub> being rejected. The relationship between AC and turnover intention was moderated by professional commitment, as found by Chang (1999). It must be noted, however, that the pattern of moderation varied for the two dimensions of professional commitment. PCC was more consistent with previous research findings. Increasing levels of PCC resulted in a stronger negative relationship between AC and turnover intention. In other words, the influence that an employee's affective attachment to the organization has on the employee remaining with the organization grows stronger as the employee's need to remain in the profession/occupation increases. In the case of PAC, however, the influence of an employee's affective attachment to

the organization on the decision to remain with the organization was only significant if the employee had a low level of PAC. This would imply that when there is a moderate or strong sense of belonging to the profession/occupation that AC has less of an influence in decreasing turnover intention.

Table 47

Hypothesis Test Result for Research Question 5

<u>Research Question: Is the relationship between affective organizational commitment and turnover intention moderated by professional commitment?</u>		Result
H <sub>160</sub>	The dimensions of professional commitment do not moderate the relationship between affective organizational commitment and turnover intention.	Rejected

The research findings did not result in the rejection of the null hypothesis (H<sub>170</sub>) for research question 6. Although the levels of POS, AC, CC, PAC, and turnover intention differed significantly between the four occupational groups, as expected, there was, however, no significant difference in the level of PCC across the groups. This would indicate that all respondents, whether professional or not, feel that it is important to remain in their current profession or occupation. This result could also partially explain some of the previous contrasts seen in the research findings for PAC and PCC. It would appear that PAC is more sensitive to the degree of professionalization of the occupation than is PCC; with all three healthcare professional groups showing significant differences in levels of PAC when compared with the clerical/administrative group (Table 38).



Table 48

Hypothesis Test Result for Research Question 6

<u>Research Question: Do the levels of perceived organizational support, organizational commitment, professional commitment and turnover intention differ between the nurses, pharmacists, physicians, and clerical/administrative employees?</u>		
		<u>Result</u>
H <sub>17o</sub>	The levels of perceived organizational support, organizational commitment, professional commitment and turnover intention do not differ between nurses, pharmacists, physicians and clerical/administrative employees.	Not rejected

Research question 7 addressed the impact of demographic variables on the independent variables and on turnover intention. The three hypotheses were developed in accordance with the research findings noted in the literature. It should be noted that there was no consensus found among the various studies regarding the nature of the relationships of the demographic variables with POS, AC, CC, PAC, PCC, and turnover intention. This lack of consensus contributed to the failure to reject the null hypotheses H<sub>18o</sub>, H<sub>19o</sub>, and H<sub>20o</sub>, as outlined in Table 49. Education and organizational tenure did not correlate with POS, as found in the meta-analysis of POS research studies conducted by Rhoades and Eisenberger (2002). It is worthy of note that in this study years of working of experience and average tenure did have a positive significant relationship with POS. This might suggest that it is not merely an employee's length of tenure with the current organization that influences the perception of organizational support but also the level of overall exposure the employee has had, which allows for greater capability to compare the performance of the current organization with other organizations. This may, in turn, lead to an enhanced level of appreciation for the support being given by the current organization, particularly if previous employers did not offer the same quality of support.

Significant correlations between organizational commitment component scales and demographic variables, as outlined by Meyer et al. (2002), were also found for the ACS and the demographic variables in this study. The CCS did not, however, show a significant relationship with age and organizational tenure. This is further evidence that the ACS and CCS are separate constructs.

Hom and Griffeth (1995) found that most demographic predictors had only modest predictive strength for turnover. These included education, marital status, kinship responsibilities, children, gender, age, and organizational tenure. There were very few significant correlations seen in this study between the demographic variables and turnover intention. Notable exceptions were gender and organizational tenure. Previous studies have indicated the tendency for females to be more inclined to remain with the organization. The results here point to females being more inclined to leave the organization. It should be noted, however, that 85 percent of the respondents in the study were female, which could have influenced the findings with respect to gender. The fact that all of the independent variables have a negative significant relationship with turnover intention and that all of the demographic variables have a significant correlation with one or more of the independent variables, and moreso with AC, would imply that the demographic variables will indirectly impact turnover intention, either by moderating the independent variable-TI relationship or acting as an intervening variable in that relationship.

Table 49

Hypothesis Test Results for Research Question 7


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**Research Question:** Are the demographic variables age, gender, organizational tenure, children, marital status, kinship responsibilities, educational level, work experience, and professional tenure related to the variables POS, organizational commitment, professional commitment, and turnover intention?

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		Results
H <sub>180</sub>	The demographic variables age, gender, organizational tenure, professional tenure, and educational level are not related to POS.	Not rejected
H <sub>190</sub>	The demographic variables age, gender, marital status, organizational tenure, and professional tenure are not related to AC; age, organizational tenure, and professional tenure are not related to CC; and age is not related to PCC.	Not rejected
H <sub>200</sub>	The demographic variables age, gender, marital status, children, kinship responsibilities, work experience, organizational tenure, professional tenure, and educational level are not related to turnover intention.	Not rejected

---

There was no consistency with the literature in the relationship of demographic variables with POS, CC, and turnover intention. Most of the demographic variables had no significant impact on turnover intention. The two exceptions, gender and organizational tenure, showed only a weak correlation with turnover intention. AC was the independent variable most impacted by the demographic variables included in the study.

*Implications of the Findings*

The results of this study provide both theoretical and practical implications. The theoretical implications will be discussed first.

*Theoretical Implications.* This study represents theoretical or empirical research regarding the antecedents and consequences of commitment in a healthcare setting. It also represents an expansion of Meyer and Allen's multidimensional commitment model to include multiple commitment constituencies - organizational and professional. Despite the fact that

commitment is an important factor for the effective functioning of organizations, there has been little empirical research among a wide array of healthcare professionals or in the public sector.

Meyer and Allen (1997) notes the value added that the multiple-commitment approach has to refining our understanding of work-related behavior. The study acknowledges and raises the awareness of the complex multidimensional nature of commitment within the workplace. In addition, this research has contributed to an extension of multiple commitments to domains outside the employing organization. It has long been recognized that the inclusion of professional commitment, when studying commitment among professionals, helps to explain the variance in outcome variables, such as intention to leave, over and above that explained by organizational commitment alone.

Central to research examining links between pairs of commitments, such as organizational and professional, has been the question of compatibility and conflict between competing commitments. Gunz and Gunz (1994) espoused the zero-sum view, that one can be loyal to one's profession or to one's organization, but not to both. This would lead to the prediction that organizational commitment might be negatively correlated with commitment to other constituencies, such as the profession. This study has helped to show that, in fact, commitment to the profession can enhance organizational commitment, with positive consequences for retention of professionals. Researchers have observed that the relations among various multiple commitments are quite complex and in need of additional research, to elucidate more clearly the complex interactions that take place. This study has helped to make this type of contribution to the existing multiple-commitment research.

The dependencies among commitments have also become more evident by the findings of this research. Scant empirical attention has been paid to the role that dependencies among

commitments to different constituencies play in the understanding of multiple commitments (Meyer & Allen, 1997). The healthcare setting is an environment in which the dependency between organizational commitment and professional commitment can be clearly seen. Lawler (1992) noted the increasing importance of research into the nested nature of constituencies, in that some constituencies to which a person might belong will be nested in larger domains; thus, the person's membership with respect to one will be dependent on continued membership in the other. This was seen in the relationship between PAC/PCC and CC among most of the occupational groups. The fact that dependencies between multiple commitments will have an influence on the pattern of work behaviors an employee exhibits makes it an important area of study.

The finding that the POS-commitment-turnover intention model is supported in the healthcare setting of a developing country is additional evidence of the generalization of the model across different cultures and different occupations.

One of the purposes of this study was to determine if differences existed in the levels of POS, organizational commitment, professional commitment, and turnover intention between four occupational groups in the healthcare sector. There are few studies involving all four concepts reported in health service management research.

Employees in healthcare delivery institutions are significant, because their attitudes and behaviors are essential to the quality of service and the success of the organization. Employee turnover is particularly important in the healthcare setting due to the high levels of client-employee contact. In this regard, this study has implications for employee turnover research in the healthcare service setting by providing contrary empirical evidence for those relationships that have been reported in other industries. In that, turnover intentions were low and felt

obligation and affective commitment high, even when employees did not perceive high levels of organizational support.

A two-dimensional structure of continuance commitment was not found. Although this resulted in the failure to reject the null hypothesis, it did support the work of some researchers that have found the CCS to be unidimensional. This study has, therefore, contributed to the ongoing debate regarding the dimensional structure of the CCS, and provides additional empirical evidence of the possible need to further refine the CCS.

*Practical Implications.* The support of these study findings for the POS-commitment-turnover intention model underscores the importance for management practitioners to take on, as part of their arsenal, surveillance and analytical techniques that will assist them to identify the values of their employees and align the organization's values accordingly, in an effort to gain greater loyalty, and thereby improve retention rates.

One implication of this study is that, for public sector hospitals to retain quality professionals, hospital CEOs must endorse a course of action providing an environment that fosters commitment to the hospital. There must be a prevailing atmosphere of trust, support, and a sense of mutual responsibility between administration and health professionals for the attainment of shared goals. A common denominator appears to be perceived organizational support that can lead to enhanced levels of commitment.

The study brings to the forefront the importance of recognizing that organizational commitment can take different forms and that each form may result in different work-related behavior. In understanding this, managers need to develop the most effective HRM practices-commitment mix to ensure that the desired behavior is realized. For example, by failing to recognize that commitment can take different forms the manager runs the risk of assuming that if

affective commitment leads to retention, an employee who remains must be affectively committed. Alternatively, the manager may assume that if an employee stays with the organization, he or she will become affectively committed. These assumptions can have disappointing consequences. For example, organizations that attempt to get employees committed by making the cost of leaving prohibitive run the risk of creating continuance commitment, which does not have the same positive implications for on-the-job behavior and performance that affective commitment does. In fact, it can have exactly the opposite effects (Meyer & Allen, 1997).

The importance of perceived organizational support to the retention process means that managers must recognize that merely doing something might not be enough. Employees will have to perceive that it was done, attribute the action to the organization, and interpret it as being motivated by good intentions. Since good intentions can be misinterpreted, clear communication with employees will also be of paramount importance. Management should not only inform employees of its actions and intentions but also should listen to or seek out the reactions of employees to determine whether the message has been accurately received. Where appropriate, input from employees should also be sought before policies and practices are implemented.

Management practitioners must be aware that there are subtle and not so subtle differences between professional and non-professional staff, which must be taken into consideration in the decision making process. For example, it is important that organization's that employ professionals ensure that they understand the professional standards and values of these professionals and provide the necessary support to minimize the level of conflict between commitment to the organization and commitment to the profession that may lead to the professional having to choose between the two.

A better understanding of how commitment develops will place practitioners in a better position to anticipate the impact of a particular policy or practice. On the basis of the findings reported in this study, managers will realize the need to move away from the generalized approach to their organizational support policies and practices, and to move instead towards customizing or tailoring the support to the differences that may exist across occupational groups. It would also be evident to practitioners, from the findings, that only granting money or rewards will not be enough to retain valuable employees.

In the midst of scarce resources, managers have to make hard decisions on a daily basis that will result in the most cost effective outcomes. Investment of these resources must be in those areas where the greatest benefit can be derived. This study has revealed that, within the hospital setting, the tendency is to concentrate on satisfying the needs of physicians, to the possible detriment of other professional and occupational groupings, which are just as important to the overall success of the hospital. If hospitals are to stop the wave of resignations from nurses, the managers are going to have to determine the type of support that nurses would find important to build their affective commitment to the organization and make them want to stay with the organization. The fact that nurses are more willing to leave their profession than are physicians makes the probability of the hospital losing nurses greater than the possibility of losing physicians. Physicians will remain with the hospital, even in a part-time capacity, as this is where their professional self-actualization is maximized. Pharmacists are also going to be more of a moving target than physicians, as their profession offers them much scope outside of the hospital setting and without the same level of professional erosion that might be felt by physicians. In addition, the nature of the medical profession will tend to make physicians feel a



sense of obligation to treat patients well, even though not perceiving a high level of organizational support.

An important implication for managers is the recognition that employee work commitment profiles need to be described in terms of the degree of affective commitment, continuance commitment, and felt obligation that the employee feels to each of several entities, rather than just the narrow organizational commitment approach that may have been taken in the past.

The difference found between managers and non-managerial staff regarding the strength of the relationship between professional commitment and affective organizational commitment emphasizes the importance that managerial employees be given support by the organization in pursuing professional advancement as this will redound to the benefit of the organization.

#### *Limitations of the Research*

As with all empirical research, this study has limitations. The most important of these will be discussed here.

One of the limitations is related to the low ratio of physicians in the sample, relative to the ratio in the population. This may affect how representative the results are of the population. In addition, because data were collected only from hospital employees, this study may not be generalizable to other healthcare delivery institutions nor to other service settings.

The study's data may have been limited by a narrow sample size. The data were collected from four hospitals and there were only 226 surveys, giving a 46 percent response rate. A larger sample size would have increased the strength of the research results. When the participation rate is less than 100 percent, the possibility exists that study findings are influenced by some factor

that differentiates participants from non-participants, thereby presenting a threat to internal validity.

The problem of employee retention in the public sector healthcare service delivery system, especially among nurses, may mean that those who have remained in the hospitals are the more committed employees. This could have resulted in the data showing a higher than normal level of commitment and felt obligation than might normally occur in situations where such a problem does not exist. This may affect the external validity of the study.

A potential source of measurement instability in survey research arises from the lack of control over survey administration. The variables in this research were measured with self-report measures using Likert-type scales. As a consequence, the observed linkages are subject to common method variance, and therefore can be artificially inflated or decreased (Kerlinger, 1986).

As with all self-report instruments, a response set can be created based on the content and order in which the questions are asked (Salancik & Pfeffer, 1978). Since perceived organizational support items were asked first in this research, a set might have been created which increased or decreased the perceived organizational support from the organization. If such a set is present, some relationships between the variables would have been inflated or deflated. However, no indications of a response set were identified.

The cross-sectional design of the study means that the direction of causality cannot be determined, as data were collected at a single point in time. Thus, causality among the independent and dependent variables cannot be concluded. For example, it may be found that, over time, the particular mix of perceived organizational support may have a decreasing effect on organizational commitment and turnover intentions.

This study did not look at other variables, such as personality, job attitude, and job satisfaction. When testing the relation between organizational commitment and its antecedents, correlates, and consequences, the effect of personality variables should be controlled (Meyer & Allen, 1997). Personality variables may mediate and/or moderate the relation between organizational commitment and its antecedents, correlates, and outcome variables. Studying the effect of personality variables may help to explain some of the unexplained variance in organizational commitment and turnover intention.

The findings of this research must be interpreted with these limitations in mind.

#### *Recommendations for Future Research.*

Further empirical research is needed to elucidate the role that dependencies among commitment to different constituencies can play in helping our understanding of multiple commitments.

Most of the commitment research has focused on the identification of correlates with commitment. There is a need, however, for more research to examine the causal ordering of variables in the development process, as well as to identify conditions that might moderate the relations between antecedent variables and commitment.

Additional research is also necessary to broaden the empirical evidence concerning the existence and the structure of the continuance commitment subscales.

The research findings have been rather inconsistent throughout the literature, with regards to the hypothesized interaction effects between different commitment dimensions in their relation to turnover intention. Thus, although the findings of this research can be regarded as contributing to the general body of empirical evidence, the research base still has to be broadened to derive meaningful generalizations (Jaros, 1995; Somers, 1995). In addition,

research concerning interaction effects of the commitment dimensions, in relation to consequence variables other than turnover intention, appear to be necessary.

Research concerning interaction effects between organizational commitment and other foci of commitment, for example, commitment to the supervisor, the work group, or the union could lead to further refinement of commitment theory.

Additional research is necessary concerning possible interaction effects between antecedent variables, for example between tenure and career stage, in relation to the relevant commitment dimensions.

Future research conducted in other healthcare delivery settings could improve the generalizability of the results.

Longitudinal research is recommended for future research, to facilitate examination of the continuity of the responses and to observe changes that occur over time. Additionally, longitudinal research would facilitate the use of actual turnover as the dependent variable instead of turnover intention.

It is highly recommended that the effects of personality variables on organizational commitment be studied in the future.

### *Summary*

This chapter provided an evaluation of the results of the study. In the first section, the interpretation of the results was provided. Ten null hypotheses were not rejected – H<sub>50</sub>, H<sub>90</sub>, H<sub>100</sub>, H<sub>110</sub>, H<sub>120</sub>, H<sub>130</sub>, H<sub>170</sub>, H<sub>180</sub>, H<sub>190</sub>, H<sub>200</sub> - the possible explanations for the failure to reject these hypotheses were highlighted. The second section discussed both the theoretical and practical implications of the research findings. Finally, the limitations of the research and recommendations for future research were discussed.

APPENDIX A

Questionnaire

## QUESTIONNAIRE

### Instructions

For each of the statements below, please indicate the degree of your agreement or disagreement with by circling one of the seven alternatives: 1 = Strongly Disagree; 2 = Moderately Disagree; 3 = Slightly Disagree; 4 = Neither Disagree nor Agree; 5 = Slightly Agree; 6 = Moderately Agree; and 7 = Strongly Agree.

### Perceived Organizational Support <sup>1</sup>

1. My organization strongly considers my goals and values.	1	2	3	4	5	6	7
2. My organization does not really care about my well-being.	1	2	3	4	5	6	7
3. My organization considers my best interest when it makes decisions that affect me.	1	2	3	4	5	6	7
4. My organization takes pride in my accomplishments at work.	1	2	3	4	5	6	7
5. When I do a good job, my organization notices my effort.	1	2	3	4	5	6	7
6. If given the opportunity, my organization would take unfair advantage of me.	1	2	3	4	5	6	7
7. My organization is willing to help me if I need a special favor.	1	2	3	4	5	6	7
8. My organization would consider any reasonable complaint from me.	1	2	3	4	5	6	7
9. If my organization could hire someone to replace me at a lower salary, it would do so.	1	2	3	4	5	6	7
10. My organization would grant a reasonable request for a change in my working conditions.	1	2	3	4	5	6	7
11. My organization does not show a great deal of concern for me.	1	2	3	4	5	6	7
12. My organization values my contribution to its well-being.	1	2	3	4	5	6	7

**Organizational Commitment**<sup>2</sup>

1. I would be very happy to spend the rest of my career with this organization.	1	2	3	4	5	6	7
2. I really feel as if this organization's problems are my own.	1	2	3	4	5	6	7
3. I do not feel a strong sense of "belonging" to my organization.	1	2	3	4	5	6	7
4. I do not feel "emotionally attached" to this organization.	1	2	3	4	5	6	7
5. I do not feel like "part of the family" at my organization.	1	2	3	4	5	6	7
6. This organization has a great deal of personal meaning for me.	1	2	3	4	5	6	7
7. Right now, staying with my organization is a matter of necessity as much as desire.	1	2	3	4	5	6	7
8. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	1	2	3	4	5	6	7
9. I believe that I have too few options to consider leaving the organization.	1	2	3	4	5	6	7
10. One of the few negative consequences of leaving this organization, would be the scarcity of available alternatives.	1	2	3	4	5	6	7
11. It would be very hard for me to leave my organization even if I wanted to.	1	2	3	4	5	6	7
12. Too much of my life would be disrupted if I decided I wanted to leave my organization.	1	2	3	4	5	6	7

**Felt Obligation**<sup>3</sup>

1. I feel a personal obligation to do whatever I can to help the organization achieve its goals.	1	2	3	4	5	6	7
2. I owe it to the organization to give 100% of my energy to achieving its goals while I am at work.	1	2	3	4	5	6	7
3. I have an obligation to the organization to ensure that I produce high-quality work.	1	2	3	4	5	6	7
4. I owe it to the organization to do what I can to ensure that the organization's customers are well-served and satisfied.	1	2	3	4	5	6	7
5. I would feel an obligation to take time from my personal schedule to help the organization if it needed my help.	1	2	3	4	5	6	7
6. I would feel guilty if I did not meet the organization's performance standards.	1	2	3	4	5	6	7
7. I feel that the only obligation I have to the organization is to fulfill the minimum requirements of my job.	1	2	3	4	5	6	7

**Employee Exchange Ideology**<sup>3</sup>

1. An employee's work effort should depend partly on how well the organization deals with his or her desires and concerns.	1	2	3	4	5	6	7
2. An employee who is treated badly by the organization should lower his or her work effort.	1	2	3	4	5	6	7
3. How hard an employee works should not be affected by how well the organization treats him or her.	1	2	3	4	5	6	7
4. An employee's work effort should have nothing to do with the fairness of his or her pay.	1	2	3	4	5	6	7
5. The failure of the organization to appreciate an employee's contribution should not affect how hard he or she works.	1	2	3	4	5	6	7



**Professional/Occupational Commitment**<sup>2</sup>

1. I would be very happy to spend the rest of my career in my current profession/occupation.	1	2	3	4	5	6	7
2. I really feel as if my profession's/occupation's problems are my own.	1	2	3	4	5	6	7
3. I do not feel a strong sense of "belonging" to my profession/occupation.	1	2	3	4	5	6	7
4. I do not feel "emotionally attached" to this profession/occupation.	1	2	3	4	5	6	7
5. I do not feel like "part of the family" in my profession/occupation.	1	2	3	4	5	6	7
6. This profession/occupation has a great deal of personal meaning for me.	1	2	3	4	5	6	7
7. Right now, staying with this profession/occupation is a matter of necessity as much as desire.	1	2	3	4	5	6	7
8. One of the major reasons I continue to work in this profession/occupation is that leaving would require considerable personal sacrifice; another profession/occupation may not match the overall benefits.	1	2	3	4	5	6	7
9. I believe that I have too few options to consider leaving the profession/occupation.	1	2	3	4	5	6	7
10. One of the positive consequences of remaining in this profession/occupation, would be the scarcity of available job alternatives if I left.	1	2	3	4	5	6	7
11. It would be very hard for me to leave my profession/occupation even if I wanted to.	1	2	3	4	5	6	7
12. Too much of my life would be disrupted if I decided I wanted to leave my profession/occupation.	1	2	3	4	5	6	7





APPENDIX B

Letter and Consent Form for Survey Respondents

Adult/General Informed Consent form for Participation in *Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intentions of Healthcare Professionals in Jamaica Study*.

Funding Source: None

IRB approval #:

Principal Investigator:  
Valerie O. Kerr  
15½ Long Lane  
P.O. Box 2536  
Kingston 8, Jamaica

Institutional Review Board  
Nova Southeastern University  
Office of Grants and Contracts  
(954) 262-5369

**Description of the Study**

The study involves research to determine the influence of perceived organizational support, organizational commitment, and professional commitment on turnover intentions of healthcare professionals in Jamaica. You have been selected on the basis of belonging to one of four employee categories – physicians, nurses, pharmacists, and clerical/administrative – in any of four hospitals – Mandeville Public Hospital, Cornwall Regional Hospital, Bustamante Hospital for Children, and Bellevue Hospital. You will be asked to provide responses on a self-administered questionnaire to allow the investigator to measure your level of perceived organizational support, organizational commitment, professional commitment, felt obligation, exchange ideology, and turnover intention. In addition, you will be asked to indicate some minimally invasive personal, work experience, and professional experience information. It is estimated that it should take you an average of ten minutes to complete the questionnaire.

**Initials** \_\_\_\_\_ **Date** \_\_\_\_\_

**Risks/Benefits to the Participant**

Risks to you by participating in this study are deemed to be minimal. There will be no direct benefits to you by participating in this study.

If you have any concerns about the risks or benefits of participating in this study, you contact Valerie Kerr at (876) 931-2045 or the IRB office at the numbers indicated above.

**Costs and Payments to the Participant**

There are no costs to you or payments made for participating in this study.

**Confidentiality and Privacy**

All information obtained in this study is strictly confidential unless disclosure is required by law. The investigator will secure all completed questionnaires in such a manner as to ensure that your confidentiality and privacy will be protected. You will also be notified that the IRB and regulatory agencies may review research records.

**Participant's Right to Withdraw from the Study**

You have the right to refuse to participate or to withdraw at any time, without penalty. If you choose to withdraw, your data will not be destroyed and will be kept for the length of this study, which is estimated to be two (2) months.

**Voluntary Consent by Participant**

**I have read the preceding consent form, or it has been read to me, and I fully understand the contents of this document and voluntarily consent to participate. All of my questions concerning the research have been answered. I hereby agree to participate in this research study. If I have any questions in the future about this study they will be answered by Valerie O. Kerr. A copy of this form has been given to me. This consent ends at the conclusion of this study.**

Participant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Witness's Signature \_\_\_\_\_ Date: \_\_\_\_\_

June 2005

Dear Sir/Madam:

You are invited to participate in a study entitled “Influence of Perceived Organizational Support, Organizational Commitment and Professional Commitment on Turnover Intentions of Healthcare Professionals in Jamaica”. The study attempts to obtain information from employees within the Jamaican health sector to gain a better understanding of employee behaviour as it relates to turnover. The study is to satisfy partial fulfillment of the Doctorate in Business Administration (DBA) programme at Nova Southeastern University.

Your assistance in completing the attached survey instrument is strictly voluntary. It should only take a few minutes of your time. The data will be used for statistical purposes only and you can be assured that strict confidentiality and privacy will be observed.

After you complete the survey, please submit it to the relevant liaison person within your institution. The researcher will collect the completed questionnaire within one week. Should you require clarification or wish to make alternate arrangements for collection you may contact the researcher at 901-2979 (office), 383-0537 (cellular), or [kerr@infochan.com](mailto:kerr@infochan.com).

Thank you for your kind contribution and cooperation.

Sincerely,

Valerie O. Kerr  
Doctoral candidate  
Wayne Huizenga School of Business and Entrepreneurship  
Nova Southeastern University

## APPENDIX C

### Letters Requesting Permission to Use Survey Instruments



# Valerie O. Kerr

15½ Long Lane  
P.O. Box 2536  
Kingston 8, Jamaica, W.I.

March 29, 2005

Dr. Natalie J. Allen  
Center of Administration & Information Studies  
Social Science Center  
University of Western Ontario  
Ontario  
Canada N6A 5C2

Dear Dr. Allen,

I am a doctoral student in business administration at Nova Southeastern University in Fort Lauderdale, Florida. Professionally, I am the Managing Director at Health Corporation Limited, the government of Jamaica's procurement agency for pharmaceuticals and medical supplies.

I am currently working on my dissertation entitled "Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intention of Healthcare Professionals in Jamaica." I am developing my dissertation proposal and would like your permission to use the instruments of Affective and Continuance Commitment that you developed. I plan to test a turnover model among healthcare professionals in Jamaica.

I would be most appreciative if you could kindly confirm permission for use of your instrument. I can be contacted at email address: [kerr@infochan.com](mailto:kerr@infochan.com). I can also be reached at my office, telephone number (876) 901-2979 or my home (876) 931-2045. Enclosed with this letter is my current business card in Kingston, Jamaica.

Thank you in advance for your assistance.

Yours faithfully,

Valerie O. Kerr  
Doctoral candidate  
Wayne Huizenga School of Business & Entrepreneurship  
Nova Southeastern University

# Valerie O. Kerr

15½ Long Lane  
P.O. Box 2536  
Kingston 8, Jamaica, W.I.

March 29, 2005

Dr. Robert Eisenberger  
Department of Psychology  
University of Delaware  
Newark, Delaware 19716  
USA

Dear Dr. Eisenberger,

I am a doctoral student in business administration at Nova Southeastern University in Fort Lauderdale, Florida. Professionally, I am the Managing Director at Health Corporation Limited, the government of Jamaica's procurement agency for pharmaceuticals and medical supplies.

I am currently working on my dissertation entitled "Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intention of Healthcare Professionals in Jamaica." I am developing my dissertation proposal and would like your permission to use the Survey of Perceived Organizational Support (short form), the Felt Obligation Questionnaire and the Exchange Ideology Questionnaire that you developed. I plan to test a turnover model among healthcare professionals in Jamaica.

I would be most appreciative if you could kindly confirm permission for use of your instrument. I can be contacted at email address: [kerr@infochan.com](mailto:kerr@infochan.com). I can also be reached at my office, telephone number (876) 901-2979 or my home (876) 931-2045. Enclosed with this letter is my current business card in Kingston, Jamaica.

Thank you in advance for your assistance.

Yours faithfully,

Valerie O. Kerr  
Doctoral candidate  
Wayne Huizenga School of Business & Entrepreneurship  
Nova Southeastern University

APPENDIX D

Letters Requesting Permission to Conduct Survey

15½ Long Lane  
 P.O. Box 2536  
 Kingston 8, Jamaica, W.I.

March 29, 2005

Ms. Catherine Gregory  
 Regional Director  
 South East Regional Health Authority  
 25 Dominica Drive  
 Kingston 5

Dear Ms. Gregory:

I am currently working on my dissertation entitled “Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intention of Healthcare Professionals in Jamaica” to satisfy the requirements for the doctoral programme in business administration (Health Services Management) at Nova Southeastern University in Fort Lauderdale, Florida.

I plan to test a turnover model among healthcare professionals in Jamaica and seek your permission to conduct my survey in the hospitals within your health region. I anticipate that this will be done some time in April 2005. In keeping with this permission I would appreciate obtaining a letter of introduction to the Chief Executive Officers to encourage their cooperation with this effort. Additionally, I am currently developing my dissertation proposal and would be very grateful if I could be provided with data relating to the numbers of employees in the hospitals for the following categories – physicians, pharmacists, nurses, and clerical/administrative staff. A copy of the survey instrument has been attached for your information.

I can be contacted at email address: [kerr@infochan.com](mailto:kerr@infochan.com). I can also be reached at my office, telephone number (876) 901-2979, home (876) 931-2045, or cellular 383-0537. I would be glad to share a summary of the research results with you.

Thank you in advance for your kind assistance.

Yours faithfully,

.....  
 Valerie O. Kerr (Mrs.)  
 Doctoral Candidate  
 Wayne Huizenga School of Business & Entrepreneurship, NSU

15½ Long Lane  
P.O. Box 2536  
Kingston 8, Jamaica, W.I.

March 29, 2005

Mr. Keith Shakespeare  
Regional Director  
Southern Regional Health Authority  
5 Ward Avenue  
Mandeville, Manchester

Dear Mr. Shakespeare,

I am currently working on my dissertation entitled “Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intention of Healthcare Professionals in Jamaica” to satisfy the requirements for the doctoral programme in business administration (Health Services Management) at Nova Southeastern University in Fort Lauderdale, Florida.

I plan to test a turnover model among healthcare professionals in Jamaica and seek your permission to conduct my survey at the Mandeville Public Hospital. I anticipate that this will be done some time in April 2005. In keeping with this permission I would appreciate obtaining a letter of introduction to the Chief Executive Officer to encourage cooperation with this effort. Additionally, I am currently developing my dissertation proposal and would be very grateful if I could be provided with data relating to the numbers of employees at the hospital for the following categories – physicians, pharmacists, nurses, and clerical/administrative staff. A copy of the survey instrument has been attached for your information.

I can be contacted at email address: [kerr@infochan.com](mailto:kerr@infochan.com). I can also be reached at my office, telephone number (876) 901-2979, home (876) 931-2045, or cellular 383-0537. I would be glad to share a summary of the research results with you.

Thank you in advance for your kind assistance.

Yours faithfully,

.....  
Valerie O. Kerr (Mrs.)  
Doctoral Candidate  
Wayne Huizenga School of Business & Entrepreneurship, NSU

15½ Long Lane  
 P.O. Box 2536  
 Kingston 8, Jamaica, W.I.

March 29, 2005

Dr. Sheila Campbell-Forrester  
 Regional Director  
 Western Regional Health Authority  
 Mount Salem  
 Montego Bay, St. James

Dear Dr. Campbell-Forrester,

I am currently working on my dissertation entitled “Influence of Perceived Organizational Support, Organizational Commitment, and Professional Commitment on Turnover Intention of Healthcare Professionals in Jamaica” to satisfy the requirements for the doctoral programme in business administration (Health Services Management) at Nova Southeastern University in Fort Lauderdale, Florida.

I plan to test a turnover model among healthcare professionals in Jamaica and seek your permission to conduct my survey at the Cornwall Regional Hospital. I anticipate that this will be done some time in April 2005. In keeping with this permission I would appreciate obtaining a letter of introduction to the Chief Executive Officer to encourage cooperation with this effort. Additionally, I am currently developing my dissertation proposal and would be very grateful if I could be provided with data relating to the numbers of employees at the hospital for the following categories – physicians, pharmacists, nurses, and clerical/administrative staff. A copy of the survey instrument has been attached for your information.

I can be contacted at email address: [kerr@infochan.com](mailto:kerr@infochan.com). I can also be reached at my office, telephone number (876) 901-2979, home (876) 931-2045, or cellular 383-0537. I would be glad to share a summary of the research results with you.

Thank you in advance for your kind assistance.

Yours faithfully,

.....  
 Valerie O. Kerr (Mrs.)  
 Doctoral Candidate  
 Wayne Huizenga School of Business & Entrepreneurship, NSU

## APPENDIX E

### Descriptive Statistics Output

**Position in Organization \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Position in Organization	Managerial/ Supervisory	Count % within Occupation/ Profession	3 23.1%	17 77.3%	35 32.7%	8 12.3%	63 30.4%
	Non-managerial	Count % within Occupation/ Profession	10 76.9%	5 22.7%	72 67.3%	57 87.7%	144 69.6%
Total		Count % within Occupation/ Profession	13 100.0%	22 100.0%	107 100.0%	65 100.0%	207 100.0%

**Organizational Tenure \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Organizational Tenure	0-4 years	Count % within Occupation/ Profession	7 50.0%	9 40.9%	49 45.0%	31 45.6%	96 45.1%
	5-9 years	Count % within Occupation/ Profession	4 28.6%	4 18.2%	29 26.6%	18 26.5%	55 25.8%
	10-14 years	Count % within Occupation/ Profession	1 7.1%	5 22.7%	9 8.3%	12 17.6%	27 12.7%
	15-19 years	Count % within Occupation/ Profession	1 7.1%	3 13.6%	4 3.7%	2 2.9%	10 4.7%
	20 years and over	Count % within Occupation/ Profession	1 7.1%	1 4.5%	18 16.5%	5 7.4%	25 11.7%
Total		Count % within Occupation/ Profession	14 100.0%	22 100.0%	109 100.0%	68 100.0%	213 100.0%



**Years of Working Experience \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Years of Working Experience	0-4 years	Count	6	4	41	22	73
		% within Occupation/Profession	42.9%	19.0%	38.0%	35.5%	35.6%
	5-9 years	Count	3	4	26	16	49
		% within Occupation/Profession	21.4%	19.0%	24.1%	25.8%	23.9%
	10-14 years	Count	3	5	13	9	30
	% within Occupation/Profession	21.4%	23.8%	12.0%	14.5%	14.6%	
	15-19 years	Count	0	1	4	4	9
		% within Occupation/Profession	.0%	4.8%	3.7%	6.5%	4.4%
	20 years and over	Count	2	7	24	11	44
		% within Occupation/Profession	14.3%	33.3%	22.2%	17.7%	21.5%
<b>Total</b>		Count	14	21	108	62	205
		% within Occupation/Profession	100.0%	100.0%	100.0%	100.0%	100.0%

## Average Tenure \* Occupation/Profession Crosstabulation

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Administrative	
Average Tenure	0-4 years	Count	8	11	55	33	107
		% within Occupation/ Profession	66.7%	52.4%	56.7%	57.9%	57.2%
	5-9 years	Count	2	7	22	13	44
		% within Occupation/ Profession	16.7%	33.3%	22.7%	22.8%	23.5%
	10-14 years	Count	1	2	10	7	20
		% within Occupation/ Profession	8.3%	9.5%	10.3%	12.3%	10.7%
	15-19 years	Count	0	0	2	0	2
		% within Occupation/ Profession	.0%	.0%	2.1%	.0%	1.1%
	20 years and over	Count	1	1	8	4	14
		% within Occupation/ Profession	8.3%	4.8%	8.2%	7.0%	7.5%
Total		Count	12	21	97	57	187
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

## Professional Tenure \* Occupation/Profession Crosstabulation

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Professional Tenure	0-4 years	Count % within Occupation/ Profession	6 42.9%	7 31.8%	44 41.5%	24 39.3%	81 39.9%
	5-9 years	Count % within Occupation/ Profession	4 28.6%	4 18.2%	27 25.5%	20 32.8%	55 27.1%
	10-14 years	Count % within Occupation/ Profession	2 14.3%	3 13.6%	13 12.3%	8 13.1%	26 12.8%
	15-19 years	Count % within Occupation/ Profession	0 .0%	3 13.6%	4 3.8%	2 3.3%	9 4.4%
	20 years and over	Count % within Occupation/ Profession	2 14.3%	5 22.7%	18 17.0%	7 11.5%	32 15.8%
Total		Count % within Occupation/ Profession	14 100.0%	22 100.0%	106 100.0%	61 100.0%	203 100.0%

## Age \* Occupation/Profession Crosstabulation

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Administrative	
Age	18 - 24	Count	0	1	10	13	24
		% within Occupation/ Profession	.0%	4.5%	8.8%	20.6%	11.3%
	25 - 34	Count	7	10	57	26	100
		% within Occupation/ Profession	50.0%	45.5%	50.4%	41.3%	47.2%
	35 - 44	Count	5	6	24	15	50
		% within Occupation/ Profession	35.7%	27.3%	21.2%	23.8%	23.6%
	45 - 54	Count	0	4	14	6	24
		% within Occupation/ Profession	.0%	18.2%	12.4%	9.5%	11.3%
	55 and over	Count	2	1	8	3	14
		% within Occupation/ Profession	14.3%	4.5%	7.1%	4.8%	6.6%
Total		Count	14	22	113	63	212
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

## Gender \* Occupation/Profession Crosstabulation

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Administrative	
Gender	Male	Count	10	5	5	13	33
		% within Occupation/ Profession	71.4%	22.7%	4.4%	19.7%	15.3%
	Female	Count	4	17	108	53	182
		% within Occupation/ Profession	28.6%	77.3%	95.6%	80.3%	84.7%
Total		Count	14	22	113	66	215
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

**Marital Status \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Administrative	
Marital Status	Unmarried	Count	7	11	49	26	93
		% within Occupation/ Profession	50.0%	50.0%	43.8%	41.9%	44.3%
	Married	Count	7	11	63	36	117
		% within Occupation/ Profession	50.0%	50.0%	56.3%	58.1%	55.7%
Total		Count	14	22	112	62	210
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

**Number of Dependents \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Number of Dependents	0-2	Count	10	16	79	47	152
		% within Occupation/ Profession	71.4%	72.7%	76.7%	74.6%	75.2%
	3-5	Count	3	5	23	15	46
		% within Occupation/ Profession	21.4%	22.7%	22.3%	23.8%	22.8%
	6 and over	Count	1	1	1	1	4
		% within Occupation/ Profession	7.1%	4.5%	1.0%	1.6%	2.0%
Total		Count	14	22	103	63	202
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

**Number of Children \* Occupation/Profession Crosstabulation**

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Administrative	
Number of Children	0	Count	7	10	32	19	68
		% within Occupation/ Profession	50.0%	45.5%	30.5%	28.8%	32.9%
	1	Count	2	7	37	21	67
		% within Occupation/ Profession	14.3%	31.8%	35.2%	31.8%	32.4%
	2	Count	3	1	25	10	39
		% within Occupation/ Profession	21.4%	4.5%	23.8%	15.2%	18.8%
	3	Count	1	3	8	11	23
		% within Occupation/ Profession	7.1%	13.6%	7.6%	16.7%	11.1%
	4	Count	0	1	2	0	3
		% within Occupation/ Profession	.0%	4.5%	1.9%	.0%	1.4%
	5	Count	1	0	1	5	7
		% within Occupation/ Profession	7.1%	.0%	1.0%	7.6%	3.4%
Total		Count	14	22	105	66	207
		% within Occupation/ Profession	100.0%	100.0%	100.0%	100.0%	100.0%

## Educational Level \* Occupation/Profession Crosstabulation

			Occupation/Profession				Total
			Physician	Pharmacist	Nurse	Clerical/ Admin	
Educational Level	High School	Count % within Occupation/ Profession	0 .0%	0 .0%	0 .0%	38 59.4%	38 18.4%
	Tertiary Diploma	Count % within Occupation/ Profession	0 .0%	4 19.0%	95 88.8%	21 32.8%	120 58.3%
	Bachelor's Degree	Count % within Occupation/ Profession	10 71.4%	17 81.0%	11 10.3%	3 4.7%	41 19.9%
	Masters	Count % within Occupation/ Profession	0 .0%	0 .0%	1 .9%	2 3.1%	3 1.5%
	Doctorate	Count % within Occupation/ Profession	4 28.6%	0 .0%	0 .0%	0 .0%	4 1.9%
Total		Count % within Occupation/ Profession	14 100.0%	21 100.0%	107 100.0%	64 100.0%	206 100.0%

APPENDIX F

Factor Analysis Output



## Correlations

		POS Scale	ACS	CCS	FOS	EIS	PACS	PCCS
POS Scale	Pearson Correlation	1	.424**	.208**	.234**	-.173**	.199**	.815**
	Sig. (1-tailed)	.	.000	.001	.000	.006	.002	.000
	N	224	221	217	220	212	208	221
ACS	Pearson Correlation	.424**	1	.033	.442**	-.072	.438**	.384**
	Sig. (1-tailed)	.000	.	.315	.000	.149	.000	.000
	N	221	223	218	220	211	207	218
CCS	Pearson Correlation	.208**	.033	1	-.055	.053	-.226**	.187**
	Sig. (1-tailed)	.001	.315	.	.209	.224	.001	.003
	N	217	218	219	217	208	204	214
FOS	Pearson Correlation	.234**	.442**	-.055	1	-.172**	.496**	.214**
	Sig. (1-tailed)	.000	.000	.209	.	.006	.000	.001
	N	220	220	217	222	212	207	217
EIS	Pearson Correlation	-.173**	-.072	.053	-.172**	1	-.040	-.104
	Sig. (1-tailed)	.006	.149	.224	.006	.	.285	.067
	N	212	211	208	212	213	202	209
PACS	Pearson Correlation	.199**	.438**	-.226**	.496**	-.040	1	.165**
	Sig. (1-tailed)	.002	.000	.001	.000	.285	.	.009
	N	208	207	204	207	202	209	205
PCCS	Pearson Correlation	.815**	.384**	.187**	.214**	-.104	.165**	1
	Sig. (1-tailed)	.000	.000	.003	.001	.067	.009	.
	N	221	218	214	217	209	205	221

\*\* . Correlation is significant at the 0.01 level (1-tailed).

**Rotated Component Matrix**

	Component	
	1	2
POS4	.803	.113
POS3	.788	-.083
POS5	.788	.105
POS1	.683	.216
POS8	.651	.217
POS12	.621	.269
POS7	.612	.288
POS10	.541	.200
AC5	.182	.833
AC3	.199	.822
AC4	.117	.791

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Rotated Component Matrix**

	Component	
	1	2
POS4	.794	.026
POS5	.779	-.011
POS3	.728	.086
POS1	.698	.206
POS7	.696	.115
POS8	.691	.076
POS12	.678	.085
POS10	.590	.024
PCC3	.059	.843
PCC4	.120	.815
PCC2	.062	.763

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Rotated Component Matrix**

	Component	
	1	2
FO4	.874	.048
FO3	.873	.103
FO2	.811	.123
FO1	.652	.438
FO6	.636	.155
FO5	.521	.251
AC5	.115	.849
AC3	.193	.808
AC4	.147	.798

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Rotated Component Matrix**

	Component	
	1	2
PAC4	.869	.125
PAC3	.831	.180
PAC5	.805	.294
AC5	.219	.826
AC4	.095	.825
AC3	.275	.797

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Rotated Component Matrix**

	Component	
	1	2
AC5	.857	.043
AC3	.851	.019
AC4	.813	-.011
PCC3	-.025	.846
PCC4	-.008	.826
PCC2	.077	.770

Extraction Method: Principal Component Analysis.  
 Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Rotated Component Matrix<sup>a</sup>**

	Component	
	1	2
FO4	.857	.101
FO3	.847	.186
FO2	.797	.185
FO1	.712	.246
FO6	.647	.162
FO5	.567	.221
PAC4	.172	.866
PAC5	.213	.828
PAC3	.224	.813

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

## APPENDIX G

### Hypothesis Testing Output

Partial Correlation Test Output for Hypothesis 3

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	POSSC	ACS	FOS
POSSC	1.0000 ( 0) P= .	.4245 ( 219) P= .000	.2341 ( 218) P= .000
ACS	.4245 ( 219) P= .000	1.0000 ( 0) P= .	.4425 ( 218) P= .000
FOS	.2341 ( 218) P= .000	.4425 ( 218) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. FOS

	POSSC	ACS
POSSC	1.0000 ( 0) P= .	.3680 ( 217) P= .000
ACS	.3680 ( 217) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 4

—

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	POSSC	TI	ACS
POSSC	1.0000 ( 0) P= .	-.3001 ( 211) P= .000	.4245 ( 219) P= .000
TI	-.3001 ( 211) P= .000	1.0000 ( 0) P= .	-.2131 ( 211) P= .001
ACS	.4245 ( 219) P= .000	-.2131 ( 211) P= .001	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

—

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. ACS

	POSSC	TI
POSSC	1.0000 ( 0) P= .	-.2370 ( 210) P= .000
TI	-.2370 ( 210) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 6

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	POSSC	TI	CCS
POSSC	1.0000 ( 0) P= .	-.3001 ( 211) P= .000	.2085 ( 215) P= .001
TI	-.3001 ( 211) P= .000	1.0000 ( 0) P= .	-.1368 ( 209) P= .024
CCS	.2085 ( 215) P= .001	-.1368 ( 209) P= .024	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. CCS

	POSSC	TI
POSSC	1.0000 ( 0) P= .	-.2803 ( 208) P= .000
TI	-.2803 ( 208) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed



Partial Correlation Test Output for Hypothesis 8

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	POSSC	TI	PACS
POSSC	1.0000 ( 0) P= .	-.3001 ( 211) P= .000	.1994 ( 206) P= .002
TI	-.3001 ( 211) P= .000	1.0000 ( 0) P= .	-.1332 ( 200) P= .029
PACS	.1994 ( 206) P= .002	-.1332 ( 200) P= .029	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PACS

	POSSC	TI
POSSC	1.0000 ( 0) P= .	-.2817 ( 199) P= .000
TI	-.2817 ( 199) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 8 (continued)

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	POSSC	TI	PCCS
POSSC	1.0000 ( 0) P= .	-.3001 ( 211) P= .000	.8147 ( 219) P= .000
TI	-.3001 ( 211) P= .000	1.0000 ( 0) P= .	-.1801 ( 209) P= .004
PCCS	.8147 ( 219) P= .000	-.1801 ( 209) P= .004	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PCCS

	POSSC	TI
POSSC	1.0000 ( 0) P= .	-.2688 ( 208) P= .000
TI	-.2688 ( 208) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	PACS	TI	ACS
PACS	1.0000 ( 0) P= .	-.1332 ( 200) P= .029	.4379 ( 205) P= .000
TI	-.1332 ( 200) P= .029	1.0000 ( 0) P= .	-.2131 ( 211) P= .001
ACS	.4379 ( 205) P= .000	-.2131 ( 211) P= .001	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. ACS

	PACS	TI
PACS	1.0000 ( 0) P= .	-.0454 ( 199) P= .261
TI	-.0454 ( 199) P= .261	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	PCCS	TI	ACS
PCCS	1.0000 ( 0) P= .	-.1801 ( 209) P= .004	.3844 ( 216) P= .000
TI	-.1801 ( 209) P= .004	1.0000 ( 0) P= .	-.2131 ( 211) P= .001
ACS	.3844 ( 216) P= .000	-.2131 ( 211) P= .001	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. ACS

	PCCS	TI
PCCS	1.0000 ( 0) P= .	-.1089 ( 208) P= .058
TI	-.1089 ( 208) P= .058	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	PACS	TI	CCS
PACS	1.0000 ( 0) P= .	-.1332 ( 200) P= .029	-.2257 ( 202) P= .001
TI	-.1332 ( 200) P= .029	1.0000 ( 0) P= .	-.1368 ( 209) P= .024
CCS	-.2257 ( 202) P= .001	-.1368 ( 209) P= .024	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. CCS

	PACS	TI
PACS	1.0000 ( 0) P= .	-.1700 ( 199) P= .008
TI	-.1700 ( 199) P= .008	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	PCCS	TI	CCS
PCCS	1.0000 ( 0) P= .	-.1801 ( 209) P= .004	.1868 ( 212) P= .003
TI	-.1801 ( 209) P= .004	1.0000 ( 0) P= .	-.1368 ( 209) P= .024
CCS	.1868 ( 212) P= .003	-.1368 ( 209) P= .024	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. CCS

	PCCS	TI
PCCS	1.0000 ( 0) P= .	-.1589 ( 208) P= .011
TI	-.1589 ( 208) P= .011	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	ACS	TI	PACS
ACS	1.0000 ( 0) P= .	-.2131 ( 211) P= .001	.4379 ( 205) P= .000
TI	-.2131 ( 211) P= .001	1.0000 ( 0) P= .	-.1332 ( 200) P= .029
PACS	.4379 ( 205) P= .000	-.1332 ( 200) P= .029	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PACS

	ACS	TI
ACS	1.0000 ( 0) P= .	-.1737 ( 199) P= .007
TI	-.1737 ( 199) P= .007	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	CCS	TI	PACS
CCS	1.0000 ( 0) P= .	-.1368 ( 209) P= .024	-.2257 ( 202) P= .001
TI	-.1368 ( 209) P= .024	1.0000 ( 0) P= .	-.1332 ( 200) P= .029
PACS	-.2257 ( 202) P= .001	-.1332 ( 200) P= .029	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PACS

	CCS	TI
CCS	1.0000 ( 0) P= .	-.1728 ( 199) P= .007
TI	-.1728 ( 199) P= .007	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed



Partial Correlation Test Output for Hypothesis 10 (continued)

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	ACS	TI	PCCS
ACS	1.0000 ( 0) P= .	-.2131 ( 211) P= .001	.3844 ( 216) P= .000
TI	-.2131 ( 211) P= .001	1.0000 ( 0) P= .	-.1801 ( 209) P= .004
PCCS	.3844 ( 216) P= .000	-.1801 ( 209) P= .004	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PCCS

	ACS	TI
ACS	1.0000 ( 0) P= .	-.1584 ( 208) P= .011
TI	-.1584 ( 208) P= .011	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	CCS	TI	PCCS
CCS	1.0000 ( 0) P= .	-.1368 ( 209) P= .024	.1868 ( 212) P= .003
TI	-.1368 ( 209) P= .024	1.0000 ( 0) P= .	-.1801 ( 209) P= .004
PCCS	.1868 ( 212) P= .003	-.1801 ( 209) P= .004	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PCCS

	CCS	TI
CCS	1.0000 ( 0) P= .	-.1067 ( 208) P= .062
TI	-.1067 ( 208) P= .062	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

—

— — — P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S — — —

Zero Order Partial

	ACS	PACS	PCCS
ACS	1.0000 ( 0) P= .	.4379 ( 205) P= .000	.3844 ( 216) P= .000
PACS	.4379 ( 205) P= .000	1.0000 ( 0) P= .	.1648 ( 203) P= .009
PCCS	.3844 ( 216) P= .000	.1648 ( 203) P= .009	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

—

— — — P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S — — —

Controlling for.. PCCS

	ACS	PACS
ACS	1.0000 ( 0) P= .	.4114 ( 202) P= .000
PACS	.4114 ( 202) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	ACS	PCCS	PACS
ACS	1.0000 ( 0) P= .	.3844 ( 216) P= .000	.4379 ( 205) P= .000
PCCS	.3844 ( 216) P= .000	1.0000 ( 0) P= .	.1648 ( 203) P= .009
PACS	.4379 ( 205) P= .000	.1648 ( 203) P= .009	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PACS

	ACS	PCCS
ACS	1.0000 ( 0) P= .	.3521 ( 202) P= .000
PCCS	.3521 ( 202) P= .000	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

Partial Correlation Test Output for Hypothesis 10 (continued)

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Zero Order Partial

	ACS	TI	PACS	PCCS
ACS	1.0000 ( 0) P= .	-.2131 ( 211) P= .001	.4379 ( 205) P= .000	.3844 ( 216) P= .000
TI	-.2131 ( 211) P= .001	1.0000 ( 0) P= .	-.1332 ( 200) P= .029	-.1801 ( 209) P= .004
PACS	.4379 ( 205) P= .000	-.1332 ( 200) P= .029	1.0000 ( 0) P= .	.1648 ( 203) P= .009
PCCS	.3844 ( 216) P= .000	-.1801 ( 209) P= .004	.1648 ( 203) P= .009	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

-

- - - P A R T I A L C O R R E L A T I O N C O E F F I C I E N T S - - -

Controlling for.. PACS PCCS

	ACS	TI
ACS	1.0000 ( 0) P= .	-.1264 ( 198) P= .037
TI	-.1264 ( 198) P= .037	1.0000 ( 0) P= .

(Coefficient / (D.F.) / 1-tailed Significance)

" . " is printed if a coefficient cannot be computed

## Principal Components Analysis Output for Hypothesis 11

### Factor Analysis

#### Communalities

	Initial	Extraction
CC1	1.000	.702
CC2	1.000	.629
CC3	1.000	.601
CC4	1.000	.624
CC5	1.000	.639
CC6	1.000	.730

Extraction Method: Principal Component Analysis.

#### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.886	48.106	48.106	2.886	48.106	48.106	2.227	37.118	37.118
2	1.039	17.314	65.420	1.039	17.314	65.420	1.698	28.302	65.420
3	.823	13.718	79.138						
4	.533	8.890	88.029						
5	.401	6.681	94.709						
6	.317	5.291	100.000						

Extraction Method: Principal Component Analysis.

#### Component Matrix<sup>a</sup>

	Component	
	1	2
CC1	.427	.721
CC2	.715	.344
CC3	.774	.037
CC4	.788	.048
CC5	.680	-.419
CC6	.714	-.470

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

**Rotated Component Matrix**

	Component	
	1	2
CC1	-.088	.833
CC2	.368	.703
CC3	.599	.492
CC4	.603	.510
CC5	.796	.070
CC6	.853	.049

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Component Transformation Matrix**

Component	1	2
1	.802	.597
2	-.597	.802

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Reliability Analysis Output for Hypothesis 11

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC3	CC3
2.	CC4	CC4
3.	CC5	CC5
4.	CC6	CC6

## Reliability Coefficients

N of Cases = 220.0                      N of Items = 4

Alpha = .7723

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC1	CC1
2.	CC2	CC2

## Reliability Coefficients

N of Cases = 221.0                      N of Items = 2

Alpha = .5394

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC2	CC2
2.	CC3	CC3
3.	CC4	CC4
4.	CC5	CC5
5.	CC6	CC6

## Reliability Coefficients

N of Cases = 219.0                      N of Items = 5

Alpha = .7934

-



Reliability Analysis Output for Hypothesis 11 (continued)

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC1	CC1
2.	CC2	CC2
3.	CC3	CC3
4.	CC4	CC4

## Reliability Coefficients

N of Cases = 217.0

N of Items = 4

Alpha = .7271

-

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC2	CC2
2.	CC5	CC5
3.	CC6	CC6

## Reliability Coefficients

N of Cases = 222.0

N of Items = 3

Alpha = .6815

\*\*\*\*\* Method 1 (space saver) will be used for this analysis \*\*\*\*\*

-

## R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   ( A L P H A )

1.	CC1	CC1
2.	CC3	CC3
3.	CC4	CC4

## Reliability Coefficients

N of Cases = 217.0

N of Items = 3

Alpha = .6344

Multiple Regression Analysis Output for Hypothesis 13

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	POS Scale	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	PCCS	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	ACS	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Turnover Intention

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.311 <sup>a</sup>	.097	.092	6.54210	.097	20.688	1	193	.000
2	.343 <sup>b</sup>	.118	.109	6.48267	.021	4.555	1	192	.034
3	.371 <sup>c</sup>	.138	.124	6.42613	.020	4.393	1	191	.037

a. Predictors: (Constant), POS Scale

b. Predictors: (Constant), POS Scale, PCCS

c. Predictors: (Constant), POS Scale, PCCS, ACS

Regression Analysis Output for Hypothesis 13 (continued)

**ANOVA<sup>d</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	885.407	1	885.407	20.688	.000 <sup>a</sup>
	Residual	8260.212	193	42.799		
	Total	9145.619	194			
2	Regression	1076.814	2	538.407	12.812	.000 <sup>b</sup>
	Residual	8068.805	192	42.025		
	Total	9145.619	194			
3	Regression	1258.235	3	419.412	10.156	.000 <sup>c</sup>
	Residual	7887.385	191	41.295		
	Total	9145.619	194			

a. Predictors: (Constant), POS Scale

b. Predictors: (Constant), POS Scale, PCCS

c. Predictors: (Constant), POS Scale, PCCS, ACS

d. Dependent Variable: Turnover Intention

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coeff.	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	20.343	1.494		13.618	.000	17.397	23.290		
	POS Scale	-1.538	.338	-.311	-4.548	.000	-2.205	-.871	1.000	1.000
2	(Constant)	19.987	1.490		13.417	.000	17.049	22.925		
	POS Scale	-2.594	.597	-.525	-4.341	.000	-3.772	-1.415	.315	3.178
	PCCS	1.196	.560	.258	2.134	.034	.091	2.301	.315	3.178
3	(Constant)	20.797	1.526		13.625	.000	17.786	23.808		
	POS Scale	-2.348	.604	-.475	-3.888	.000	-3.538	-1.157	.303	3.303
	PCCS	1.299	.558	.280	2.329	.021	.199	2.399	.312	3.203
	ACS	-.555	.265	-.157	-2.096	.037	-1.078	-.033	.806	1.241

a. Dependent Variable: Turnover Intention

Regression Analysis Output for Hypothesis 13 (continued)

**Excluded Variables<sup>d</sup>**

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics			
					Tolerance	VIF	Minimum Tolerance	
1	ACS	-.142 <sup>a</sup>	-1.877	.062	-.134	.812	1.232	.812
	CCS	-.027 <sup>a</sup>	-.391	.696	-.028	.958	1.044	.958
	PACS	-.056 <sup>a</sup>	-.793	.428	-.057	.956	1.046	.956
	PCCS	.258 <sup>a</sup>	2.134	.034	.152	.315	3.178	.315
2	ACS	-.157 <sup>b</sup>	-2.096	.037	-.150	.806	1.241	.303
	CCS	-.030 <sup>b</sup>	-.436	.663	-.032	.958	1.044	.311
	PACS	-.057 <sup>b</sup>	-.820	.413	-.059	.956	1.046	.311
3	CCS	-.035 <sup>c</sup>	-.504	.615	-.037	.957	1.045	.299
	PACS	.000 <sup>c</sup>	.001	.999	.000	.807	1.240	.302

a. Predictors in the Model: (Constant), POS Scale

b. Predictors in the Model: (Constant), POS Scale, PCCS

c. Predictors in the Model: (Constant), POS Scale, PCCS, ACS

d. Dependent Variable: Turnover Intention

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	POS Scale	PCCS	ACS
1	1	1.950	1.000	.03	.03		
	2	.050	6.216	.97	.97		
2	1	2.912	1.000	.01	.00	.00	
	2	.069	6.485	.93	.04	.13	
	3	.018	12.578	.06	.95	.86	
3	1	3.797	1.000	.01	.00	.00	.01
	2	.115	5.738	.04	.02	.04	.98
	3	.069	7.413	.90	.04	.12	.01
	4	.018	14.396	.05	.94	.84	.01

a. Dependent Variable: Turnover Intention

Scheffé Test Results for One-Way ANOVA for Hypothesis 17

Scheffe

Dependent Variable	(I) Occupation/ Profession	(J) Occupation/ Profession	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
POS Scale	Physician	Pharmacist	.6650	.46872	.571	-.6555	1.9855
		Nurse	.8683	.38755	.174	-.2235	1.9601
		Clerical/ Administrative	.3592	.40139	.849	-.7716	1.4900
	Pharmacist	Physician	-.6650	.46872	.571	-1.9855	.6555
		Nurse	.2033	.31839	.939	-.6937	1.1003
		Clerical/ Administrative	-.3058	.33510	.842	-1.2499	.6382
	Nurse	Physician	-.8683	.38755	.174	-1.9601	.2235
		Pharmacist	-.2033	.31839	.939	-1.1003	.6937
		Clerical/ Administrative	-.5091	.20684	.112	-1.0918	.0736
	Clerical/ Administrative	Physician	-.3592	.40139	.849	-1.4900	.7716
		Pharmacist	.3058	.33510	.842	-.6382	1.2499
		Nurse	.5091	.20684	.112	-.0736	1.0918
ACS	Physician	Pharmacist	.6255	.63563	.809	-1.1652	2.4163
		Nurse	1.6344*	.52627	.024	.1517	3.1171
		Clerical/ Administrative	1.5721*	.54306	.041	.0421	3.1021
	Pharmacist	Physician	-.6255	.63563	.809	-2.4163	1.1652
		Nurse	1.0088	.43264	.146	-.2101	2.2277
		Clerical/ Administrative	.9465	.45291	.228	-.3295	2.2226
	Nurse	Physician	-1.6344*	.52627	.024	-3.1171	-.1517
		Pharmacist	-1.0088	.43264	.146	-2.2277	.2101
		Clerical/ Administrative	-.0623	.27940	.997	-.8495	.7249
	Clerical/ Administrative	Physician	-1.5721*	.54306	.041	-3.1021	-.0421
		Pharmacist	-.9465	.45291	.228	-2.2226	.3295
		Nurse	.0623	.27940	.997	-.7249	.8495

\*. The mean difference is significant at the .05 level.

Scheffé Test Results for One-Way ANOVA for Hypothesis 17 (continued)

Scheffe

Dependent Variable	(I) Occupation/ Profession	(J) Occupation/ Profession	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
CCS	Physician	Pharmacist	.6455	.52460	.680	-.8327	2.1237
		Nurse	-.0053	.43476	1.000	-1.2304	1.2197
		Clerical/ Administrative	-.6086	.44924	.608	-1.8744	.6573
	Pharmacist	Physician	-.6455	.52460	.680	-2.1237	.8327
		Nurse	-.6508	.35758	.348	-1.6583	.3568
		Clerical/ Administrative	-1.2540*	.37505	.012	-2.3108	-.1972
	Nurse	Physician	.0053	.43476	1.000	-1.2197	1.2304
		Pharmacist	.6508	.35758	.348	-.3568	1.6583
		Clerical/ Administrative	-.6033	.23339	.086	-1.2609	.0544
	Clerical/ Administrative	Physician	.6086	.44924	.608	-.6573	1.8744
		Pharmacist	1.2540*	.37505	.012	.1972	2.3108
		Nurse	.6033	.23339	.086	-.0544	1.2609
PACS	Physician	Pharmacist	-.2083	.51449	.983	-1.6586	1.2419
		Nurse	.6107	.42426	.559	-.5852	1.8066
		Clerical/ Administrative	1.6043*	.43709	.004	.3722	2.8364
	Pharmacist	Physician	.2083	.51449	.983	-1.2419	1.6586
		Nurse	.8190	.35645	.156	-.1857	1.8238
		Clerical/ Administrative	1.8126*	.37162	.000	.7651	2.8602
	Nurse	Physician	-.6107	.42426	.559	-1.8066	.5852
		Pharmacist	-.8190	.35645	.156	-1.8238	.1857
		Clerical/ Administrative	.9936*	.23108	.000	.3422	1.6450
	Clerical/ Administrative	Physician	-1.6043*	.43709	.004	-2.8364	-.3722
		Pharmacist	-1.8126*	.37162	.000	-2.8602	-.7651
		Nurse	-.9936*	.23108	.000	-1.6450	-.3422

\*. The mean difference is significant at the .05 level.

## Scheffé Test Results for One-Way ANOVA for Hypothesis 17 (continued)

Scheffe							
Dependent Variable	(I) Occupation/ Profession	(J) Occupation/ Profession	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
PCCS	Physician	Pharmacist	.5944	.51922	.727	-.8685	2.0573
		Nurse	.7193	.43410	.434	-.5038	1.9424
		Clerical/ Administrative	.3641	.44824	.882	-.8989	1.6271
	Pharmacist	Physician	-.5944	.51922	.727	-2.0573	.8685
		Nurse	.1249	.34514	.988	-.8476	1.0973
		Clerical/ Administrative	-.2303	.36277	.940	-1.2524	.7918
	Nurse	Physician	-.7193	.43410	.434	-1.9424	.5038
		Pharmacist	-.1249	.34514	.988	-1.0973	.8476
		Clerical/ Administrative	-.3552	.22463	.477	-.9881	.2777
	Clerical/ Administrative	Physician	-.3641	.44824	.882	-1.6271	.8989
		Pharmacist	.2303	.36277	.940	-.7918	1.2524
		Nurse	.3552	.22463	.477	-.2777	.9881
Turnover Intention	Physician	Pharmacist	-1.0790	2.2942	.974	-7.5448	5.3868
		Nurse	-3.6240	1.9032	.308	-8.9878	1.7398
		Clerical/ Administrative	-1.0018	1.9720	.968	-6.5593	4.5558
	Pharmacist	Physician	1.0790	2.2942	.974	-5.3868	7.5448
		Nurse	-2.5450	1.5661	.452	-6.9586	1.8687
		Clerical/ Administrative	.0772	1.6489	1.000	-4.5700	4.7244
	Nurse	Physician	3.6240	1.9032	.308	-1.7398	8.9878
		Pharmacist	2.5450	1.5661	.452	-1.8687	6.9586
		Clerical/ Administrative	2.6222	1.0382	.098	-.3037	5.5481
	Clerical/ Administrative	Physician	1.0018	1.9720	.968	-4.5558	6.5593
		Pharmacist	-.0772	1.6489	1.000	-4.7244	4.5700
		Nurse	-2.6222	1.0382	.098	-5.5481	.3037

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