

**Transformational Leadership, Job Satisfaction, Organizational Commitment, and
Non-Supervisory Nurses' Intention to Leave**

Dissertation Proposal

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Lynn University

By

Audrey Gregory

May 10, 2011

UMI Number: 3458589

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

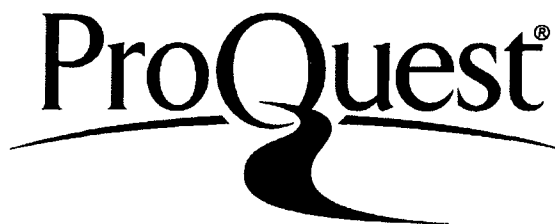
In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3458589

Copyright 2011 by ProQuest LLC.

All rights reserved. This edition of the work is protected against unauthorized copying under Title 17, United States Code.



ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

Order number _____

**Transformational Leadership, Job Satisfaction, Organizational Commitment, and
Non-Supervisory Nurses' Intention to Leave**

Audrey Elizabeth Gregory

Lynn University, 2011

Copyright 2011, by Audrey E. Gregory All Rights Reserved

U.M.I.
300 N. Zeeb Road
Ann Arbor, MI 48106

APPROVAL OF DOCTORAL DISSERTATION DEFENSE

**Transformational Leadership, Job Satisfaction, Organizational Commitment, and
Non-Supervisory Nurses' Intention to Leave**

By Audrey Gregory

Ralph Norcio, Ph.D.
Dissertation Committee Chair

Date

Adam Kosnitzky, Ph.D.
Dissertation Committee Member

Date

Ann Crawford, B.S., M. S., M.P.S, Ph.D.
Dissertation Committee Member

Date

ACKNOWLEDGMENTS

The journey of embarking upon a doctoral degree did not begin with me, but with my dear husband Owen, and for that, I will be eternally grateful. To say that I am blessed would be an understatement, and I am of a clear understanding that I could not have accomplished a terminal degree without God's guidance and strength, so my thanks go to Him. Many individuals have supported and encouraged me along the way. Special thanks and acknowledgement to Dr. Joan Scialli who got me started, who was relentless in her pursuit for perfection and scholarly work, and who brought out the best in me as a doctoral student. The fact that she was a nurse was an added personal benefit for me, because in her, I found a kindred spirit in the School of Business.

I would like to especially thank the members of my dissertation committee. Dr. Norcio, my committee chair, who picked me up when I felt abandoned on the journey and who with gentle guidance assisted me to the end. An extra special thanks and acknowledgement to Dr. Nathalie Lynch-Walsh, who read and re-read, worked around my insane schedule, encouraged me, pushed me, and who ensured that my data was correct. A special thanks to the Chief Nursing Officers of Tenet South Florida who were my partners in data collection. Tribute goes to Marsha Powers, Senior Vice President of Tenet South Florida, and to Tenet Healthcare for allowing me access to the nurses.

This dissertation is in honor of my family. My parents set such a high value on education that I still believe that "silver and gold will vanish away, but a good education will never decay." Thank you, Mom and Dad for leading by example. Thank you to my immediate family who made this all possible. To my children, Olivia, Owen, and Omari, your Mother has returned. Thank you for your patience and for your understanding of

Mom and her “homework.” Olivia, you did an outstanding job of organizing and alphabetizing all of my research articles according to variables.

Words fail me in expressing thanks to my husband, my best friend and a full partner in every sense. Owen, I cannot begin to thank you. For every step of this journey, you were not just present, you were a presence. You picked up so much of my slack in everything, taking on a lion’s share without ever complaining. You made things go smoothly. Thank you for being you, my hand-made gift from God.

Finally, I must commend the registered nurses of Tenet South Florida who took the time to participate in my study. Your input had added to the body of nursing knowledge. Now as nurse leaders we are truly challenged to help you to stay in nursing.

ABSTRACT

The United States is currently experiencing a nursing shortage. To compound the problem, hospital nurses are leaving their organizations and executives are scrambling to figure out the reasons behind the increased turnover. Many factors are associated with nurses' intention to leave their current employment. Among these factors are job satisfaction, organizational commitment, work satisfaction, work setting, control over practice, salary, nurse-physician collaboration, job stress, and leadership style. Effective nursing leadership is an integral factor in the retention of hospital nurses and nurses who perceive their nursing leadership as participative and transformational may be more likely to be satisfied with their jobs

The purpose of this non-experimental exploratory (comparative) and explanatory (correlational) online survey research was to examine the relationship among non-supervisory nurses' demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave. Empirical literature was reviewed for significant findings and theoretical literature about leadership theories, job satisfaction, organization commitment, and intention to leave were reviewed and served as guides to this study.

Three research questions and six hypotheses were examined. The survey instrument consists of six scales: an eight item *Demographic Characteristics Scale*, a six item *Work Profile*, a seven item *Global Transformational Leadership Scale*, a 21 item *Revised Three Component Model of Organizational Commitment scale*, a 31 item *McCloskey-Mueller Satisfaction Survey*, and a three item *Intention to Leave Scale*. The entire target population of full-time non-supervisory RNs at 10 Tenet South Florida

hospitals were asked to participate in the study. Psychometric evaluation of measures were examined by exploratory factor analysis (EFA) and coefficient alphas. Independent *t*-tests and ANOVA, as well as Chi-square were used to answer the exploratory research questions. Multiple mediated regression analyses and multiple regression analyses were used to test the explanatory hypotheses.

Findings were partially supported. The role of *affective commitment* as a factor of *organizational commitment*, and the role of *transformational leadership* were evident in this study. *Organizational Commitment (affective)* and *Job Satisfaction* were significant explanatory variables of *nurses' intention to leave*. Future studies utilizing this model to examine factors that impact nurses' *intention to leave* is recommended.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
LIST OF FIGURES	xiii
CHAPTER I: INTRODUCTION TO THE STUDY	1
Introduction and Background to the Problem	1
Purpose	7
Definitions of Terms	8
Justification	12
Delimitations and Scope	14
Organization of the Study	14
CHAPTER II: LITERATURE REVIEW, THEORETICAL FRAMEWORK, RESEARCH QUESTIONS, AND RESEARCH HYPOTHESES	16
Literature Review	16
Leadership	16
Transformational and Transactional Leadership Theory	17
Conger and Kanungo's Charismatic Model	27
Hershey and Blanchard's Situational Leadership Theory	32
Organizational Commitment	39
Meyer and Allen's Three-Component Model of Organizational Commitment	41
Job Satisfaction	44
Job Satisfaction Theory	45
Turnover and Intention to Leave Models	50
Price and Mueller Turnover Model	51
Intention to Leave	52
Mobley's Intention to Leave Model	52
Nurses' Intention to Leave	54
Leadership Styles, Job Satisfaction, Organizational Commitment, and Turnover	63
Synopsis of the Literature	66
Theoretical Framework	83
Research Questions	87
Research Hypotheses	87

TABLE OF CONTENTS

(Continued)

	Page
CHAPTER III: RESEARCH METHODS	92
Research Design	92
Population, Sampling Plan, and Setting	95
Target Population and Setting	95
Accessible Population	96
Sampling Plan	96
Eligibility Criteria and Exclusion Criteria	98
Instrumentation	99
Part 1: Demographic Characteristics	101
Part 2: Work Profile	101
Part 3: Transformational Leadership	101
Part 4: Organizational Commitment	103
Part 5: Job Satisfaction	105
Part 6: Intention to Leave	108
Procedures: Ethical Considerations and Data Collection Methods	109
Methods of Data Analysis	113
Evaluation of Research Methods	119
CHAPTER IV: RESULTS	122
Final Data Producing Sample	122
Reliability and Validity of the Measurement Scales	123
Research Question 1	146
Research Question 2	164
Research Question 3	192
Research Hypothesis 1	222
Research Hypothesis 2	251
Research Hypothesis 3	254
Research Hypothesis 4	258
Research Hypothesis 5	259
Research Hypothesis 6	269

TABLE OF CONTENTS

(Continued)

	Page
CHAPTER V: DISCUSSION	279
Summary and Interpretations	279
Implications	323
Conclusions	325
Limitations	327
Recommendations for Future Study	329
REFERENCES	332
BIBLIOGRAPHY	356
APPENDIX	
Appendix A: Filter Questions and Survey Instrument	358
Appendix B: Permission to Use the Scales in this Study	373
Appendix C: Permission from Tenet Healthcare Corporation	384
Appendix D: Email to Tenet South Florida CNOs	390
Appendix E: Invitation Letter to Initial Sample	393
Appendix F: Follow up Letter to Initial Sample	396
Appendix G: Authorization for Voluntary Consent (Online Version)	399
Appendix H: Survey Monkey Policies and Agreement	404
Appendix I: Lynn University IRB Approval Letter	411
VITA	420

LIST OF TABLES

Number		Page
3-1	Number of Hospitals, Census and Estimated Distribution of Full-time Non-Supervisory Registered Nurses	96
3-2	Constructs in the Survey	100
4-1	Target Population and Data Producing Sample with Representation by Hospital	123
4-2	Coefficient Alphas and Corrected Item-total Correlations for Part III: 7-Item Global Transformational Leadership Scale (Total scale Coefficient Alpha = .978)	125
4-3	Factor Loadings for the Global Transformational Leadership Scale	126
4-4	Corrected Item-total Correlations for the Affective Commitment Scale, the Continuance Commitment Scale, and the Normative Commitment Scale	127
4-5	Inter-Item Correlation Matrix for Affective Commitment Scale	128
4-6	Inter-Item Correlation Matrix for Continuance Commitment Scale	129
4-7	Inter-Item Correlation Matrix for Normative Commitment Scale	131
4-8	Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Three Component Organizational Commitment Measure	132
4-9	Factor Item Loadings for Part IV: 21-Item Three Component Organizational Commitment measure After Extraction	134
4-10	Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Part V: 31-Item McCloskey/Mueller Satisfaction Scale (Total Scale Coefficient Alpha = .948)	136
4-11	Coefficient Alphas for Eight Subscales of Part V: 31-Item McCloskey/Mueller Satisfaction Scale (Total Scale Coefficient Alpha = .94)	137
4-12	Factor Item Loading for Part V: 31-item McCloskey/Mueller Satisfaction Scale (MMSS) After Extraction	139
4-13	Coefficient Alphas for Seven Subscales of Part V: 31-Item McCloskey/Mueller Satisfaction Scale (MMSS) (Total Scale Coefficient Alpha = .94)	140
4-14	Initial Factor Item Loadings for Part VI: 3-Item Intention to Leave Scale After Extraction	142
4-15	Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Part VI: 3-Item Intention to Leave Scale (Total Scale Coefficient Alpha = 0.915)	142
4-16	Pearson <i>r</i> Correlation Matrix of Study Scales: Convergent and Divergent Validity	144
4-17	Demographic Characteristics of Employees by Age, Gender, Marital Status, Race, Language, Nursing Education, Highest Degree, and Hourly Wage	147

LIST OF TABLES (Continued)

Number		Page
4-18	Work Profile Characteristics of Employees by Length of Employment in Job, Length of Time as an RN, Length of Employment in Tenet, Nursing Unit, Shift Worked, and Hospital	149
4-19	Mean Scale and Average Item Scores for the 7-Item Global Transformational Leadership Scale	151
4-20	Mean Scale and Average Item Scores for the 21-Item Three Component Organizational Commitment Scale (Revised)	153
4-21	Mean Scale and Average Item Scores for the 31-Item McCloskey/Mueller Satisfaction Scale	158
4-22	Mean Scale and Average Item Scores for the 3-Item Intention to Leave Scale	164
4-23	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Age: ANOVA and Post Hoc Comparisons	166
4-24	Comparison of Nurses' Demographic Characteristics, Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Gender: Independent t-test	171
4-25	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Marital Status: ANOVA and Post Hoc Comparisons	173
4-26	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Race: ANOVA and Post Hoc Comparisons	177
4-27	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Language: ANOVA and Post Hoc Comparisons	180
4-28	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Highest Nursing Education Level: ANOVA and Post Hoc Comparisons	183
4-29	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Highest Degree Level: ANOVA and Post Hoc Comparisons	186

LIST OF TABLES (Continued)

Number		Page
4-30	Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Hourly Wage: ANOVA and Post Hoc Comparisons	190
4-31	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Employment in Current Job: ANOVA and Post Hoc Comparisons	195
4-32	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Time as a Registered Nurse: ANOVA and Post Hoc Comparisons	199
4-33	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Employment with Tenet: ANOVA and Post Hoc Comparisons	204
4-34	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Nursing Unit: ANOVA and Post Hoc Comparisons	208
4-35	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Shift Worked: ANOVA and Post Hoc Comparisons	213
4-36	Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Hospital: ANOVA and Post Hoc Comparisons	217
4-37	Pearson <i>r</i> Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Extrinsic Reward Subscale	224
4-38	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Extrinsic Reward	226
4-39	Pearson <i>r</i> Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Scheduling Subscale	227
4-40	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative, Continuance), and Scheduling	229
4-41	Pearson <i>r</i> Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Family and Work Balance Subscale	231

LIST OF TABLES (Continued)

Number		Page
4-42	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Family and Work Balance	233
4-43	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Co-Workers Subscale	234
4-44	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Co-Workers	236
4-45	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Interaction Opportunities Subscale	237
4-46	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Interaction Opportunities	239
4-47	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Praise and Recognition Subscale	241
4-48	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Praise and Recognition	243
4-49	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Control and Responsibility Subscale	244
4-50	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative, and Continuance), and Control and Responsibility	247
4-51	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Job Satisfaction	248
4-52	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Job Satisfaction (Total Score)	251
4-53	Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, Job Satisfaction, and Intention to Leave	252
4-54	Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, and Normative), Job Satisfaction, and Intention to Leave	254

LIST OF TABLES (Continued)

Number		Page
4-55	Multiple Mediated Regression with Sobel Test of Affective Commitment, Transformational Leadership and Nurses' Intention to Leave	256
4-56	Multiple Mediated Regression with Sobel Test of Normative Commitment, Transformational Leadership and Nurses' Intention to Leave	257
4-57	Multiple Mediated Regression with Sobel Test of Job Satisfaction, Transformational Leadership and Nurses' Intention to Leave	259
4-58	<i>Eta</i> Correlations of Demographic Characteristics, Work Profiles, and Job Satisfaction	261
4-59	Pearson <i>r</i> Correlation of Non-Categorical Demographic Characteristics, Non-Categorical Work Profile Characteristics, and Job Satisfaction	261
4-60	Pearson <i>r</i> Correlation among Demographic Profiles, Work Profiles, Global Transformational Leadership, Organizational Commitment scale (Affective, and Normative), and Job Satisfaction	263
4-61	Hierarchical (Forward) Multiple Regression Analysis of Demographic Characteristics, Work Profiles, Transformational Leadership, Organizational Commitment Subscales (Affective, and Normative), and Job Satisfaction	266
4-62	<i>Eta</i> Correlations of Demographic Characteristics, Work Profiles, and Intention to Leave	270
4-63	Pearson <i>r</i> Correlation of Non-Categorical Demographic Characteristics, Non-Categorical Work Profile Characteristics, and Intention to Leave	271
4-64	Pearson <i>r</i> Correlation among Employee Demographic Profiles, Work Profiles, the Global Transformational Leadership Scale, the Three Component Organizational Commitment Scale, the MMSS, and the Intention to Leave Scale	272
4-65	Hierarchical (Forward) Multiple Regression Analysis of Demographic Characteristics, Work Profiles, Transformational Leadership, Organizational Commitment (Affective, and Normative), Job Satisfaction, and Intention to Leave	275
5-1	Summary of Psychometric Evaluation of Measures Using EFA and Coefficient Alpha	284
5-2	Summary of Research Questions and Results	299
5-3	Summary of Hypotheses Testing and Results	320

LIST OF FIGURES

Number		Page
2.1	Hypothesized model of the relationship among demographic and work profile characteristics, transformational leadership, organizational commitment, job satisfaction and nurses' intention to leave	90

CHAPTER I

Introduction and Background to the Problem

A study by the Health Resources and Services Administration (HRSA) predicted that hospital nursing vacancies will reach 800,000, or 29 percent of total nursing positions, by 2020. The number of nurses is expected to grow by only 6 percent by 2020, while demand for nursing care is expected to grow by 40 percent (HRSA, 2006).

According to a report released by the American Hospital Association in July 2007, U.S. hospitals needed approximately 116,000 RNs to fill vacant positions (AHA, 2007). This translates into a national RN vacancy rate of 8.1%. The United States is currently experiencing a nursing shortage (Hammer & Craig, 2008). To compound the problem, hospital nurses are leaving their organizations and executives are scrambling to figure out the reasons behind the increased turnover. The growing concern over the potential shortage of nursing personnel has brought the problem of turnover to the forefront (Hammer & Craig, 2008; Cohen, 2006). The American Hospital Association (AHA) reported that there was a projected shortage of one million RNs by the year 2020 (AHA, 2005). The literature is consistent with projections of the nursing shortage ranging from 400,000 to one million (Pricewaterhouse Coopers Health Research Institute, 2007; AHA, 2007; HRSA, 2006)

According to the Bernard Hodes Group survey, in 2005, the average registered nurse (RN) turnover rate was 13.9%, with a vacancy rate of 16.1% ("Bernard Hodes Survey," 2005). To date, the first year turnover rate for registered nurses at a local acute care organization is at 30% with overall year- to- date turnover for registered nurses at 12% (S. Ludlow, Human Resource Director, personal communication, June 3, 2008).

These data are consistent with national trends where although the average nurse turnover rate in hospitals was 8.4%, the average voluntary turnover for first-year nurses was 27.1% (PricewaterhouseCoopers Health Research Institute, 2007).

Many factors are associated with nurses' intention to stay in their current employment, which is a good predictor of turnover (Nedd, 2006). Among these factors are job satisfaction, work satisfaction, work setting, control over practice, salary, nurse-physician collaboration, job stress, and leadership style (Nedd, 2006; Boyle et al., 1999; Bratt, Broome, Kelber, & Lostocco, 2000; Kleinman, 2004). Effective nursing leadership is an integral factor in the retention of hospital nurses and nurses who perceived their nursing leadership as participative and transformational were more likely to be satisfied with their jobs (Kleinman, 2004; Bratt et al., 2000).

The impact of leadership styles on turnover within hospital nursing staff was selected because the effects of nursing turnover are relevant to current nursing practice. A shortage of 400,000 registered nurses is expected by the year 2020 (Shirey, 2006). The implications of this staggering number are far reaching across the profession. Nurse leaders play a pivotal role in creating a healthy work environment and fostering increased job satisfaction (Shirey, 2006). As a current nurse administrator, it is evident that nurses are impacted by how they perceive their immediate supervisor and a part of the nurse administrator role is not only to understand the factors that impact nurses' intention to leave, but to develop strategies that increase the retention of nurses in the hospital setting.

The problem of turnover among registered nurses is about the ability of the nursing profession to provide care for the patient population. Turnover is a problem in the healthcare disciplines, and specifically as it relates to the turnover among registered

nurses for the discipline of nursing. The inability of acute care organizations to retain staff nurses threatens the adequacy of the healthcare delivery system, which can result in increases in personnel and patient care costs (Kleinman, 2004). The associated implications of turnover for organizations are many. Turnover of hospital nurses has resulted in three problem areas: 1) shortages of nurses, where, as the demand for nurses increases, the supply is decreasing, 2) financial implications related to the costs of vacant positions and the cost of hiring and training new hires, and, 3) quality outcomes of patients.

Turnover of hospital nurses has resulted in shortages in the nursing supply. The current nursing shortage peaked in late 2001 and at that time the average national hospital registered nurse vacancy rates were at 13% with hospitals reporting approximately 126,000 unfilled full-time equivalent RN positions (Buerhaus, Auerbach & Staiger, 2007). In late 2005 the national vacancy rate dropped to 8.5%, but that equates to 118,000 unfilled RN positions (AHA, 2006). The demand for registered nurses is high, yet the supply is low with projections of the numbers worsening. The projected shortfall of full-time registered nurses by 2020 will be 1,016,900, a 36% demand shortfall (Allen, 2008).

Another implication of nursing turnover impacted by the shortage of nurses is the dissatisfaction among nurses. More than 40% of nurses working in hospitals reported being dissatisfied with their jobs. The same study revealed that one out of every three hospital nurses under the age of 30 was planning to leave their current job within the next year (Aiken et al., 2001). The relationship between turnover and the nursing shortage is a continuous loop whereby as the nursing shortage peaks, nurses who are left at the bedside

are finding working conditions to be unacceptable, and are leaving the profession in search of other jobs, increasing turnover and further increasing the shortage (Allen, 2008).

The financial costs that are associated with turnover cannot be overlooked. This includes such costs as the cost of selecting, hiring and training (Nedd, 2006). The average cost-per-hire of a registered nurse was \$2,821 (Bernard Hodes Survey, 2005). Other research found that turnover of registered nurses costs up to two times a nurse's salary. Therefore, if the national average of a medical-surgical nurse is \$46, 832, the cost of replacing just one nurse is \$92, 442, with costs up to \$145,000 to replace a specialty nurse (Atencio, Cohen & Gorenberg, 2003). Replacements costs include expenses incurred by human resources to advertise and interview, the use of traveling nurses to backfill the vacant positions, overtime, lost productivity and terminal payout (Atencio, Cohen & Gorenberg, 2003).

From a financial standpoint, as turnover numbers for registered nurses increase, hospitals have resorted to salary bidding wars, large sign-on bonuses, which are not resulting in a decrease in turnover numbers (Kleinman, 2004). These economic solutions, however, have simply resulted in a redistribution of the current nursing supply and have not been effective in recruiting new nurses (Nevidjon & Erickson, 2001).

The high rate of staff nurse turnover has far-reaching implications for hospitals and patients. Less than optimal staffing impacts the quality of care received by patients, increases the time that patients wait for services, and in some instances, may result in a reduction of the number of services offered such as surgeries and emergency services (Kleinman, 2004). In a 2001, study it was found that organizations with low turnover

reported shorter lengths of stay for patients and had a lowered risk- adjusted mortality scores, as well as lower severity-adjusted length of stay compared to hospitals with high turnover rates (22 percent or higher) (Gelinas & Bohlen, 2002).

A high rate of staff nurse turnover increases the nursing shortage. The result is increased workload for the current nursing supply. From a quality standpoint it is noted that more registered nursing hours were associated with lower rates of urinary tract infections, pneumonia, upper gastrointestinal bleeding, shock or cardiac arrest (Needleman et al., 2002). An increase in the nursing workload has a resounding impact on quality. Aiken, Clarke, Sloane, Sochalski and Silber (2002) note that each additional patient that the nurse receives above the 4:1 patient to nurse ratio is associated with a 7% increase in the likelihood of the patient dying within 30 days of admission. In addition, the chance of death increased by 2.3 per 1,000 for a 6:1 patient to nurse ratio.

Turnover among hospital nurses has far-reaching financial and quality effects. Therefore, the significance of examining leadership styles, job satisfaction, organizational commitment, and intention to stay, especially among hospital nurses can help health care organizations to understand the needs of the registered nurse and what leadership styles may assist in the retention of nurses. Healthcare organizations will need to understand what drives nursing turnover and, in turn, develop strategies to decrease and prevent nurses' intentions to leave an organization. Turnover and intention to leave may be affected by such factors as leadership styles (Hsu, Hsu, Huanh, Leong, & Li, 2003); job satisfaction (Cohen, 2006); and organizational commitment (Lum et al., 1998).

This research study examines a number of variables that impact intention to leave. While there is not one main theory that forms a single framework for this study, numerous theories that connect the variables are integrated to guide this study.

Employee turnover is “the termination of a person’s membership-usually employment-with an organization” (Hsu et al., 2003, p. 39). A related variable of turnover is turnover intention (Hsu et al., 2003). *Turnover intention*, the last in a pattern of employee withdrawal thought processes, is “a conscious and deliberate willfulness to leave the organization” (Hsu et al., p. 39). Factors associated with an employee’s intention to leave are varied and include leadership styles (Hsu, Hsu, Huanh, Leong, & Li, 2003); job satisfaction (Cohen, 2006); and organizational commitment (Lum et al., 1998).

Transformational leadership theory explains the relationship between the leader and the followers. The basic premise is that the transformational leader is one who is able to develop subordinates so that they see the vision and are inspired to perform in line with the leader’s goals and objectives (Bass et al., 1982).

Job satisfaction “represents nurses’ degree of positive affective orientation toward their job” (Way & MacNeil, 2006, p. 69). Locke (1969) explains the concept of job satisfaction in terms of a connection between the employee’s pleasant emotional state and the employee’s job achievement and job value.

Organizational commitment is an attitude of an employee that indicates that the employee identifies with a particular organization (Jenkins, 1993). Meyer and Allen (1991) define organization commitment in terms of three general themes: how the

employee is attached to the organization, perceived costs associated with leaving the organization, and obligation to remain with the organization.

The growing concern over the potential shortage of nursing personnel has made decreasing turnover a matter of importance for healthcare executives (Cohen, 2006). Factors, such as leadership styles, job satisfaction, and organizational commitment are noted throughout the literature as having an impact on intention to leave, and can be applied to nurses within the hospital setting. This application to nurses forms the background to this study and how these factors relate to each other, and to nurses' intention to leave, underlie the purpose of this study.

Purpose

The general purpose of this non-experimental exploratory (comparative) and explanatory (correlational) online survey research is to examine the relationship among non-supervisory nurses' demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave. The specific purposes of this study are as follows:

1. To describe the demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave of non-supervisory nurses.
2. To determine if there are significant differences in non-supervisory nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intentions to leave according to demographic characteristics and work profile characteristics.

3. To determine the explanatory relationships among demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and non-supervisory nurses' intention to leave.

Definitions of Terms

Demographic Characteristics

Theoretical definition. The collection of non-supervisory nurse socio-demographic characteristics provides information about the group of people being surveyed. Socio-demographic characteristics of employees are age, gender, race and ethnicity, marital status, highest education level achieved, highest nursing education level achieved, and income (Xu & Kwak, 2005).

Operational Definition. *Demographic Characteristics* are measured using a series of multiple choice, dichotomous, and fill in the blank items comprising Part 1 of the Nurse Survey. The eight items are as follows: (a) age in years; (b) gender; (c) marital status; (d) race; (e) ethnicity; (f) highest nursing education level; (g) highest degree level; (h) hourly wage (See Appendix A, Part 1).

Work Profile Characteristics

Theoretical Definition. Job characteristics of leaders and subordinates are current employment status (full time or part time), job roles, tenure in job, hours worked, primary work setting, and unit (Xu & Kwak, 2005). Work profile characteristics include the traits which provide information related to the organization, and the nursing unit.

Operational Definition. *Work Profile Characteristics* are comprised of unit characteristics of the hospital, the type of nursing specialty unit, and the type of shift

worked (eight-hour or twelve hour shifts). These characteristics are measured by fill in the blank (Tenure in job) and multiple choice items (Type of nursing specialty unit, employment status, and type of shift worked). (See Appendix A, Part 2).

Transformational Leadership

Theoretical Definition. Transformational leadership explains the relationship between the leader and the followers. The basic premise is that the transformational leader is one who is able to develop subordinates so that they see the vision and are inspired to perform in line with the leader's goals and objectives (Bass et al., 1982).

Operational Definition. *Transformational Leadership* is measured by the Global Transformational Leadership Scale (GTL) consisting of seven leader behaviors (Carless et al., 2000). The GTL instrument is a unidimensional, global measure of transformational leadership capturing complex leadership behaviors using a 5-point rating scale. (See Appendix A, Part 3). For the purpose of this study, staff nurses assess their immediate supervisor.

Organizational Commitment

Theoretical Definition. Porter, Steers, Mowday, and Boulian (1974) defined Organizational Commitment in terms of how strongly an individual identified with, and was involved with a particular organization. Meyer and Allen (1991) present a three-component framework of organizational commitment where the definition of commitment includes three general themes: "affective attachment to the organization, perceived costs associated with leaving the organization, and obligation to remain with the organization" (Meyer & Allen, 1991, p. 64). These three approaches are classified, respectively, as affective, continuance, and normative commitment. Affective

commitment is focused on how emotionally attached the employee is to the organization. This also considers how involved the employee is with the organization. A strong affective commitment results in employees staying with an organization because they *want* to remain. (Meyer & Allen, 1991). Continuance commitment describes having knowledge of the costs that are associated with the employee leaving the organization. Employees with continuance commitment remain with an organization because they *need* to do so (Meyer & Allen, 1991). With normative commitment, employees feel obligated to continue their employment and feel that they *ought* to remain with the organization (Meyer & Allen, 1991). Affective, continuance and normative commitment should be viewed as subsets, rather than as types, of commitment. The major proposition of this theory is that all three subsets impact an employee's decision to remain with an organization.

Operational Definition. *Organizational Commitment* is measured by Meyer and Allen's (1991) 24-item *Organizational Commitment* questionnaire, which contains three subscales: the *Affective Commitment Scale* (ACS) assesses the emotional attachment to the organization; the *Continuance Commitment Scale* (CCS), assesses the cost associated with leaving the organization; and the *Normative Commitment Scale* (NCS), which reflects the level of obligation that the employee feels to continue within the organization. Each subscale has eight items with each item rated on a seven point semantic differential scale with anchors labeled as; 1) strongly agree and 7) strongly disagree (Meyer & Allen, 1991). (See Appendix A, Part 4).

Job Satisfaction

Theoretical Definition. Locke (1969) developed a model of job satisfaction, where job satisfaction is defined as “a pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (p. 316).

Operational Definition. *Job satisfaction* is measured using the 31-item *McCloskey/Mueller Satisfaction Scale (MMSS)* multidimensional questionnaire designed for hospital staff nurses. The MMSS measures eight work factors: extrinsic rewards, scheduling satisfaction, family/work balance, co-workers, interaction, professional opportunities, praise/recognition and control/responsibility (Mueller & McCloskey, 1990). A five-point rating response is used, ranging from “very dissatisfied” (1) to “very satisfied” (5). (See Appendix A, Part 5).

Intention to Leave

Theoretical Definition. Intention to leave is a “conscious and deliberate willfulness to leave the organization” (Tett & Meyer, 1993, p. 262). Intention to leave is generally referenced against a specific interval, such as within the next six months, and is usually the last behavior in a sequence of withdrawal thought processes and behaviors (Trett & Meyer, 1993).

Operational Definition. *Intention to Leave* is measured using a three-item scale from Meyer, Allen, and Smith (1993). The items are rated on a 7-point semantic differential scale with anchors labeled as; 1) strongly disagree and 7) strongly agree (Meyer & Allen, 1991; Kickul, 2001). (See Appendix A, Part 6).

Justification

Intention to leave is noted as one of the strongest predictors of employee turnover (Porter & Steers, 1994). In fact, employees' intention to leave consistently relate to turnover behaviors and provides more of an explanation of turnover than other responses such as job satisfaction (Mobley et al., 1979). Examining the impact of leadership styles on intention to leave is important because management style was noted to be the "only predictor of anticipated turnover..." (Kleinman, 2004, p. 129). The nation's shortage of registered nurses has become not only a workforce issue, but a public health issue. With the current turnover trends among nurses, there has been shift in the current RN practice environment with changes in patient loads, and work design. In addition, the turnover rate for hospital registered nurses is among the highest when compared to other professional and technical occupational groups (Hart, 2005).

Investigation of those variables that might affect the intentions of non-supervisory nurses to leave their jobs can provide insight into the development of retention strategies. As hospitals attempt to attract high quality nurses with increased critical thinking skills, the development of extensive retention strategies is paramount. This is even more significant when administrators realize that one in every three RNs practicing in acute care has reported being dissatisfied with their job (Hart, 2005). The leadership style of the nurses' "immediate" supervisor may affect the job satisfaction of subordinates, which in turn affects turnover intentions, and eventually turnover (Medley & Larochelle, 1995). In hospitals where charge nurses or assistant nurse managers or nurse managers are serving as immediate supervisors, the quality and style of leadership that the immediate supervisor provides may influence the non-supervisory nurses' job satisfaction, either

positively or negatively (Medley & Larochelle, 1995). In addition organizational commitment, an affective response to the whole organization, is related to employee behaviors such as turnover intentions, where organizational commitment is negatively related to turnover and intention to leave (Lum et al., 1998).

This study is justified because of its significance and the extent to which it is feasible and researchable. Because the critical problem of turnover in hospital registered nurses has resulted in substantial industry costs in search, selection, hiring, training and separation costs; loss of productivity; decrease in employee morale; and costs that are eventually passed on to the quality of patient care, as an administrator within a for-profit acute care hospital, the value of a quantitative analysis that examines the relationship among leadership styles, job satisfaction, organizational commitment and intention to leave in hospital non-supervisory nurses is considered very important.

This study was selected in order to explore factors that may have an impact on registered staff nurses' intention to leave within a large for-profit acute care health system within the United States. While there are numerous empirical studies regarding turnover as it relates to leadership styles, job satisfaction, or organization commitment (Price & Mueller, 1981; Kleinman, 2004; Boyle et al., 1999), no empirical study was found that examined organizational commitment and job satisfaction as mediating variables between transformational leadership and intention to leave in the for-profit acute care setting, or a study that examined the cumulative explanatory relationship among leadership styles, job satisfaction, and organizational commitment on intention to leave. This study may contribute to the body of scholarly knowledge on leadership styles, job satisfaction, organizational commitment and turnover (Boyle et al., 1999).

The theoretical framework and hypotheses can be tested and measured; therefore, the study is researchable. The online survey is feasible since it could be implemented in a reasonable time, the accessible population is available, and the costs and time are manageable.

Delimitations and Scope

This study had the following delimitations:

1. The geographic setting was limited to Dade, Broward, and Palm Beach Counties, in Florida.
2. The setting was limited to the Tenet South Florida Healthcare System.
3. The target population was limited to non-supervisory registered nurses who are employed full-time on the dates of data collection in the Tenet South Florida Health Care System
4. The study included participants who are at least 18 years of age.
5. The study included only participants who were able to speak, read, and write English.

Organization of the Study

Five chapters were developed for this research study. Chapter I provides an introduction to the study about transformational leadership, job satisfaction, organizational commitment, and intention to leave among non-supervisory registered nurses. This introduction section discusses the importance of leadership styles, job satisfaction, organizational commitment and intentions to leave and describes the purpose of the study. Theoretical and operational definitions are defined for each variable.

Delimitations of the study are also identified. The study is justified since the intended research is significant, researchable, and feasible.

Chapter II provides a literature review, theoretical framework, research questions and hypotheses identified in the study. A detailed examination is done of the theoretical literature and measures surrounding transformational leadership, organizational commitment, job satisfaction, turnover and intention to leave. Through this review of the literature and identified gaps in the literature, a theoretical framework was developed, along with research questions and hypotheses and a hypothesized model was developed.

Chapter III discusses the research design, population, sampling plan, and setting, instrumentation, procedures, methods of data analysis, and evaluation of research methods. Included in this chapter are the population sampling plan, instrumentation, data collection procedures, ethical considerations, methods of data analysis and evaluation of research methods. Chapter III also presents the research questions and the hypotheses to be tested about the relationship among perception of transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave.

Chapter IV presents the final data producing sample, psychometric evaluation of measures, answers to research questions, and the results of the research hypotheses.

Finally, Chapter V discusses the summary, interpretations, and implications for practice, conclusions, limitations of the study, and recommendation for future scholarly study.

CHAPTER II

Literature Review

The growing concern over the potential shortage of nursing personnel has brought the problem of nurses' intention to leave their jobs to the forefront (Cohen, 2006).

According to the Bernard Hodes Group survey in 2005, the average registered nurse (RN) turnover rate was 13.9%, with a vacancy rate of 16.1% ("Bernard Hodes Survey," 2005).

This high rate of staff nurse turnover has far-reaching implications for hospitals and patients. Less than optimal staffing impacts the quality of care received by patients, increases the time that patients wait for services, and in some instances, may result in a reduction of the number of services offered such as surgeries and emergency services (Kleinman, 2004). From a financial standpoint, as turnover numbers for registered nurses increase, the cost of replacing hospital nurses have increased (Kleinman, 2004). Healthcare organizations will need to understand what drives nurses' intention to leave and in turn develop strategies to decrease and prevent nurses leaving an organization.

Leadership

Early research into leadership began in the 1920s and 1930s. It was in the 20th century in America that leadership studies began to change from a biographical focus of great people, frequently male military leaders, to the current psychological/behavioral orientation type of research found from the 1930s and onward (Trehan, 2007). Early leadership theories focused on the leader being able to achieve a goal through a high concern for task and people. Early theories were centered on the traits of a leader. Early studies were inconclusive in determining which traits would have to be always present in people for them to be considered a leader (Kest, 2006). Gradually, leadership theories

were modified to include the element of contingency such as Hershey and Blanchard's Situational Leadership Theory (Kest, 2006; Trehan, 2007).

Later leadership theories, the situational and contingency models, developed by Paul Hersey and Ken Blanchard, included the fact that situations may vary; consequently, the leadership approach may need modification. The simplicity or complexity of the task, the power of the leader over subordinates, and situational requirements were shown to be related to certain leadership styles (Trehan, 2007).

"New leadership" theories emerged in the 1980s that advocated inspirational, visionary, charismatic and transformational roles for the leader (Trehan, 2007). This included the Conger and Kanungo Charismatic Model and Bass's Transformational Leadership Theory (Conger & Kanungo, 1987; Bass, 1987). Full range leadership theories grew out of Burns' (1978) work in political leadership where the leader is described as one who is able to influence followers to rise above their own preoccupation and strive towards exceeding expectations. Bass (1987) further developed a set of leadership behaviors that can be described as transactional and transformational (Kest, 2006; Trehan, 2007).

Transformational and Transactional Leadership Theory

Transactional leadership by Burns. Burns' 1978 writings on leadership are considered the seminal work in the field of leadership. Burns describes the transforming leader as one who is able to appeal to the follower to serve the purposes of both the leader and the follower (Burns, 1978). The transforming leader is able to understand the current needs of the followers and to also create new motivations within the followers.

Transforming leadership is based on the premise that under the transforming leader

separate goals of the followers become secondary to the higher goals of the leader.

Transformation leadership is grounded in *end-values*. These include values such as liberty, equality and justice.

Burns (1978) also describes leadership in terms of a transactional relationship between the leader and the follower. This relationship is based in the leader and follower exchanging gratifications, which may not be tangible. Transactional leadership is only effective in the presence of *modal values*. These are values of means such as responsibility and honesty.

Bass' transformational and transactional leadership theory. Transformational leadership theory was developed by Bass in 1985. Bass developed his theory of transformational leadership based on preliminary results obtained in surveying 198 United States Army officers who were asked to rate their superior officers using the Multifactor Leadership Questionnaire-Form 1 (Bass, Waldman, & Avolio, 1987). Bass' theory had its roots in Burns' empirical investigations in 1978, which found that leadership could be understood in terms of either a transactional or a transformational process (Bass, Waldman, & Avolio, 1987); and in House's 1976 theory of charismatic leadership (as cited in Felfe, Tartler, & Liepmann, 2004).

Bass' early development of this theory identified six major constructs. These are defined as charisma/inspirational, intellectual stimulation, individualized consideration, contingent reward, active management-by-exception and passive-avoidance leadership (Avolio, Bass, & Jung, 1999). *Charisma* is the fundamental factor in the transformational process. It is defined as the leader's ability to generate symbolic power with which the employees want to identify (Avolio et al., 1999). *Intellectual stimulation*

gets the followers to look at familiar problems in new ways. It encourages followers to question the current methods that are being used and improve upon them (Avolio et al., 1999). *Individual consideration* describes the mentoring role of the leader (Gellis, 2001). It focuses on the leader understanding the needs of each of the followers and how the leader works to get the followers to develop their full potential (Avolio et al., 1999). *Contingent reward* clearly defines what is expected from the followers and also clarifies what the followers will receive if the expected levels of performance are met (Avolio et al., 1999). *Active management-by-exception* is focused on monitoring the execution of tasks in order to identify any occurring problems and correcting the problem in order to maintain the current performance levels (Avolio et al., 1999). *Passive-avoidant leadership* reacts only after the problems have become serious. The leader takes corrective action and avoids decision making (Avolio, Bass, & Jung, 1999). These last two constructs are related to transactional actions of the leader (Felfe et al., 2004).

The major proposition in this leadership theory is that charismatic leadership contributes most to the variances in transformational leadership ratings. The leader gives individual attention to the subordinate resulting in further development of the subordinate. When all the constructs are applied, the result is that the follower becomes capable of developing solutions for problems on their own (Bass, Waldman, & Avolio, 1987). Leaders can behave in a transformational and a transactional manner. Taking all of the different styles and behavior constructs together, the full range of leadership as defined by Bass is represented (Felfe et al., 2004). Also central to Bass' theory development is the Full Range Leadership Model, which led to the development of

Multifactor Leadership Questionnaire (MLQ). The MLQ is widely used to measure the constructs of transformational leadership (Bass et al., 1987).

An optimal leadership profile is characterized by a very high level of transformational behavior, a high level of contingent reward, some management by exception, and less frequent passive avoidance (Felfe et al., 2004). In the study conducted by Kane, and Tremble (2000), this proposition is further verified in that transformational leadership augmented the effects of transactional leadership on various unit outcomes and across organizational levels. Throughout the literature reviewed, there were schematic models noted that were developed depicting the relationship between the constructs (Bass et al., 1987).

There is now extensive empirical research on Bass's multifactor leadership theory (Avolio et al., 1999). These studies have provided evidence of the empirical validity confirming the link between transformational leadership and various outcomes. Avolio, Zhu, Koh, and Bhatia (2004) examined the relationship between transformational leadership and organizational commitment with structural distance and psychological empowerment as moderating roles. The study used hierarchical linear modeling analyses to test the hypotheses. The study supported a positive association between transformational leadership and organizational commitment (Avolio et al., 2004). The study also found that structural difference did moderate the relationship between transformational leadership and organizational commitment (Avolio et al., 2004). Gellis' (2001) research further confirms that transformational leadership factors were significantly related to leader outcomes of effectiveness, satisfaction and extra effort.

This study was specific to social workers, but has implications for other professionals in various settings and practice.

Kleinman (2004) examined the relationship between managerial leadership behaviors and staff nurse retention. Transformational leadership theory was the conceptual framework for this study where the researcher examined the constructs of the transformational and transactional leadership theory by Bass and then tested the factor structure of the Multifactor Leader Questionnaire (Den Hartog, Van Muijen, & Koopman, 1997).

A criticism of transformational leadership theory is related to the distinction made between passive management-by-exception and laissez-faire leadership. The distinction between the two is not clear when the empirical data are examined (Den Hartog et al., 1997). The criticism is that it is difficult to separate vision from charisma and treat it as indicating inspiration (Den Hartog et al., 1997).

Bass's transformational leadership model derived from Burns has applicability for more than one discipline, and any organizational environment (military, psychology, healthcare, business). It also has applicability to different practice environments and cultures, such as the study by Chen, Beck, and Amos (2005), which examined the relationship between leadership styles and nursing faculty job satisfaction in Taiwan. This theory is socially significant addressing issues essential to job satisfaction, and organizational commitment among employees. Transformational leadership theory is useful in predicting the relationship between leadership style empowerment on job satisfaction of nurses. Both transformational leadership and transactional leadership are positively related to job satisfaction (Morrison, Jones, & Fuller, 1997).

The theory has social utility in providing direction for practice, research and education and is socially congruent with a variety of societal situations. For example, the theory has been adapted to military situations and the army population (Kane & Tremble, 2000); and for studies in other cultures such as Germany and Taiwan (Felfe et al., 2004; Chen et al., 2005). Thus, this theory is a well-developed guide to understanding the relationship between leadership style and various outcomes related to employees and organizational performance. The transformational leadership theory is easy to use contributing to its usefulness (Kane & Tremble, 2000; Felfe et al., 2004; Chen et al., 2005).

Bass's transformational leadership theory is a predominant theory that is used to examine leadership styles. The theory has well developed propositions and strong empirical support and is well received in various settings, disciplines, educational institutions, and researchers worldwide, and contributes to explaining and interrelating leadership concepts. The theory is referenced in past and current scholarly inquiries and is used frequently in studies that examine the impact of leadership styles in nursing science (Medley & Larochelle, 1995; Morrison et al., 1997; Spinelli, 2006). While many studies contribute to the empirical validity of Bass' transformational leadership theory, the major area of future development is in the examining propositions related to how the various concepts relate to each other. Examples of hypotheses to be investigated in future development are as follows:

1. Are there intercorrelations among the transformational factors and the transactional factors?

2. Is there an explanatory relationship between the measure of transformational behaviors and the measure of transactional behaviors?

Earlier Bass and Avolio further developed the leadership theory to what is now coined as the “full range of leadership styles.” This describes a leadership continuum from idealized transformational leadership to laissez-faire (Spinelli, 2006). The theory is current and applicable across all settings. The strength of the theory is in its ability to be broadly applied, hence, the frequency of its use. Key limitations lie in the fact that all empirical studies involving the theory and the MLQ rely heavily on data obtained from self-reporting. During the review of the literature, all the studies used a cross-sectional technique and then applied regression analysis (explanatory, correlational research). Further development of the theory could include longitudinal methods that examine the causal relationships between leader behaviors and performance outcomes along with multiple sources of data collection (Walumbwa, 2005). Major competing models include leader member exchange (LMX) theory developed by Graen, which focuses on the processes through which leader- follower groups coordinate and integrate their actions in order to accomplish some goal (Barge & Schlueter, 1991) and situational leadership theory (SLT) developed by Hersey and Blanchard (Hersey, Blanchard & Natemeyer, 1979).

Measurement using the Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio. The MLQ has its background in the full range leadership framework (FRL) and the instrument was developed by Bass and Avolio (Walumba et al., 2005). The FRL identifies three groups of behaviors that can be exhibited by leaders: transformational leadership, transactional leadership and laissez faire (Walumba et al.,

2005). Two forms of the MLQ have been developed. The Rater Form has the subjects rate their immediate supervisors for leadership. The self form has the subjects rate themselves on their perception of their leaders' leadership behaviors (Bass & Avolio, 2006). The Multifactor Leadership Questionnaire-short form (MLQ-5X) is a 45 item questionnaire where each behavior is rated on a 5-point frequency rating scale, where 0 = not at all, 1 = every once in a while, 2 = sometimes, 3 = fairly often, and 4 = frequently, if not always. The 45 item MLQ short form (MLQ, 5X Short Form) measures five transformational (attributed charisma, idealized influence, inspirational motivation, intellectual stimulation and individualized consideration); three transactional (contingent reward, management-by-exception-passive and management-by-exception-active); and one non-leader factor (laissez-faire leadership). This version of the MLQ includes four items for each of the subscales, as well as scales to measure extra effort (four items), perceived effectiveness (three items) and follower satisfaction (two items). The MLQ scale scores range from 0 to 4 for each of the subscales.

Bass (1985) reported reliability coefficients of .86 (Cronbach's alpha) for transactional leadership and .80 for transformational leadership. Coefficient alpha estimates for each of the scales exceeded .70 with some falling in the range between .80 and .91, except for active management by exception (Bass & Avolio, 2000; Gardner & Cleavenger, 1998; Avolio et al., 1999). Cronbach's alpha for the global scale of extra effort was .86; for perceived effectiveness, the alpha was .88, and for leader satisfaction, Cronbach's alpha was .87 for the global scale (Gellis, 2001).

Confirmatory factor analysis established discriminant validity between the transformational scales and the transactional scales (Bass, 1985; Felfe et al., 2004; Avolio

et al., 1999). Bass (1985) established construct validity of the MLQ with several samples of business and military leaders. Medley and Larochelle (1995) used principal component analysis with varimax rotation to establish content validity. They reported Cronbach's alpha of 0.86 for the transactional leadership and 0.80 for transformational leadership.

The Multifactor Leadership Questionnaire, Form 6S, is a 21 item questionnaire where each behavior is rated on a 5-point frequency rating scale, where 0 = not at all, 1 = every once in a while, 2 = sometimes, 3 = fairly often, and 4 = frequently, if not always. This version of the MLQ has subscales measuring charisma and idealized influence (3 items; Cronbach's alpha = 0.78), inspirational motivation (3 items; Cronbach's alpha = 0.81), intellectual stimulation (3 items; Cronbach's alpha = 0.75), individualized consideration (3 items; Cronbach's alpha = 0.74), contingent reward; Cronbach's alpha = 0.73) and constructive transactions (3 items), management-by-exception and corrective transaction (3 items; Cronbach's alpha = 0.72), and laissez-faire leadership (3 items). Scores for each of the MLQ transformational leadership subscales range from 0 -12. The interpretation of scores for each subscale is as follows:

- Scores in the range of 9-12 indicated a high degree of transformational leadership.
- Scores in the range of 5-8 indicated a moderate degree of transformational leadership.
- Scores in the 0-4 range indicated a low degree of transformational leadership (Bass & Avolio, 1994; Elenkov et al., 2005).

Validity was not reported on this version of the MLQ.

Another version of the MLQ Form 6S is a 12 item questionnaire that measures idealized influence (3 items), inspirational motivation (3 items), individualized consideration (3 items), and intellectual stimulation (3 items). Cronbach's alpha for the items in the subscales were all above 0.50, with an overall Cronbach's alpha of 0.87. Correlational analysis established convergent validity, where all correlational values were greater than .60 (Madhu & Krishnan, 2005; Tambe & Krishnan, 2000).

In their summary of seventeen studies, Bass and Avolio report transformational leadership scores that were more strongly correlated with the effort of followers, satisfaction and the overall effectiveness of the organization (Avolio, et al.,1999). However, criticism of these findings is not just related to the concern of single source bias. Rather, examination of the MLQ, an integral measure of the transformation leadership theory shows that the items that measure subordinates' outcomes tend to confound the behavior of the leader with the outcome (Kane & Tremble, 2000). Construct validity of the MLQ was appraised through a principal component analysis of the dimensions of the scales. A reliability coefficient of .80 (Cronbach's alpha) for transformational leadership was reported. (Avolio et al.,1999). In their construct validation study, Tepper and Percy (1994) found that the MLQ captures a theoretically meaningful factor of transactional leadership (contingency reward) that is different from a global measure of transformational leadership.

Several empirical studies such as the meta-analysis conducted by Lowe et al. have resulted in refinement of the MLQ (as cited in Kane & Tremble, 2000). The result is that recent forms of the MLQ generally measure four factors of transformational behavior (charisma, inspirational motivation, intellectual stimulation and individualized

consideration), three factors of transactional behaviors (contingent reward and active and passive management by exception), and laissez-faire behaviors (Walumba et al., 2005).

Conger and Kanungo

Conger and Kanungo's Charismatic Model. Conger and Kanungo (1987) developed a model of leadership that focuses on the behavioral dimensions of charismatic leadership within organizations. The model is based on the idea that charisma is an "attributional phenomenon" (p. 639). Charisma is seen "both as a set of dispositional attributions by followers and as a set of leaders' manifest behaviors" (p. 645). The distinction between charismatic leaders and other leaders is in the fact that the former is able to develop and relay an inspirational vision by actions and behaviors that give the impression that the leader and the mission are extraordinary. Consequently, individuals follow such a leader not due to formal authority, but due to perceptions of extraordinariness, and the measure of charismatic leadership is based on the followers' perceptions of the behavioral attributes of the leader (Conger & Kanungo, 1994).

Conger-Kanungo proposed distinguishing behavioral components in three distinct stages. In stage one (environmental assessment stage), the model distinguishes charismatic leadership from other leadership roles by the followers' perception of the manager's intrinsic desire to change things from the way they have been, and by an increased sensitivity to environmental opportunities, constraints and the needs of the followers (Conger & Kanungo, 1994). In stage two (vision formulation), what distinguishes charismatic leadership from other leadership roles is the followers' perception of the leader's development of a shared idealized future vision and delivery of that vision in an inspirational manner. In stage three (implementation stage), the

followers perceive the charismatic leader as being able to perform exemplary acts that followers interpret as involving personal risk and sacrifice. Such leaders are able to build trust with subordinates and are able to deploy innovative and unconventional means for achieving their vision (Conger & Kanungo, 1994).

Conger and Kanungo's (1994) leadership model has applicability for more than one discipline and any organizational environment (managers, political party delegates and clerical staff). It also has applicability to different practice environments and cultures, such as the study by Conger et al. (1997) which examined the leadership styles noted by subordinates in a large national corporation in India. This theory is socially significant addressing issues essential to trust and job satisfaction along with feelings of collective identity and empowerment. Charismatic leadership is positively related to follower reverence and trust (Conger, Kanungo, & Memon, 2000).

The theory has social utility in providing direction for practice and research and education, and is socially congruent with a variety of societal situations. For example, the theory has been adapted to political situations (Conger et al., 1997); and for studies in other cultures such as India (Conger et al., 1997). Thus, this theory is a well-developed guide to understanding the relationship between charismatic leadership and various outcomes related to employees' heightened sense of team, feelings of empowerment and trust in the leader. The theory is easy to use contributing to its usefulness.

Conger and Kanungo's charismatic leadership theory is a predominant theory that is used to examine the effect of the charismatic leader on the follower. The theory has well developed propositions and empirical support and is utilized in various settings, disciplines, educational institutions, and contributes to explaining and interrelating

leadership concepts. The theory is referenced in past and current scholarly inquiries (Conger et al., 1987; Conger et al., 1997; Conger et al., 2000; Feinberg et al., 2005).

Feinberg, Ostroff, and Burke (2005) examined the impact of transformational leadership on the subordinates' perception of the leader to include the ability of the leader to create agreement and similar ways of thinking among the subordinates. This study provided empirical validity to the 1987 transformational leadership model of Conger and Kanungo. The study addressed the empirical gap throughout the literature that discusses transformational leadership. This model identifies two major constructs of transformational leadership and within-group agreement.

For this study, one of the pivotal attributes of the transformational leader is the ability of the leader to create agreement among the subordinates. As a theoretical definition, Feinberg et al. (2005) infer that within-group agreement is the extent to which followers agree with the leader. The major proposition examined in the Feinberg et al. (2005) study is:

leader behaviors and the extent of agreement among subordinates can be viewed as two separate but related indicators of transformational leadership. It is not only behaviors that are related to attributions of transformational leadership, but also a leader engaging in these behaviors in such a way that followers agree regarding the behaviors. (p. 475)

The proposition led to the hypotheses tested.

The design for the study was predominantly explanatory with multiple-mediated regressions used to test hypotheses. A correlational survey research design was used with a convenience sample of banking organization managers, Vice President or higher.

A custom made scale reflective of the dimensions of the mission of the organization was developed, to measure leadership behavior. It consisted of 36-items, and six dimensions, with items rated on a 5-point rating scale. The six dimensions included performance, customer focus, growth, and innovation. For these dimensions, internal consistency reliabilities for the six dimensions measured by the scale ranged from 0.83 to 0.90. Coefficient alpha values for the total scales were .97 for both peer and subordinates ratings. The scale was based on items derived from the literature and other scales to establish concurrent validity.

Reliability and validity were reported for the *Leadership Assessment Inventory (LAI)*, which was developed in 1993 and consists of 18 items that the authors describe as a “forced-choice format” (Feinberg et al., 2005, p. 478). Ethical aspects during data collection were not described.

With H1, (exploratory, correlational aspect of the study), Pearson r correlations, which is a low level analysis that does not explain relationships between the variables were conducted. For H2, (explanatory, correlational aspect of the study), the authors did a hierarchical multiple regression, followed by multiple mediating regression to examine the interaction between respondent groups. In both cases, the relationship between more positive leader behaviors and attributions of transformational leadership depends on the extent of agreement, while agreement has little impact when behaviors are rated less positively.

Feinberg et al. (2005) discusses the importance of this exploratory and explanatory study, the only known of its kind and assesses the importance of examining effective leadership in terms of consensus among followers about their perception of the

leader. Future research should examine whether the same relationship exists when subordinates or peers evaluate the transformational style of a leader; and the role that consensus plays in other aspects of work. Sample size was discussed as a limitation of the study and the measures used in the study.

Internal validity strengths of this study were that it addressed a problem that was validated by gap in the literature, generating two hypotheses testing propositions, using both leaders and subordinates, and high level statistical testing of hypothesis 2. Threats to internal validity included a weak statistical analysis of H1. The major external validity weakness was a convenience sample, therefore results could not be generalized to another organization. Future studies could address these threats to validity.

Measurement using the Conger-Kanungo Scale of Charismatic Leadership.

The Conger-Kanungo (C-K) multidimensional scale consists of 25 items using a six point (“very characteristic to very uncharacteristic”) response. The three stages of the Conger-Kanungo model are linked to the items on the C-K scale. For example, the items under “*Environmental sensitivity*”, “*Sensitivity to member needs*,” “*Does not maintain the status quo*” are directly linked to stage one-environmental assessment. The items labeled “*Vision and articulation*” capture the second stage, and stage three is measured in “*Personal risk*.” The scale consists of six dimensions: *vision and articulation* (6 items; score range from 0-6); *environmental sensitivity* (7 items; score range from 0-6); *unconventional behavior* (3 items; score range form 0-6); *personal risk* (4 items; score range from 0-6); *sensitivity to member needs* (3 items; score range form 0-6); and *does not maintain status quo* (2 items; score range form 0-6) (Conger & Kanungo, 1994).

Conger and Kanungo (1994) used Bass' (1985) scale to establish convergent and discriminate validity of the C-K measure. The reliabilities (Cronbach's alpha) for the C-K scale varied from 0.88 to 0.91, the reliability index was 0.88. The C-K scale is positively related to other leadership measures such as the scale developed by Bass. The C-K scale has the highest correlation with the Bass scale ($r = 0.69$) and lowest correlation with task orientation measures ($r = 0.26$), suggesting convergent and discriminant validity of the scale. Further evidence validity was established in the reanalysis of the 1994 study, where the C-K scale was revised to a 20-item, five factor scale of charismatic leadership. The overall scale in this study had a correlation of .69 with Bass' charisma scale and alpha reliabilities ranged from 0.72 to 0.87 (Conger et al., 1997).

Conger and Kanungo (1994, 1997) concluded that the scale had adequate reliability and convergent validity and discriminate validity were established. Discriminant coefficients distinguished between charismatic and non-charismatic leaders. Principal component analysis with varimax rotation and confirmatory factor analyses were performed to empirically verify the six factor structure of the instruments, establishing construct validity (Conger et al., 1994). The authors recommended further empirical studies to establish criterion validity and studies to explore the link between the individual behavioral dimensions and specific follower outcomes (Conger, & Kanungo, 1994; Conger et al., 1997).

Hershey and Blanchard

Hershey and Blanchard's Situational Leadership Theory. Situational leadership theory (SLT), also referred to as the life cycle theory of leadership, is a contingency theory of leadership that was developed in 1969 by Paul Hersey and Ken

Blanchard (Hersey, Angelini & Carakushansky, 1982; Hersey, Blanchard, & Natemeyer, 1979). SLT bears similarity to other contingency theories in that it is based on the premise that the leader is able to assess the situation and respond with relevant and fitting behaviors (Goodson, McGee, & Cashman, 1989). Hersey et al (1979) indicated that unlike other leadership theories, SLT assesses the effectiveness of the leader in terms of the actions of the followers.

According to Hersey et al. (1979), the pivotal construct of situational leadership is in the leader identifying the level of maturity of the follower, and, in turn model behaviors. This specifically refers to the measure of readiness and willingness that is displayed by the employee. Hersey et al. (1979) also identified four major constructs within this theory. These are defined as telling, selling, participating and delegating (S1-S4). Telling is a high task-low relationship category where the leader directs all actions of the follower. Selling describes when the leader both supports and directs the behavior. This is referred to as a high task-high relationship category. Participating defines a low task-high relationship category where both the leader and the follower are involved in the decision making processes. Where the leader neither directs nor supports, this is categorized as the low task-low relationship category of delegating (Hersey, Angelini & Carakushansky, 1982). The readiness of the follower (R1-R4) is also evaluated along the continuum of being unable and unwilling to take responsibility to being both willing and able to do the tasks (Kest, 2006).

The major proposition in SLT is that each of the four leadership behaviors described is appropriate depending on the level of follower readiness (Hersey et al., 1979; Goodson, et al., 1989). The ideal leadership/follower combination is telling for low

readiness of the follower; selling for moderately low readiness of the follower; participating for moderately high readiness of the follower; and delegating for high follower readiness (as cited in Goodson, et al., 1989). Throughout the literature reviewed, there is a schematic model developed by the authors depicting the relationship between the constructs.

Situational leadership theory has some interest, and there is some empirical support for the theory. There are empirical studies that have tested the link between situational leadership and various outcomes. Chen and Silverthorne (2005) examined functional relationships between SLT and employee job satisfaction and job performance, job stress and turnover intention. The model used Pearson's r to establish correlation between the variables. The study findings were mixed and found no correlation between the outcome variables and leadership styles and subordinate readiness. There was partial support of SLT whereby the higher the leadership score, the higher was the leader's influence (Chen & Silverthorne, 2005). Silverthorne (2000) confirmed that outcomes such as turnover, profits and absenteeism were related to SLT. These studies have implications in non-United States settings and American settings. It should be noted that high levels of data analysis such as multiple regression should be used to examine explanatory (correlational) relationships rather than Pearson's r , which is limited to examining of functional relationships.

In Graeff's 1997 study, it was noted that one of the weaknesses of SLT is that the theory is not applicable in some situations. Another weakness of the theory is its lack of empirical support (Avery, 2002). The *Leader Effectiveness and Adaptability Description*

(LEAD-Self and Others) is the instrument that was developed by Hersey and Blanchard to measure situational leadership (Maduakolam & Bailey, 1999).

Hersey and Blanchard's situational leadership model has applicability to more than one discipline, such as business, education, healthcare, and any organizational situation (Silverthorne, 2000; Ireh & Bailey, 1999). It also has applicability to different practice environments and cultures, such as the study by Avery (2002) which examined SLT among managers in Australia. This theory is socially significant in addressing issues related to job satisfaction, productivity, turnover and absenteeism among employees (Avery, 2002; Silverthorne, 2000; Chen & Silverthorne, 2005).

The theory has social utility in providing direction for practice, research and education and is socially congruent with a variety of societal settings. For example, the study by Silverthorne (2000) examined situational leadership in a large construction company in Taiwan. Thus the theory is a guide to understanding the relationship between leadership styles and various outcomes related to the readiness and willingness of employees to achieve the goals within an organization. The SLT has balance between simplicity and complexity contributing to its usefulness. In Avery's (2002) study, managers reported ease of use with the model.

Hersey and Blanchard's (1969) situational leadership model is a model that is used to examine leadership styles. The theory needs current empirical research to support its propositions and to further clarify how the various concepts between leader behaviors are related to follower willingness and readiness. Examples of questions to be investigated in future studies are:

1. Is there an explanatory relationship between specific leader behavior (S1-S4) and an increase in the readiness of the follower?
2. Is there an explanatory relationship between specific leader behavior and organizational outcomes?

SLT is current and applicable in a variety of settings. The strength of the model is in its broad application, which could lead to more frequent use. Key limitations lie in the studies that have been completed, where there has only been partial support of the model (Silverthorne, 2000; Silverthorne & Wang, 2001). With the mixed support of the SLT, there is evidence of lack of empirical support for the theory, therefore researchers have to be cautious in their use of the theory (Silverthorne, 2000; Silverthorne & Wang, 2001). Major competing models include transformational leadership, which focuses on the ability of the charismatic leader to influence the follower.

Measurement using the Leadership Effectiveness and Adaptability

Description (LEAD) by Hershey and Blanchard. As a part of the SLT model development, Hersey and Blanchard developed the Leader Effectiveness and Adaptability Description (LEAD-Self and Others) instrument (Ireh & Bailey, 1999). The *LEAD-Self* is a twelve item, unidimensional questionnaire that consists of tasks followed by alternative choice for behavioral action. Each item consists of a short vignette and respondents completing the instrument choose one of the four alternatives that best fit what they would do in that particular situation (Zorn & Violanti, 1993). The LEAD-Self measures self-perception of three aspects of leader behavior: style, style range and style adaptability. The leadership style of respondents is decided by counting the number of respondent choices reflecting each of the four task and/relationship combinations (*High*

Task and Low Relationship; Low Task and High Relationship; Low Task and High Relationship; Low Task and Low Relationship) (Graef, 1983; Sampson, 2000). As a measurement of leader adaptability, the LEAD scores for this behavior ranges from +24 to -24. This score is determined by summing the values assigned to the alternatives chosen in each of the twelve situations. The least to most appropriate alternatives from among four in each situation are scored +2, +1, -1, and -2 (Graef, 1983; Sampson, 2000). A positive score indicates an effective leader because the individual chose alternatives which were appropriate for the situation that was presented. A negative score indicates an ineffective leader because the alternatives chosen were not appropriate for the situation presented based on the theory (Zorn & Violanti, 1993).

The *LEAD-Other* instrument is completed by the subordinates and measures how they perceive the adaptability and effectiveness of managers (Silverthorne, 2000). Reliability estimates for the LEAD instrument range between 0.81 and 0.61 (Walter et al., 1980), and are problematic. Greene (1980) estimated reliability for the total LEAD-Other instruments, reporting a contingency coefficient of .71 with a correlation for the adaptability scores of .69. Validity was “standardized on the responses of 264 managers constituting a North American sample” (Greene, 1980, p. 1). Construct validity using exploratory factor analysis of the LEAD Other has not been reported in the literature.

Ireh and Bailey (1999) effectively used the *LEAD-Self* instrument to measure leadership styles of school superintendents. Multiple regression analysis in this study indicated that years of experience as an administrator made a significant ($R^2 = .17, p < .05$) explanatory contribution to their use of the S3 (Participating) style of leadership. Further

testing of the model could include a longitudinal study examining correlations as opposed to the cross-sectional application (Ireh & Bailey, 1999).

Arvidsson et al. (2007) used a modified version of the LEAD to examine how the leadership styles, leadership style adaptability, and leadership behavior differed across situations, operative conditions, leadership structures and working tasks in an air traffic control setting. The LEAD was modified to reflect 32 items, reflecting different situations, as opposed to the standard 12 situations of the LEAD instrument. While the authors reported means, standard deviations, and *t*-values, there were no reliability and validity data reported in this study.

To assess situational leadership abilities, a group of team managers were assessed by their team members at two Air Traffic Control Centers in Sweden. For each study location and for each situation, the profiles of the leadership styles were calculated as mean scores of the occurrence of each of the four possible leadership styles (S1-S4). Results of the study showed that for all situations and study location, the two most seldom used leadership styles were *S1-high task/low relationship behaviors*, and *S4-low relationship/low task behavior*. For Success and Group situations, *S3-high relationship/low task behavior* was the overall most frequently used leadership style. In Hardship and Individual situations, the *S2-high task/high relational behavior* was most frequently used. There were no reports of reliability and validity for this scale.

The Leadership Practices Inventory (LPI)

The Leadership Practices Inventory (LPI) developed by Kouzes and Posner measures five leadership practices with subscales using 30 items rated on a 10 point rating scale. The LPI reports on the frequency with which respondents demonstrate a

specific set of leadership behaviors where 1 = almost never, 2 = rarely, 3 = seldom, 4 once in a while, 5 = occasionally, 6 = sometimes, 7= fairly often, 8 = usually, 9 = frequently, and 10 = almost always. (Enger, 2004; Brown & Posner, 2001). The score range for the total scale is 30 to 300, where higher scores are associated with more effective leaders (Brown & Posner, 2001).

Each construct is measured by six statements (Carless et al., 2000; Brown & Posner, 2001), and the score range for each subscale is 6 to 60. Reliability estimates for each subscale are as follows: *Challenging the Process* (coefficient alpha = .81), *Inspiring a Shared Vision* (coefficient alpha = .90), *Enabling others to Act* (coefficient alpha =.89), *Modeling the Way* (coefficient alpha =.86), and *Encouraging the Heart* (coefficient alpha = .94).

In terms of validity, the LPI has concurrent, face, and predictive validity. Concurrent validity is noted because higher LPI scores correlate with positive outcomes, such as leadership credibility. The results of an LPI assessment are easily understood reflecting face validity and the LPI appears to be a good predictor of leadership performance, exhibiting predictive validity (Sumner et al., 2006). First order confirmatory factor analysis was used to establish construct validity validating the five factor structure and the subscales (Fields & Herold, 1997).

Organizational Commitment

Historical Development of Organizational Commitment Theory

As early as the 1960s, empirical research has been conducted with commitment as both an independent and a dependent variable (Reichers, 1985). Reicher (1985) in examining the historical development of organizational commitment credits the

beginning to a 1960 study by Becker that focused on the idea of side bets where employees stake an unrelated aspect of their lives on continued membership in the organization. An example of this behavior was that people would refrain from quitting their jobs for fear of been labeled as a “job hopper.”

It was Porter et al. (1974) in their seminal work that defined organizational commitment in terms of how strongly an individual identified with, and was involved with, a particular organization. Porter et al. (1974) describe this commitment in terms of three factors: the employee strongly believes in and accepts the goals and values of the organization; the employee’s willingness to exert a great amount of effort on behalf of the organization; and the employee’s desire to maintain membership within the organization. This three aspect type of commitment leads to the proposition that individuals who are committed to the goals of the organization and who are willing to exert energy on the behalf of the organization in order to achieve the goals are more inclined to remain with the organization. Further studies in organizational commitment, done by Porter and colleagues, distinguished between commitment as an attitude, and commitment as a behavior (Porter et al., 1974). Meyer and Allen (1991) further proposed a three-component model of organizational commitment.

Measurement using the Organizational Commitment Questionnaire Scale by Porter, Steers, Mowday, and Boulian. The *Organizational Commitment Questionnaire* (OCQ) is a 15-item multidimensional questionnaire which measures the degree to which subjects feel committed to the current organization (Porter, Steers, Mowday, & Boulian, 1974). The scale measures three aspects of attitudinal commitment: the belief in and acceptance of the organization’s goal and values; a willingness to exert great effort on

behalf of the organization, and a strong desire to maintain organizational membership. Responses for all items are on a seven-point semantic differential scale with anchors labeled as 1) strongly disagree and 7) strongly agree with score ranges from 1-7. A measure of overall commitment is derived by taking the mean score across all items.

Internal consistency of the OCQ (Cronbach's alpha) has been estimated to range from .82 to .93 across four time periods used in the original research (Porter et al., 1974). Both exploratory and confirmatory factor analyses were used to examine the variables for dimensionality, reliability, and validity. Exploratory factor analysis was used to establish construct validity of the three-factor structure of organizational commitment.

Confirmatory factor analysis validated a two-factor structure (9 items): affective commitment and continuance commitment. Construct discriminant validity was also confirmed (Lee & Gao, 2005).

Numerous empirical studies have tested this OCQ scale (Meyer & Allen, 1990; Lee & Jamil 2003). Lee and Jamil (2003) used hierarchical linear modeling analyses to show that a) organizational commitment was positively related to satisfaction and trust at the employee level and, b) at the group level, the relationship between organizational commitment and role states variables were significant. Lee and Gao (2005) applied the measure in the Korean setting and culture, identifying affective and continuance dimensions in this OCQ measure.

Meyer and Allen's Three-Component Model of Organizational Commitment

Meyer and Allen (1991) present a three-component framework of organizational commitment that is a further development from Mowday's earlier discussion of organization commitment. The definition of commitment includes three general themes:

“affective attachment to the organization, perceived costs associated with leaving the organization, and obligation to remain with the organization” (Meyer & Allen, 1991, p. 64). The authors classified these three aspects of commitment respectively as affective, continuance, and normative commitment. *Affective commitment* is focused on how emotionally attached the employee is to the organization. This also considers how involved the employee is with the organization. A strong affective commitment results in employees staying with an organization because they want to remain. (Meyer & Allen, 1991). *Continuance commitment* describes having knowledge of the costs that are associated with the employee leaving the organization. Employees with continuance commitment remain with an organization because they need to do so (Meyer & Allen, 1991). With normative commitment, employees feel obligated to continue their employment and feel that they ought to remain with the organization (Meyer & Allen, 1991). A schematic model shows the relationship between the concepts and also reflects the work-related behaviors that are impacted by each form of commitment (Meyer & Allen, 1991).

The major proposition of this framework is that affective, continuance and normative commitment should be viewed as subsets, rather than as types, of commitment. Consequently, an employee could have varying degrees of all three forms of commitment. Meyer and Allen (1991) propose that all three forms of commitment work together to impact the employee’s behaviors.

The theory has social utility in providing direction for practice, research and education and is socially congruent with a variety of societal conditions. For example, the theory has been adapted to health care, and other cultures, such as Malaysian

physicians (Samad, 2006) and public sector employees in Pakistan (Tayyeb & Riaz, 2004).

Numerous empirical studies have tested the propositions in the model. Using regression analysis, Samad's (2006) study found an inverse relationship between organizational commitment, job satisfaction, and turnover intentions. In Samad's study affective commitment was a strong predictor of turnover intentions. The study by Tayyeb and Riaz (2004) further supports the proposition of the three component model of organizational commitment. The major proposition with conflicting results in empirical studies is the distinction between the constructs of affective and continuance commitment (Tayyeb & Riaz, 2004).

Measurement using the Three Component Model of Organizational Commitment Scale by Meyer and Allen. To measure the three components of commitment, three eight-item subscales were developed (Meyer & Allen, 1991). Responses for the subscales were on a seven point semantic differential scale ranging with anchors labeled as: 1) strongly disagree and 7) strongly agree. The subscales are the *Affective Commitment Scale (ACS)*, which assesses the emotional attachment to the organization; the *Continuance Commitment Scale (CCS)*, assesses with cost associated with leaving the organization; and the *Normative Commitment Scale (NCS)*, which reflects the level of obligation that the employee feels to continue within the organization. The score range for each subscale ranged from 8 to 40 with a total score range from 24 to 120.

The internal consistency reliability estimates for each scale (Cronbach's alpha) were .87, .75 and .79, respectively (Meyer & Allen, 1991; Tayyeb & Riaz, 2004). Factor

analysis was used to establish the three-factor structure (Allen & Meyer, 1990). Concurrent validity was established by comparing the three subscales to the *Organizational Commitment Questionnaire* (OCQ), developed by Porter et al. (1974), which measured commitment similar to the scales developed by Meyer and Allen. Correlations between the ACS subscale and OCQ exceeded .80, while the correlations between OCQ and the CCS were not significant (Allen & Meyer, 1990). Factor analytic studies of the total scale have shown that three scales measure distinct constructs (affective, normative, and continuance commitment), resulting in the OCQ being a multidimensional instrument (Meyer et al., 1993; Tayyeb & Riaz, 2004).

Job Satisfaction

Historical Development of Job Satisfaction Theory. The systematic approach to the study of job satisfaction began in the 1930s, though the examination of the role of the worker's attitudes goes back to 1912 (Locke, 1976). Locke (1976) noted that as far back as World War I, fatigue reduction was being investigated, to include the effect of environmental factors, such as noise and ventilation, on fatigue. The Hawthorne studies initiated in the 1920s examined the effects of rest pauses and incentives on productivity, with a resulting shift of employees' attitudes, which included not only job satisfaction, but the employees' view of management and the economic situation of the time (Locke, 1976). The Hawthorne studies shaped the trend of research for the next two decades. The "Human Relations" movement emphasized the pivotal role of the supervisors and the work group as determinants of productivity and employee satisfaction (Locke, 1976).

Locke (1976) noted the three major historical trends identified in job satisfaction: 1) the physical-economic trend of the 1920s which stressed the physical arrangement of

the work and the working conditions, 2) the social, or human relation trend, beginning in the 1930s which identified the role of the supervisor, cohesive work groups, and positive employee-management relationships, and 3) the trend that emphasized the work itself that focused on the goal of satisfaction through growth in skill. All three trends provided a framework for studies in job satisfaction.

Job Satisfaction Theory. Locke (1969) developed a model of job satisfaction, where job satisfaction is defined as “a pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (p. 316). Locke’s (1969, 1970, 1976) *range-of-affect theory* proposes that affective response (satisfaction) with any job is dependent on two facets: 1) the discrepancy between what the individual wants and what the individual is perceiving that he/she is receiving, and 2) the importance of what the individual wants where the level of satisfaction is influenced by the have-want discrepancy.

The range-of-affect theory has been supported by empirical studies on job satisfaction (McFarlin, Coster, Rice, & Cooper, 1995; Jackson & Corr, 2002; Wu & Yao, 2006). McFarlin et al. (1995) used regression analysis to support the perceived have-want discrepancy gap indicated by Locke’s hypothesis. The study also established the usefulness of the theory to a non-United States setting as it was conducted among South African workers.

A criticism of Locke’s theory concerns whether the model, specifically, the have-want discrepancy, can predict global measures of job satisfaction (Jackson & Corr, 2002). The proposition has applicability to more than one discipline and any organizational

environment, and is also socially significant in addressing issues related to job satisfaction among employees.

Locke's range-of-affect theory has social utility in providing direction for practice, research and education and is socially congruent with a variety of societal situations. An example of a proposition to be tested in future studies would be related to how employees assess have and want. This is specific measure of the match between what the employees wanted from their jobs and what they currently receive with regard to each facet of the job (McFarlin et al., 1995).

Further development of the theory could include the development of value-importance-satisfaction functions for various employee groups. Major competing models include Herzberg's Motivator-Hygiene Theory which proposes that job satisfaction and dissatisfaction result from different causes (Locke, 1976). With respect to the nursing population, Price and Mueller (1981) also present a competing model which shows that job dissatisfaction is the single most important reason for nurses to leave their jobs.

Measurement using the Job Descriptive Index (JDI), the Job in General (JIG) Scales by Smith, Kendall and Hulin. The JDI is designed to assess job satisfaction and its various facets, while the JIG scale provides an overall measure of job satisfaction. Other scales that measure job satisfaction include the Andrew and Withey Job Satisfaction Questionnaire, and the Minnesota Job Satisfaction Questionnaire.

Job Descriptive Index (JDI). The JDI can be used to diagnose problems, monitor changes in job situation, and evaluate the effects of job improvement programs. The JDI consists of 72 items that measure five subscales of job satisfaction (Ironson, Smith, Brannick, Gibson, & Paul, 1989). Each subscale is measured with 9 or 18 adjectives

which are scored based on the following responses : yes = 3, cannot decide = 1, and no = 0 for positively discriminating items; and yes = 0, cannot decide = 1, and no = 3 for negatively discriminating items (Futrell, 1979). A total score is obtained by summing the total points on each facet. The point total for the *Present Pay and Opportunities for Promotion* subscales are doubled so that each facet shares a score range of 0-54. The *Work on Present Job* (18 items, score range 0 to 54, coefficient alpha = 0.80) measures an employee's satisfaction with the job itself; *Present Pay* (9 items, score range 0 to 54, coefficient alpha = 0.77) focuses on the employees' satisfaction with the pay; *Opportunities for Promotion* (9 items, score range 0 to 54, coefficient alpha = 0.90) measures satisfaction with the promotion policy of the company and the administration of the policy; *Supervision* (18 items, score range 0 to 54, coefficient alpha =0.87) measures employees' satisfaction with their supervisor; and people on your present job (18 items, score range 0 to 54, coefficient alpha =0.89) assesses satisfaction with co-workers (Harwell, 2004; Yeager, 1981).

Cronbach's alpha for each of the five subscales of the JDI in the 1997 revision ranged from 0.86 to 0.91. Researchers have summed the scores of the five subscales of the JDI to receive a composite score. However, the JDI scales were not designed to be summed. The five facets of the JDI reflect different constructs; therefore, an overall score on the JDI should not be calculated (Harwell, 2004; Ironson et al., 1989). The JIG is a more accurate measure of overall job satisfaction. The JDI shows strong concurrent validity in that it correlates with other job satisfaction scales (Harwell, 2004). Futrell (1979) used the multitrait-multi-method matrix for validation analysis confirming the five facets of the JDI. However, Yeager (1981) contends through principal component

analysis and scree test of the eigenvalues that there are nine factors, not five as noted in the original scale. Further construct validation needs to establish the dimensionality of JDI.

Job in General (JIG) Scale. The JIG was developed because the empirical evidence suggested that an overall job satisfaction score should not be calculated from the JDI. Factor analysis was used to support the JIG as a unidimensional scale that measured overall job satisfaction (Ironson, et al., 1989). The JIG used 18 items to assess overall satisfaction where responses were scored based on: yes = 3, cannot decide = 1, and no = 0 for positively discriminating items; and yes = 0, cannot decide = 1, and no = 3 for negatively discriminating items with a total score range of 0-54. The items consist of a list of short phrases and adjectives of low reading difficulty and respondents answer yes or no. Each examinee receives a total score that is obtained by adding the points on the JIG (Harwell, 2004; Ironson et al., 1989).

The estimate of reliability using Cronbach's alpha for the total JIG was acceptable at 0.91, while concurrent validity was established by correlating the JIG with other scales of job satisfaction such as the Faces scale, and the Brayfield-Roth scale. The correlating results were acceptable and ranged from 0.66 to 0.80 (Ironson, et al., 1989). Ironson et al. (1989) established discriminant validity by determining whether there were differences in the JDI and the JIG. Discriminant validity was established as the JIG prediction power of some global variables, while the facets scales are more closely related to specific behaviors. Exploratory factor analysis using principal components of the 18 items established the JIG as a unidimensional scale. One factor accounted for 87% of the variance (Ironson, et al., 1989).

Andrew and Withey's Job Satisfaction Questionnaire. The Andrew and Withey Job Satisfaction Questionnaire is a five item unidimensional questionnaire that measures global job satisfaction. Responses are on a seven-point rating scale where 1 = delighted, 2= pleased, 3 = mostly satisfied, 4 = mixed, 5 = mostly dissatisfied, 6 = unhappy, and 7 = terrible. Over all job satisfaction is measured by averaging the responses to the five items with a range of 1-7, where lower scores indicate that the worker is highly satisfied. A midpoint score of 3.5 would indicate that the worker is neither delighted nor terribly unhappy about the job (Johnson et al., 1999).

The internal consistency coefficient as an estimate of reliability was 0.81. Convergent validity was established by correlating the Withey Job Satisfaction Questionnaire with the Minnesota Job Satisfaction Questionnaire (MSQ) resulting in a correlation of 0.70, and the correlation of the Job Satisfaction Questionnaire with the JDI resulted in a correlation of 0.70 (van Saane et al., 2003). There was no report of exploratory or confirmatory factor analysis to establish construct validity for this scale.

The Minnesota Job Satisfaction Questionnaire (MSQ) by Weiss, Dawis, England, and Lofquist. The short form of the inventory includes a 20 item questionnaire related to a number of facets. Respondents use the 5-point rating scale to rate their satisfaction with various aspects of their work. Response categories are rated as follows: 1 = very dissatisfied, 2 = dissatisfied, 3 = neither 4 = satisfied, and 5 = very satisfied. Scores on this multidimensional instrument are summed to show the overall participant's satisfaction level, with scores ranging from 20 to 100. Sample items include "The chance to be 'somebody' in the community" (McCoy & Bradley, 2005). Overall job satisfaction scores below 50 demonstrate dissatisfaction, 50-69 indicate that the worker is neutral,

neither satisfied nor dissatisfied, and scores greater than 70 indicate that the worker is satisfied (McCoy & Bradley, 2005).

A reliability estimate of 0.88 (Cronbach's alpha) for the MSQ short form was reported (Ozyurt et al., 2006; McCoy & Bradley, 2005), while Avery et al. (1989) reported a reliability estimate of 0.90 (Cronbach's alpha) for the overall scale. In terms of validity, factor analysis of the 20 items resulted in two factors, intrinsic and extrinsic satisfaction (Avery et al., 1989). Concurrent validity was established by correlating overall job satisfaction scores with a one-item job satisfaction question on demographic data forms (VanVoorhis & Levinson, 2006). The coefficients ranged from 0.46 to 0.58 (Avery et al., 1989; VanVoorhis & Levinson, 2006).

Turnover and Intention to Leave Models

Historical Development of Turnover Theory

Studies of employee turnover are throughout the literature on organizational behavior and industrial psychology. As early as 1910, studies were conducted on the subject, but models were not developed (Steers & Mowday, 1981). Attempts to develop comprehensive models related to turnover and the turnover process began in the 1950s with work by March and Simon (as cited in Steers & Mowday, 1981). Further development of turnover models occurred in the 1970s with different research conducted by Price in 1977, Mobley in 1977 and Forrest also in 1977. These models sought to link satisfaction with turnover, and formed the basis for current turnover models (Steers & Mowday, 1981). Early models of turnover focused on one job attitude (job satisfaction), and may not have included other attitudes such as organizational commitment. The

models were unidirectional in flow, not accounting for feedback loops which can impact an employee's intent to leave an organization (Steers & Mowday, 1981).

Price and Mueller's Turnover Model. The "Price-Mueller" model of turnover is one of the major turnover models described in the literature. The purpose of Price and Mueller's (1981) research was to develop a causal model which explained the turnover of hospital nurses. Price and Mueller (1981a) described turnover as "voluntary separation of an individual from an organization" (p. 2), and the research was focused on voluntary separation. The model uses 11 exogenous variables that are determinants of the nurses' intent to stay: *opportunity, routinization, participation, instrumental communication, integration, pay, distributive justice, promotional opportunity, professionalism, general training and kinship responsibility*. Intent to stay was an intervening variable between job satisfaction and turnover.

Price and Mueller (1981) described the variables used for the theory development. *Opportunity* is defined as the availability of alternative jobs in the organization's environment. *Routinization* is the degree to which a job is repetitive. *Participation* is the degree of power that an individual demonstrates related to the performance of the job. This is further described as autonomy within nursing. *Instrumental communication* is the degree to which information about the job is transmitted by an organization to its members. *Integration* is the degree to which an individual has close friends among members in the organization. *Pay* describes money and its equivalent, such as benefits. *Distributive justice* refers to the degree to which rewards and punishments are related to performance. *Performance opportunity* is the degree of potential vertical occupational mobility within an organization. *Professionalism* is the degree of dedication by

individuals to occupational standards of performance, where the greater the dedication to occupational standards, the greater the professionalism. *General training* is the degree to which the occupational socialization of an individual results in the ability to increase the productivity of diverse organizations. *Kinship responsibility* is the degree of an individual's obligations to relatives in the community in which the employer is located.

There has been empirical research on propositions in Price and Mueller Turnover Model (Boyle et al., 1999; Kovner et al., 2006). Castle et al. (2007) used the Price and Mueller model because the model includes both turnover and intent to leave. For Castle's et al. empirical study, the model was modified to reflect the nursing home environment, such as facility characteristics. According to the modified model, an employee's intent to leave is influenced by role related characteristics, such as tenure; personal characteristics, such as age; facility characteristics, such as staffing levels; and turnover opportunities, such as local unemployment rates, and job characteristics. The model has applicability to more than one discipline and any organizational environment (healthcare, information technology).

Intention to Leave

Mobley's Intention to Leave Model. Mobley et al. (1979) found intention to quit to be the immediate precursor of turnover. Therefore, the best predictor of turnover would be intention to quit. The relationship between turnover and intention becomes stronger relative to the specificity of the intention statement and the closer the time frame between the measurement of the intention and the actual behavior. Intention to search and actual search behavior are intentional behaviors that precede intention to quit and turnover (Mobley et al., 1979).

Mobley et al. (1979) proposed that the essential determinants of intentions are satisfaction, attraction expected utility of the present job, and attraction expected utility of alternative jobs or roles. Satisfaction is seen as the “affective response to evaluation of the job” (p. 518). The resulting behavior of satisfaction versus dissatisfaction is that the employee uses the approach avoidance technique.

Attraction is future oriented and is based on the whether or not the job will lead to future ability to achieve various outcomes that are valued. Attraction expected utility of the present role, contributes to an approach-avoidance technique. One may be dissatisfied with the current work situation, but may remain attracted to it because of the expectation of future attainment that is valued (Mobley et al., 1979).

The model also proposes that there has to be an attraction to alternatives with the expectation of attaining the alternatives. Attraction of alternatives is defined in terms of expectation that the alternative will lead to the future attainment of valued outcomes (Mobley et al., 1979).

This model is based on the fact that there are a number of cognitive and behavior interactions that occur between the emotional experience of job dissatisfaction and the actual withdrawal behavior. This model proposes that the employee has thoughts of quitting which leads to an evaluation of alternatives, intention to quit and then the withdrawal decision and behavior (Mobley, Horner, & Hollingsworth, 1978).

Mobley et al. (1978) used regression analysis to evaluate the efficacy of the model. The model was tested among a sample of 203 hospital employees. Using regression equations where each variable in the model served as the dependent variable, the researchers found a .49 correlation between intention to quit and actual turnover

within one year, which was a significantly stronger relationship than the relationship between satisfaction and turnover.

A criticism of this model is that although Mobley et al. (1979) were able to find support for the model, cross-validation of the results was not conducted (Mowday, Koberg & McArthur, 1984). Mowday et al. (1984) examined the model in two samples (hospital employees and clerical staff). Results of regression analyses showed that intention to stay was the best predictor of turnover for each sample.

Nurses' intention to leave. Tourangeau and Cranley (2006) conducted an explanatory (correlational) survey study that examined the factors that influence the nurses' intentions to remain employed in their respective acute care hospitals. A random sample of 13,000 registered nurses and registered practical nurses working in acute care hospitals in Ontario, Canada was selected from the 2003 College of Nurses of Ontario registration database.

The Ontario Nurse Survey instrument was used to assess where participants worked in the hospital, participants' evaluation of the quality of patient care, history of injury from sharps, burnout, career intentions, job satisfaction, and demographic information. Also included in the survey were the Maslach Burnout Inventory (MBI), the Revised Nursing Work Index (NWI-R), and the McCloskey Mueller Satisfaction Scale (MMSS). Relative to this study, the MMSS was used to measure global nurse job satisfaction and consisted of eight distinct job satisfaction dimensions, which include satisfaction with: extrinsic rewards, scheduling, balance of family and work, co-workers, interaction opportunities, professional opportunities, praise and recognition, and control and responsibility. Cronbach's alpha for these subscales ranged from 0.52 (*Extrinsic*

Reward) to 0.84 (*Scheduling Satisfaction*). The global scale, which combined all 31 items from the eight subscales, had an alpha of 0.89 (Mueller & McCloskey, 1990). With respect to the NWI-R, *Nurse Participation in Hospital Affairs* was one of five subscales. Cronbach's alpha for this scale in the current study was 0.85 (Tourangeau & Cranley, 2006). Nurse burnout was measured on the emotional exhaustion subscale of the MBI, with Cronbach's alpha being 0.91 for this study. Within this study, the dependent variable was nurse-reported intention to remain employed within the current hospital until retirement. For this measure, nurses were asked to respond to a question about their future career plans. The responses were based on a four-point rating scale ranging from very unlikely (value = 1) to a very likely (value = 4). Higher response scores were indicative of the stronger intention of the nurse to remain employed in the current hospital (Tourangeau & Cranley, 2006).

To test the hypothesized model, stepwise multiple regression analysis was used. Regression analysis revealed that the model used accounted for 34% of the total variance ($R^2 = .34, p < .001$). Ten of the 19 hypothesized predictors of intention to remain employed had estimates that were significant. The researchers found that years employed in the hospital to be a significant predictor of organizational commitment. The more years that nurses reported being employed in their current hospital, the more likely they were to remain employed in that hospital until retirement. *Level of Teamwork* was found to be a significant predictor of nurse intention to remain employed ($p < .015$). The higher teamwork was rated in the work area, the more likely it was for the nurses to report intention to remain employed.

Overall job satisfaction, satisfaction with co-workers, and satisfaction with interaction opportunities were also significant predictors. The researchers found that as overall nurse job satisfaction increases, nurse intention to remain employed in the current hospital also increased. In addition, the higher nurses rated their satisfaction with co-workers and their satisfaction with opportunities for interactions at work, the more likely it was that the nurse intended to remain employed at that hospital. Those predictor variables most strongly correlated with the dependent variable, intention to remain employed, were nurse age, years of employment at the current hospital, and overall job satisfaction.

Internal validity strengths were the research design, sample size sufficient to conduct analysis, reliable and valid measures of variables, and data analysis methods. The high response rate and random sample size are strengths to external validity (generalizing findings to acute care hospitals in Canada).

The researchers noted that while the regression model explained 34% of the variance in the nurses' intention to remain employed with their current hospital, 66% of the variance remains unexplained and is indicative of the need to identify other variables that explain intentions to remain employed such as, organizational characteristics, other demographic factors specific to nurses or changing life circumstances. Limitations of the study were the fact that the study was conducted during the time of the Sudden Acute Respiratory Syndrome (SARS) in Canadian hospitals. The SARS experience could have affected the nurses' intention to remain employed. Other limitations were the sample being limited to acute care hospitals in Ontario, Canada. The findings may not be generalizable to other settings.

The MMSS has been used in numerous empirical studies related to the job satisfaction of nurses. Roberts, Jones and Lynn (2004) used the MMSS to examine the job satisfaction of new baccalaureate nurses. Construct validity was established by correlating the subscales of the MMSS to the subscales of the Job Characteristics Inventory. The reliability estimates (Cronbach's alpha) ranged from .48 to .85 with two of the subscales (*Extrinsic Rewards* and *Family and Work Balance*) having estimates that fell below the .70 level. Each of these subscales had only three items, hence the low reliability. The results of the study indicated that nurses who intended to stay in their current position were significantly more satisfied in 7 of the 8 MMSS subscales than those who did not intend to stay.

Tourangeau, Hall, Doran, and Patch (2006) examined the psychometric properties of the MMSS when used to measure hospital nurse job satisfaction. In the original model of the MMSS, confirmatory factor analysis using PCA with varimax was used to force an eight-factor model for the 31-item instrument. The eight factor model explained 61.1% of the variance. In this study, exploratory PCA with varimax yielded a seven factor model with reliability estimates ranging from .31 to .85, with three of the seven factors having reliability coefficients less than .70.

Nurse managers' leadership style and intention to leave. Boyle, Bott, Hansen, Woods and Taunto (1999) studied the influence of nurse managers' leadership style on critical care nurses' intent to stay in the employment positions. The authors noted that intent to stay had the strongest predictive relationship to retention.

The researchers used a conceptual model of intent to stay of staff intensive care unit (ICU) nurses. The model, grounded in empirical literature, is based on the concept

that ICU nurses intent to stay is related to manager characteristics of power, influence, and leadership style; organizational characteristics; nurse characteristics; and work characteristics (Boyle et al., 1999).

A sample of 255 ICU nurses from four large acute care hospitals in the United States was randomly selected. Both specialty (neonatal, neurological, cardiovascular surgery) and medical-surgical ICU's were included in the study. Staff completed questionnaires that included information about their respective managers; however, the exact instruments were not named though the authors noted that the study was an extension of research by Price and Mueller. Specific variables measured were: manager characteristics, organizational characteristics, and work characteristics; the nurse characteristic of opportunity elsewhere, job stress, job satisfaction and commitment and the outcome variable of intent to stay. The internal consistency reliability coefficient (Cronbach's alpha) for each measure was assessed and ranged from 0.61 for position power (a measure of manager characteristics) to 0.94 for distributive justice (a measure of organizational characteristics).

A significant correlation was seen between promotional opportunities for critical care nurses and managers who had greater personal power ($r = 0.25; p < .001$). Staff reported a moderate intent to stay and high job satisfaction.

Multiple regression path analyses estimate the explanatory variable, and the intervening variables on intent to stay. Manager characteristics, promotional opportunities, and job satisfaction were significant explanatory variables of intent to stay and 52% of the variance in intent to stay among critical care nurses was explained with this model. Characteristics of power, influence, and leadership style of nurse managers

accounted for 12% of the variance in intent to stay. The addition of manager characteristics to the model increased its explanatory power and allows for the development of leadership strategies for nurse managers.

Limitations of the study, stated by the authors, included the fact that two of the scales had lower reliability than the 0.70 generally accepted standard. This was attributed to the use of short scale length as opposed to lack in internal consistency among the items. In addition, in terms of external validity, a larger sample size would increase generalizability, however, the study was limited to one geographic area impacting the representativeness. Future study recommendations by the author included study designs that test the effects of management and leadership strategies, resulting in empirically supported strategies that could be used to impact nurses intent to stay.

Job satisfaction, organizational commitment and intention to leave. In a meta-analysis of 25 studies, Barak et al. (2001) analyzed the relationship among demographic variables, personal perceptions, such as organizational commitment and job satisfaction, and organizational conditions and either turnover or intention to leave among child welfare, social work, and other human service employees. The analysis included studies related to intention to leave and actual turnover. In terms of demographic factors, the researchers found that age, education, job level and tenure with the organization to be predictors of turnover, where younger and better educated employees are more likely to leave. In terms of job level, the higher the job level that the employee has in the organization, the lower the likelihood of quitting. Those employees with highly specialized skills remain in the job for longer periods of times. There was an inverse

relationship between tenure and turnover where turnover rates were higher among employees with a shorter length of service.

Barak et al. (2001) found that job satisfaction was a consistent predictor of turnover. The more satisfied employees were with their jobs, the less likely they were to quit. In terms of job satisfaction, the evidence also supported the job satisfaction impacting organizational commitment and intention to leave. Employees with lower levels of commitment experience less job satisfaction and increased their likelihood of leaving their jobs.

Synthesis of the literature by Barak et al. (2001) showed similarities in measures. Burnout was consistently measured using the three scales of the *Maslach Burnout Inventory* (MBI). Job satisfaction was measured by the *Job Satisfaction Survey* developed by Spector, or the three item *Job Satisfaction Scale*, while organizational commitment that examines a worker's attachment to the job was measured by the *Organizational Commitment Questionnaire* developed by Mowday, Steers and Porter. While the authors included a summary of the included studies and results, reliability and validity for the measurements were not reported.

Appropriate meta-analysis techniques were utilized. In the meta-analysis with 80 unique predictor variables being assessed, each study was coded for the study sample, the type of turnover measure, whether the study reported correlation or regression coefficients, sample size, and publication date. The effect size estimate used in the meta-analysis was r . The results indicated that in the category of personal demographics, age was the best predictor of turnover. In addition, organizational commitment ($z = 10.21, p$

< .001), professional commitment, burnout ($z = 4.84, p < .001$) and job satisfaction ($z = 8.50, p < .001$) were the best predictors of intention to quit.

Limitations noted by the authors were the small number of studies that were included in the meta-analysis and the differences in the operationalizing of variables across the different studies. The authors also found that generalizability of the findings of the meta-analysis might be limited due to the diverse sample size and the infrequent use of the predictor variables across the studies.

Future study recommendations by the authors included studies related to gaps in the literature including an analysis of macrolevel variables such as organization setting, structure, size and other economic factors. Other recommendations include examination of how various predictor variables interact and multiple methods of measurement. The authors recognized a strong need for a simultaneous examination of strongest turnover predictors in order to establish their relationships with each other and to find mediating and moderating variables. Other study recommendations included further examination of intention to leave and turnover as intention to leave is only a portion of actual turnover.

Measurement using the Meyer, Allen, and Smith's Intention to Leave Scale.

Meyer, Allen, and Smith (1993) developed a three-item scale that specifically measures nurses' intention to leave. The items are rated on a 7-point semantic differential scale with anchors labeled as; 1) strongly disagree and 7) strongly agree (Meyer, Allen, & Smith 1993; Kickul, 2001). Responses are averaged across the items to give intention-to-leave scores with score ranges from 1 to 7. A reliability estimate of 0.83 (Cronbach's alpha) for the intention to leave scale was reported (Meyer et al., 1993). While there was research that reported reliability estimates, validity methods for the three item intention to

leave scale were not reported (Meyer, Allen, & Smith 1993; Kickul, 2001; Labatmediene, Endriulaitiene, & Gustainiene, 2007).

Measurement using the Price and Mueller's Job Satisfaction/Intent to Leave Questionnaire. As a part of the overall questionnaire, Price and Mueller (1981) developed a two-item, unidimensional, survey as a measure of intent to stay (a predictor of turnover), with each item measured on a five point rating scale ranging from 0 to 4. The items are: "Which of the following statements most clearly reflect your feelings about your future in the hospital?", and "Do you expect to leave the hospital in the near future?" The response categories on this 5-point scale for the first item is 4 = definitely will not leave, 3 = probably will not leave, 2 = uncertain, 1 = probably will leave, and 0 = definitely will leave. For the second item responses ranged from 0 = Will definitely leave in the near future, 1 = The chances are quite good that I will leave, 2 = The situation is uncertain, 3 = The chances are very slight that I will leave, and 4 = definitely will not leave in the near future. The total score range is 0 to 8. High scores are associated with the employee's intent to stay within the organization.

The reliability estimate was 0.85 (Cronbach's alpha) for the two questions related to intent to stay. The overall Cronbach's coefficient alpha for the variables in the Price and Mueller's Job Satisfaction/Intent to Leave Questionnaire was .83 (Price & Mueller, 1981). Factor analysis was used to determine convergent validity (Price & Mueller, 1981).

Leadership Styles, Job Satisfaction, Organizational Commitment, and Turnover

In the Walumbwa et al. (2005) study, the authors examined the relationship between transformational leadership, organizational commitment, and job satisfaction across two cultures (United States and Kenya). The focus was on organizational commitment and job satisfaction as the authors found that a link existed between these variables and withdrawal behaviors among employees (Walumbwa et al., 2004). The study found that results of the study showed a positive, significant relationship between organizational commitment and job satisfaction in both the United States and Kenya (Walumbwa et al., 2005).

Morrison et al. (1997) used a non-experimental quantitative, correlational, explanatory survey research design to examine the relationship between leadership style and job satisfaction of nurses with empowerment as a mediating variable. The study showed that both transformational and transactional leadership were positively related to job satisfaction and that leadership styles have a greater influence than empowerment on the way staff feel about their jobs. In a meta-analysis of 155 studies, Tett and Meyer (1993) analyzed the relationship among job satisfaction, organizational commitment, turnover intention and, turnover. Results of the review support the view that job satisfaction and commitment each contribute to the turnover process. Tett and Meyer (1993) found that turnover intention is the strongest predictor of turnover, followed by organizational commitment and job satisfaction, where job satisfaction correlated less strongly than commitment.

Comparison of the literature showed that there is sensitivity in the measures that are used as a part of studies related to turnover and the variables that impact turnover. The original 15-item OCQ correlated more strongly with turnover compared to the 9-item version. Analysis also showed that in the job satisfaction and commitment studies as they relate to turnover, it is important to consider the use of single versus multi-item global satisfaction scales. The largest amount of variance (43%) was explained with the use of multi-item intention measures; and the smallest amount (16%) with the single-item intention measures.

Limitations noted by the authors were the use of path analysis which presents a weaker evaluation of causal relationships based on correlational data. Future study recommendations are related to the dimensionality of these instruments and to the repeated investigation of the causal link among a variety of variables.

Leadership Styles, Other Factors, and Turnover

Bratt et al. (2000) used a cross-sectional, non-experimental descriptive design to identify other factors, in addition to leadership styles, that impacted the job satisfaction of nurses. They used a random sample of 1973 registered nurses from 65 pediatric acute care institutions that were members of an association of pediatric facilities in Canada and the United States. The factors studied included job stress (dealing with the families of patients), nurse to physician collaboration, and group cohesion. Organizational job satisfaction was positively correlated with group cohesion, professional job satisfaction, nurse-to-physician collaboration and nursing leadership behaviors.

The study showed that the entire model explained 52% of the variance in job satisfaction within the organization, where job stress alone explained 32% of the

variance. Nursing turnover is increased among nurses who have increased job stress (Bratt et al., 2000).

Factors Influencing Turnover. Empirical research indicates that there are numerous factors that influence turnover and intention to leave. Opportunity, defined as the availability of alternative jobs in the local job market, is an environmental variable that influences turnover (Price, 2001). The result is that where there is increased opportunity, there is increased turnover (Price, 2001). Other predictors of turnover include age, education, job level, gender, and tenure within the organization, where younger and better educated employees are more likely to leave their jobs (Barak et al., 2001). Inversely, turnover rates are lower among employees with longer lengths of service (Krackhardt et al., 1981). Leader-member exchange (LMX), which refers to the quality of the relationship between the supervisor and subordinates, also impacts turnover (Harris, et al., 2005). There is an inverse relationship between LMX and turnover intentions, where the supervisor develops a high quality relationship with the high performing and high-potential subordinates, decreasing the likelihood of turnover intentions (Harris, et al., 2005).

Specific to healthcare organizations and nurses, job satisfaction was found to be a predictor of turnover where there is an inverse relationship between overall job satisfaction and turnover (Mobley et al., 1979; Tourangeau & Cranley, 2006; Castle et al., 2006; Kovner et al., 2006). Other factors that influence turnover include occupational commitment and managers' leadership style (Nogueras, 2006; Pare & Tremblay, 2000; Boyle et al., 1999).

Synopsis of the Literature

Turnover of registered nurses in acute care organizations is a problem that is now at the forefront and is a growing concern for healthcare executives. Efforts to decrease turnover among registered nurses are becoming the area of focus. This study examines a number of variables that impact the nurses' intention to leave their current jobs. While there is not one main theory that forms a single framework, numerous theories that connect leadership, job satisfaction, organizational commitment and nurses' intention to leave have been discussed.

Theoretical Literature

Leadership styles. Hershey and Blanchard's situational leadership theory is a contingency theory that measures relationships between leaders and followers (Hersey, Angelini & Carakushansky, 1982; Hersey, Blanchard, Natemeyer, 1979). The major proposition of the theory is that the leader is assessed in terms of the actions of the followers, which is depicted in a schematic model. With situational leadership, it is the leader's responsibility to recognize the level of maturity of the followers and modify behaviors in order to be effective. Major constructs are telling, selling, participating and delegating (S1-S4) which defines the leader-follower continuum and how the leader would relate to the follower. The readiness of the follower (R1-R4) is also assessed along a continuum which determines if the follower is willing and able to do the tasks. The major proposition is that each of the leadership behaviors is appropriate based on the level of the followers (Kest, 2006; Hersey et al., 1979; Goodson, et al., 1989).

The theoretical literature about situational leadership theory is applicable to a variety of settings. However, studies that examined the link between situational

leadership and organizational outcomes such as employee job satisfaction, job performance and turnover intention have received mixed review and demonstrated lack of empirical support throughout the literature. The constructs within the theory were operationally defined and became more obvious with the schematic model; however, empirical studies have not been able to fully support how the constructs relate with each other (Chen & Silverthorne, 2005; Kest, 2006; Avery, 2002; Silverthorne & Wang, 2001). The *Leader Effectiveness and Adaptability Description (LEAD-Self and Others)* is the instrument developed by Hersey and Blanchard (Ireh & Bailey, 1999).

One can readily agree with the definitions of the constructs of the theory as leaders have to consistently assess the maturity of followers and use that assessment to decide how to communicate and share responsibilities. However, one has to disagree with the relationship between the constructs as the studies were not able to show causal relationships or linkages among the variables (Chen & Silverthorne, 2005; Kest, 2006; Avery, 2002; Silverthorne & Wang, 2001).

Bass' transformational and transactional leadership theory defines leadership in terms of transactional and transformational processes (Bass, Waldman, & Avolio, 1987). The theory consists of six major constructs that were defined by Bass. Charisma, intellectual stimulation, individual consideration, contingent reward, active management-by-exception, passive-avoidance define the transformational and transactional processes. A major proposition is that charisma contributes most to the variances in transformational leadership (Bass, Waldman, & Avolio, 1987; Avolio et al., 1999; Gellis, 2001).

Optimally, the leader rates high on transformational behavior, demonstrates some transactional behavior, and less on passive avoidance. The theoretical literature about

Bass' transformational leadership is clear on the fact that the theory adds to practice and research and is applicable across settings, organizations and cultures (Chen, Beck & Amos, 2005).

A competing model to transformational leadership is the leader member exchange. It would be interesting to see if the followers' reactions are based solely on the leaders' behavior or in the way in which the leader-follower integrates to accomplish common goals (Barge & Schlueter, 1991).

Conger and Kanungo's (1987) model of charismatic leadership defined three distinguishing behaviors of the leader (environmental assessment, vision formulation, and implementation). The leader is then able to build trust with subordinates. The constructs are operationally defined and are measured by the C-K scale.

Organizational commitment. Porter et al. (1974) provided the seminal theoretical work that defined organizational commitment in terms of how an employee identified with their organization. The theoretical literature describes organizational commitment in terms of how strongly the employee believes in, and accepts, the goals and values of the organization; the employee's willingness to exert effort on behalf of the organization; and the employee's desire to maintain membership within the organization. A major proposition is that employees who are committed to the goals of the organization and who are willing to exert energy in order to achieve the organizational goals are more inclined to remain with the organization.

Meyer and Allen (1991) later presented a three-component framework of organizational development that has its roots in Mowday's earlier works on organizational commitment. Meyer and Allen (1991) define commitment in terms of:

affective attachment to the organization (*affective commitment*), perceived costs associated with leaving the organization (*continuance commitment*), and obligation to remain with the organization (*normative commitment*). Major propositions are that a strong *affective commitment* results in employees staying in an organization because they want to remain, while employees with *continuance commitment* remain with an organization because they need to do so. Employees with high *normative commitment*, employees feel obligated to continue in their employment and feel that they ought to remain in the organization (Meyer & Allen, 1991). An employee can have varying degrees of all three forms of commitment (Meyer & Allen, 1991). The three-component model is socially significant in addressing issues in the area of organizational commitment and is applicable across settings and cultures (Samad, 2006; Tayyeb & Riaz, 2004). Allen and Meyer (1991) found that because of the high correlations between affective commitment and normative commitment, there is some doubt about the distinction between these constructs.

Job satisfaction. Locke's (1969) range-of-affect theory defines job satisfaction in terms of a pleasurable emotional state caused by recognizing the value in one's job. The theory describes satisfaction in terms of two factors: 1) the discrepancy between what the individual wants and what the individual perceives is being received, and 2) the importance of what the individual wants, where the level of satisfaction is influenced by the "have-want discrepancy" (Locke, 1969, 1976). McFarlin et al. (1995) found the need for further testing the discrepancy between of what the employees wanted from their jobs and what they currently receive. The major proposition from this discrepancy is that a larger range of satisfaction is expected when workers place greater importance on a facet

of the job. This results in greater satisfaction when conditions are favorable and greater dissatisfaction when conditions are unfavorable. If a facet of the job has low importance to the individual, then a strong affective response would not be elicited.

Intention to leave and turnover. Seminal works on turnover began as early as the 1910s though models were not developed (Steers & Mowday, 1981). Subsequent early models of turnover were unidirectional in flow and did not account for feedback loop which impact an employee's intent to leave an organization. While Steers and Mowday's model of turnover suggests a causal relationship between variables, such as organizational commitment and job satisfaction, further development of the theory could propose causal linkages between the sequence of an employee leaving. Further research is also needed that focuses on the role of job performance in the turnover process and also a comprehensive examination of how people begin the process of searching for job alternatives (Steers & Mobley, 1981).

Mobley et al. (1979) describes intention to leave as the immediate precursor of turnover. The link between turnover and intention becomes stronger relative to the specificity of the intention statement and the closer the time frame between the measurement of the intention and the actual behavior (Mobley et al., 1979). The major proposition proposes that satisfaction, expected utility of the present job, and attraction expected utility of alternative jobs are the essential determinants of intention to leave.

The Price-Mueller model of turnover is widely referenced in the literature (Price & Mueller, 1981; Boyle et al., 1999; Castle et al., 2007). Price and Mueller (1981) describe turnover as an individual voluntarily separating from an organization, where the employee's intention to stay is the precursor of turnover. There are 11 variables

described as determinants of intention to stay: *opportunity, routinization, participation, instrumental communication, integration, pay, distributive justice, promotional opportunity, professionalism, general training, and kinship responsibility*. The model is applicable across more than one discipline and organizational environment.

Empirical Literature

Leadership styles. Quantitative studies have been used to examine the relationship between situational leadership and various outcomes (employee job performance, job stress and turnover intention (Chen & Silverthorne, 2005; Avery 2002; Silverthorne, 2000; Ireh & Bailey, 1999). A number of the studies reviewed were non-experimental, exploratory designs and used non-probability (convenience) sampling plans. Types of analyses included the use of t-test to test for significant differences (Avery, 2002); and ANOVA to determine differences between the groups of school superintendents. None had experimental designs.

Populations included school superintendents in the United States (Ireh & Bailey, 1999); and Australian managers from a range of organizations (Avery, 2002), and a construction company in Taiwan (Silverthorne, 2000). Future studies were recommended in non-US settings (Avery, 2002), and other US school districts (Ireh & Bailey, 1999). There are gaps in the literature as the empirical evidence does not consistently show strong support for the constructs and how they are related to each other, or for the relationship between the leader behavior and the maturity of the followers (Chen & Silverthorne, 2005; Graeff, 1997; Silverthorne & Wang, 2001). Limitations for all the studies included sample size. Chen and Silverthorne's (2005) also have poor presentation of the analysis and used a weak method of data analysis. Avery (2002) explained the importance of the relationship between situational leadership and various employee outcomes, however, little of this is documented in the literature about health professionals or, specifically, nurses in the acute care setting.

Empirical studies support transformational leadership complementing the effects of transactional leadership on various outcomes such as job motivation and commitment (Felfe, Tartler, & Liepmann, 2004; Kane & Tremble, 2000). Empirical studies over a number of years confirm the link between transformational leadership and various outcomes such as organizational commitment, leader outcomes of effectiveness, satisfaction and extra effort, and staff nurse retention (Avolio et al., 2004; Gellis, 2001; Kleinman, 2004).

The constructs in Bass' theory are operationally defined and are measured by the *Multifactor Leadership Questionnaire* (MLQ), which has a self-rating form. Extensive studies have established reliability and validity of the measure. For example, a reliability coefficient of .80 (Cronbach's alpha) was reported with intercorrelation between the transformational and transactional dimension ($r = .72$). Exploratory factor analyses confirmed the items of the MLQ that measure the five transformational, three transactional and one non-leader factor (Avolio et al., 2004). Confirmatory factor analyses established discriminant validity between the transformational scales and the transactional scales (Bass, 1985; Felfe et al., 2004; Avolio et al., 1999). Further empirical studies are needed that focus on longitudinal data.

Organizational commitment. Meyer, Allen, and Smith's (1993) quantitative, explanatory study was an examination of the generalizability of the three-component model of organizational commitment that was developed by Meyer and Allen (1991). Internal validity strengths included the use of confirmatory factor analyses for examination of the measures showing strong correlations between the three aspects of commitment. Their study found limitations in the fact that the research studied members

of one occupation-nursing, the use of self-report measures of work behavior and the modest reliability of some of the measures. Clearly defined procedures allow for replication of the study. Additional study is needed with other occupations. Future studies should examine the psychometric qualities of affective commitment, normative commitment, and continuance commitment.

Kickul (2001) examined how unfulfilled employer promises influence employee's intention to leave small firms. The proposition is that when employees perceive that the company has failed to fulfill promises made related to inducements, employees often have negative feelings toward the small firm resulting in lower levels of commitment to the organization. Kickul used hierarchical multiple regression to examine the various relationships, and the analysis found support for the hypothesized relationships between specific contract breach and employee work-related attitude. The limitation identified was the use of a cross-sectional study, and the use of small firms, impacting the ability to generalize the study to larger firms. Other limitations included the fact that the predictors and beliefs were taken from one source, the employee, which may have resulted in employee bias. Further longitudinal studies would establish a causal direction among the relationships investigated in the study.

Samad's (2006) study hypothesized that organizational commitment and job satisfaction were negatively related to turnover intentions. The use of regression analyses resulted in a high level of data quality, and organizational commitment accounted for 61% of the variance of turnover intentions. The analysis also showed that among the three aspects of organizational commitment, *affective commitment* was the most significant predictor of turnover intentions. External validity strength was in random

sampling, but the data collection was limited only to doctors in public hospitals in Malaysia. As this study was cross-sectional in nature, future research could consider experimental or longitudinal methodology (Samad, 2006).

Job satisfaction. Empirical research in the area of job satisfaction is extensive. The Chu et al. (2003) empirical study was grounded in the Price-Mueller model of job satisfaction. The study examined job satisfaction among nurses in Taiwan. Exploratory factor analysis, and convergent and discriminate validity established construct validity of the 11 variables used in the model (*Job Involvement, Positive Affectivity, Negative Affectivity, Autonomy, Distributive Justice, Procedural Justice, Job Stress, Pay, Promotional Chances, Routinization, and Social Support*). Multiple regression analysis resulted in 45% of the variance in job satisfaction explained by all the variables, except for pay. This empirical study contributed to the generalization of the model across cultural settings.

The Mcloskey/Mueller Satisfaction Scale (MMSS) is one of the instruments used in nursing research to measure job satisfaction in a variety of clinical settings. The MMSS measures eight distinct satisfaction factors: *Extrinsic Rewards, Scheduling, Balance of Family and Work, Co-workers, Interaction Opportunities, Professional Opportunities, Praise and Recognition, and Work Control and Responsibility* (Tourangeau, Hall, Doran, & Pech, 2006). The scale has fair estimates of internal consistency reliability. Three of the eight MMSS subscales had low alpha reliability coefficients, that were less than 0.60 (*Satisfaction with Extrinsic Rewards; Satisfaction with Coworkers; and Balance of Family and Work*) (Tourangeau et al., 2006; Roberts, Jones & Lynn, 2004). For construct validity, exploratory factor analyses did not support

the eight dimensions of the MMSS (Tourangeau et al., 2006). Tourangeau et al. (2006) reported a seven factor model of the MMSS with reliability estimates ranging from .31 to .85. Three of the seven factors had reliability coefficients that were less than 0.70. It is recommended that future studies be done that further redevelop and test the MMSS to improve internal consistency of the instrument (Tourangeau et al., 2006; Roberts et al., 2004).

There are several empirical studies that have examined the relationship among job satisfaction and intention to leave and turnover (Mobley, 1977; Castle et al., 2007; Hwang & Kuo, 2006). While the studies indicate that there is an inverse relationship between high measures of job satisfaction and intention to quit and turnover, the studies also indicate that there are other variables which may mediate job satisfaction and intention to leave and turnover. Mediating variables include organizational commitment and perceived alternate employment opportunities (Lum et al., 1998; Hwang & Kuo, 2006).

Intention to leave and turnover. Quantitative studies have been used to examine factors that influence the nurse's intention to remain employed acute care hospitals (Tourangeau & Cranley, 2006; Boyle, et al., 1999; Barak et al., 2001). A number of the studies reviewed were non-experimental and used convenience sampling and indicated a relationship between job satisfaction and nurses' intention to leave (Barak et al., 2001; Boyle, et al., 1999). However, throughout the empirical literature, turnover models explained only 30%-42% of the variances in nurses' intention to remain employed. 58% to 70% of the variance remains unexplained and is indicative of the need to identify other variables than explain intent to leave and turnover such as organizational

characteristics, and other demographic factors (Tourangeau & Cranley, 2006; Boyle, et al., 1999). Future study recommendations included improvement in study designs to include larger sample size; studies related to gaps in the literature such as analysis of macro level variables such as organizational settings, structure, size (Barak et al., 2001).

Conclusions

1. Price and Mueller's Turnover Model is a causal model that is used throughout the literature with applicability across disciplines, and is especially applicable to nursing. The model is comprehensive, increasing its explanatory power, and includes both turnover and intent to leave (Price, & Mueller, 1981).
2. Steers and Mowday's Model of turnover focuses on the linkage between job attitudes and intent to leave. Within the model, affective responses (job satisfaction, job involvement, and organizational commitment) and non-work influences on staying or leaving an organization are also considered. Other models may have only considered job satisfaction as an affective response (Steers, & Mowday, 1981).
3. Steers and Mowday's turnover model proposes causal links between variables, but the model is not specific in its operative definitions of the terms used, which make empirical testing difficult (Lee and Mowday, 1987). Noted gaps in the literature are related to the impact of individual job performance in the turnover process.
4. Key leadership theories (situational leadership, transformational leadership, and charismatic leadership) propose that the actions of the leader impact the response of the subordinates. A weakness of the situational leadership theory is that there

are limitations (related to self-rating) with applying the theory across non-United States setting, impacting its usefulness (Avery, 2002).

5. The strength of Bass' transformational leadership theory is in its broad application and the full range of the leader's behavior that is included in the theory (both transformational and transactional). Weaknesses in Bass' transformational leadership theory are related to the syntax. In terms of operational definitions, there is difficulty with distinguishing between the constructs of passive-management-by-exception and laissez-faire leadership; and distinguishing between vision and charisma (Den Hartog et al., 1997).
6. Extensive empirical research on Bass' transformational leadership theory have provided empirical validity to the proposition that link transformational leadership to outcomes such as job satisfaction and organizational commitment (Gellis, 2001; Avolio et al., 2004, Avolio et al., 1999; Kane & Tremble, 2000). The explanatory, correlational, including multiple-mediated regression analysis found in leadership studies strengthens the internal validity of the studies (Feinberg et al., 2005). Construct validity has been established with the Bass (1985) *Multifactor Leadership Questionnaire*. A weakness identified in the leadership empirical studies was the use of convenience sampling.
7. The strength of Locke's range of affect is its broad application and the fact that it has formed the basis for other theories on job satisfaction. Studies on job satisfaction used regression analysis to support the range-of affect theory (Mcfarlin et al., 1995; Wu & Yao, 2006). However, a criticism of Locke's theory

related to job satisfaction is whether or not the model can predict global measures of job satisfaction (Jackson & Corr, 2002).

8. The strength of the organizational commitment theory outlined by Meyer and Allen is that the theory outlines not just an overall organization commitment, but identifies commitment as an affective attachment to the organization, commitment as the perceived cost related to leaving the organization, and commitment as an obligation to remain in the organization (Meyer & Allen, 1991). With the application of this theory, organization commitment is not viewed as an event, but actually describes a continuum where the employee *wants* to remain, *needs* to remain, or *ought* to remain in the organization (Meyer & Allen, 1991).
9. Data analysis methods have provided the strength in the empirical research done on organizational commitment. Numerous studies have tested the theory using measures of organizational commitment developed by Meyer and Allen. Lee and Jamil (2003) used hierarchical linear modeling analyses to support the proposition that organizational commitment was related positively to satisfaction and trust at the employee level. Samad (2006) used regression analysis to explain an inverse relationship between organizational commitment and job satisfaction and turnover intentions.
10. Organizational commitment is positively related to satisfaction, and trust at the employee level and at the group level (Lee & Jamil, 2003).
11. Several studies have demonstrated the relationship between leadership style (particularly with Bass' transformational leadership and employee turnover and intention to leave (Felfe et al., 2004; Kane & Tremble, 2000). Transformational

leadership was positively related to organizational commitment; and both transformational and situational leadership show a relationship to turnover, profits and absenteeism (Avolio et al., 2004).

12. Transformational leadership theory has been shown to be associated with organizational commitment (Avolio et al., 2004) and it is shown that structural difference did moderate the relationship between transformational leadership and organizational commitment (Avolio et al., 2004). However, there were no studies found that examined job satisfaction and organizational commitment as mediating variables between transformational leadership and turnover intention in hospital nurses.
13. Empirical research indicates that as overall nurse job satisfaction increases, nurses' intention to remain employed in the current hospital also increased (Boyle et al., 1999; Tourangeau & Cranley, 2006). Specific to healthcare organizations and nurses, job satisfaction was found to be a predictor of turnover where there is a negative relationship between overall job satisfaction and turnover (Mobley et al., 1979; Tourangeau & Cranley, 2006; Castle et al., 2006; Kovner et al., 2006). However, there is a gap in the literature related to the mediating effects of job satisfaction and organizational commitment on leadership styles and turnover.
14. In the empirical studies related to turnover and intention to leave, the studies were explanatory (correlational) and examined factors related to turnover in nurses (Boyle et al., 1999, Tourangeau & Cranley, 2006). The use of multiple regression analysis is a strength in these studies, and in the study conducted by Tourangeau and Cranley (2006) the large sample size of 13,000 registered nurses with a 65%

response rate is a strength of the study's external validity. In the meta-analysis of 25 studies found that measures showed similarities, and relevant constructs were measured by the various instruments used. What was also evident from the data analyses throughout the empirical research was the fact that job satisfaction was a consistent predictor of turnover, and among nurses it was evident that there was a negative relationship between overall job satisfaction and turnover (Barak et al., 2001; Mobley et al., 1979; Tourangeau, & Cranley, 2006; Castle et al., 2006; Kovner et al., 2006). However, there were gaps in the empirical literature related to the examination of the mediating effects of organizational commitment on turnover.

15. While there have been numerous studies on intention to leave, the majority of study designs have been cross-sectional. It is recommended that longitudinal research is conducted specific to examine intervening variables related to intention to leave and job satisfaction.

Recommendations

Based on analysis of the literature related to leadership, organizational commitment, job satisfaction and intention to leave there are some identified gaps in the literature. The relationship between satisfaction and turnover has been found consistently throughout the empirical literature, with job satisfaction accounting for 15-52% of the variance in turnover (Tourangeau et al., 2006; Tourangeau & Cranley, 2006; Boyle et al., 1999). Intention to leave and turnover models should be expanded so that job satisfaction is not viewed as the primary explanatory variable (Lum et al., 1998). For nurses, other factors may include workload, job stress, unit characteristics, nurse

characteristics, work-group cohesion, promotional opportunities, professional values, job hazards, and leadership styles (Kovner et al., 2006).

A number of studies reviewed were non-experimental and used convenience sampling and indicated a relationship between job satisfaction and nurses' intention to leave (Barak et al., 2001; Boyle et al., 1999). Throughout the empirical literature, turnover models explained only 30-42% of the variances in nurses' intention to remain employed. There remains a range of 58% to 70% of the variance remains unexplained and is indicative of the need to identify other variables than explain turnover or intention to leave (Tourangeau & Cranley, 2006; Kovner et al., 2006).

There is evidence to suggest that there is a relationship between job stress and job satisfaction (Bratt et al., 2000). Consequently, it is recommended that further research focuses on the testing interventions that mitigate stress in nurses, such as staffing and workload (Bratt et al., 2000). Within the nursing research, it has been recommended that future research examine the specific impact of the work unit, model of care, and organizational size on job satisfaction (Bratt et al., 2000). Sample size within nursing research should be large enough to examine satisfaction within sub groups such as differences according to position, job title and tenure, and across different types of units. Other variables for future research related to nursing job satisfaction would include the impact of physician communication (Kovner, et al., 2006).

Transformational leadership theory has been shown to be associated with organizational commitment (Avolio et al., 2004) and it is shown that structural difference did moderate the relationship between transformational leadership and organizational commitment (Avolio et al., 2004). Numerous empirical studies have established the

relationship between leadership styles and employee turnover and intention to leave (Felfe, Tartler, & Liepmann, 2004; Kane & Tremble, 2000). However, there were no studies found that examined job satisfaction and organizational commitment as mediating variables between transformational leadership and turnover intention in hospital nurses.

Weaknesses in Myer and Allen's organizational commitment theory are related to the difficulty in distinguishing between the constructs of effective and continuance commitment. While the authors report that the constructs are distinct, other empirical studies found no distinction (Tayyeb & Riaz, 2004).

Because the critical problem of turnover in hospital registered nurses has resulted in substantial industry costs in search, selection, hiring, training and separation costs, loss of productivity, decrease in employee morale, costs that are eventually passed on to the quality of patient care, it is recommended that a comparative (exploratory) and correlational (explanatory) online survey research be used to examine the relationships among transformational leadership, job satisfaction, organizational commitment, and non-supervisory nurses' intention to leave. The theoretical framework that guided this study is presented next.

Theoretical Framework

The theoretical framework that guides this study is based on Mobley et al. (1979) employee withdrawal process, transformation leadership, Myer and Allen's organizational commitment, and Locke's job satisfaction theories.

Intention to Leave

Mobley's et al. (1979) theory examines the process associated with the decision to leave an organization. The theory identifies factors that are a precursor to the desire to

leave an organization. The theory proposes that labor market, organizational, job, and individual variables are all a part of the leaving process. The model also proposes that the search process precedes intention to leave. Mobley et al. (1979) theorizes that expected utility of the present job and expected utility of alternative jobs combine with satisfaction to drive the employee's intention to leave and intention to stay.

Transformational Leadership

Bass' transformational leadership theory forms one of the theoretical frameworks for this study. Bass defines leadership in terms of transactional and transformational processes (Bass, Waldman, & Avolio, 1987). The transformational leadership theory consists of six major constructs that were defined by Bass. Charisma, intellectual stimulation, individual consideration, contingent reward, active management-by-exception, passive-avoidance define the transformational and transactional processes (Bass, Waldman, & Avolio, 1987; Avolio, Bass, & Jung, 1999; Gellis, 2001). Carless et al. (2000) note these constructs as overarching themes in transformational leadership as a global concept.

Charisma is the fundamental factor in the transformational process. It is defined as the leader's ability to generate symbolic power with which the employees want to identify (Avolio, Bass, & Jung, 1999). Charisma, as a construct of transformational leadership allows the leader to gain the pride and confidence of the followers and transmit a sense of vision and purpose for the followers and the organization (Walumba et al., 2005; Carless et al., 2000).

Intellectual stimulation gets the followers to look at familiar problems in new ways. It encourages followers to question the current methods that are being used and

improve upon them (Avolio, Bass, & Jung, 1999). *Individual consideration* describes the mentoring role of the leader (Gellis, 2001). It focuses on the leader understanding the needs of each of the followers and how the leader works to get the followers to develop their full potential (Avolio, Bass, & Jung, 1999). *Contingent reward* clearly defines what is expected from the followers and also clarifies what the followers will receive if the expected levels of performance are met (Avolio, Bass, & Jung, 1999).

Optimally, the leader rates high on transformational behavior, demonstrates some transactional behavior, and less on passive avoidance. Transformational leadership complements the effects of transactional leadership on various outcomes such as job motivation and commitment (Felfe, Tartler, & Liepmann, 2004; Kane & Tremble, 2000). There also is confirmed linkage between transformational leadership and various outcomes such as organizational commitment, leader outcomes of effectiveness, satisfaction and extra effort and staff nurse retention (Avolio et al., 2004; Gellis, 2001; Kleinman, 2004). The theoretical literature about Bass' transformational leadership is clear on the fact that the theory adds to practice and research and is applicable across settings, organizations and cultures (Chen, Beck, & Amos, 2005). As a global concept, the transformational leader is able to communicate a clear and positive vision of the future, support and develop staff, encourage and recognize staff, foster trust and positive team dynamics, encourages innovative thinking, clearly articulates values and leads by examples, and inspires followers to exceed expectations (Bass, 1985; Carless et al., 2000).

Job Satisfaction

Locke (1969) developed a model of job satisfaction, where job satisfaction is defined as “a pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (p. 316). Locke’s (1969, 1970, 1976) *range-of-affect theory* proposes that affective response (satisfaction) with any job is dependent on two facets: 1) the discrepancy between what the individual wants and what the individual is perceiving that he/she is receiving; and 2) the importance of what the individual wants where the level of satisfaction is influenced by the have-want discrepancy.

Organizational Commitment

Organizational commitment is an attitude of an employee that indicates that the employee identifies with a particular organization (Jenkins, 1993). Meyer and Allen (1991) define organizational commitment in terms of three general themes: the employee’s attachment to the organization, perceived costs associated with leaving the organization, and obligation to remain with the organization.

Meyer and Allen (1991) classified these three aspects of commitment, respectively, as affective, continuance, and normative commitment. Affective commitment is focused on how emotionally attached the employee is to the organization. This also considers how involved the employee is with the organization. A strong affective commitment results in employees staying with an organization because they want to remain (Meyer & Allen, 1991). Continuance commitment describes having knowledge of the costs that are associated with the employee leaving the organization. Employees with continuance commitment remain with an organization because they *need*

to do so (Meyer & Allen, 1991). With normative commitment, employees feel obligated to continue their employment and feel that they ought to remain with the organization (Meyer & Allen, 1991).

The major proposition of this theory is that affective, continuance and normative commitment should be viewed as subsets, rather than as types, of commitment. Consequently, an employee could have varying degrees of all three forms of commitment. Meyer and Allen (1991) propose that all three forms of commitment work together to impact the employee's behaviors. The following research questions and hypotheses were formulated for this study.

Research Questions

1. What are the demographic characteristics, work profiles, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave of nurses?
2. Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their demographic characteristics?
3. Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to work profiles?

Research Hypotheses

- H1: Perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction.

- H2: Perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.
- H3: Organizational commitment mediates the relationship between transformational leadership and nurses' intention to leave.
- H4: Job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave.
- H5: Demographic and work profile characteristics, perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction.
- H6: Demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.

Figure 2-1 depicts concepts from the theoretical framework and the hypotheses that will be tested in the study concerning the explanatory relationships among demographic characteristics, work profile, transformational leadership, organizational commitment, job satisfaction, and nurses' intention to leave (H6). Also examined are other explanatory relationships including the relationship among transformational leadership, organizational commitment and job satisfaction (H1), and perceptions of transformational leadership, organizational commitment, job satisfaction and nurses' intention to leave (H2). There are two mediating hypotheses that will be tested in the study. The mediating effects of organizational commitment and job satisfaction on the relationship between transformational leadership and intention to leave will be examined. This examination will include the mediating effect of organizational commitment on the

relationship between transformational leadership, and nurses' intention to leave (H3), and the mediating effects of job satisfaction on the relationship between transformational leadership and nurses' intention to leave (H4). The relationships among demographic characteristics, work profile characteristics, perceptions of transformational leadership, organizational commitment, and nurses' job satisfaction (H5) are also examined.

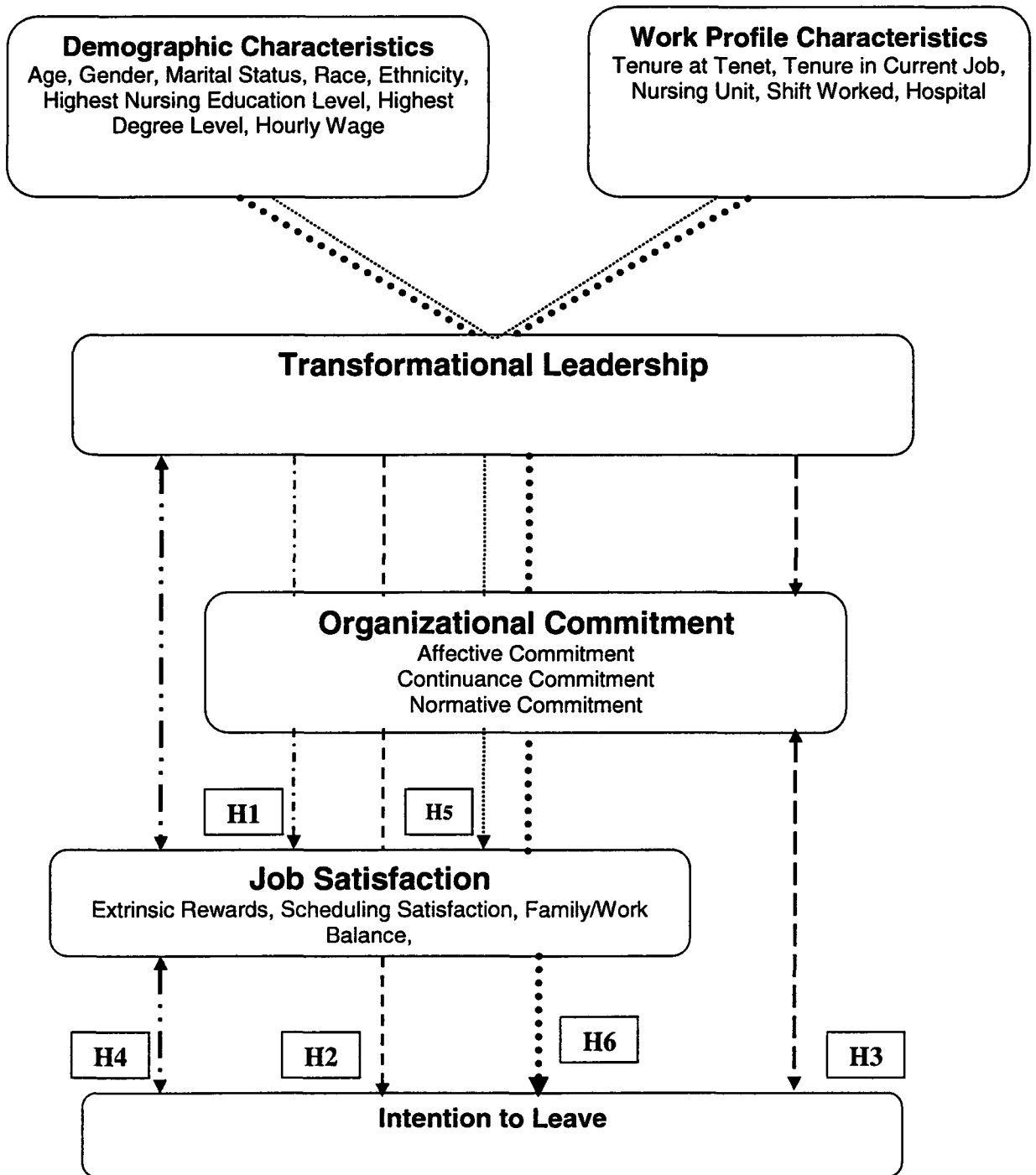


Figure 2. Hypothesized model of the relationship among demographic and work profile characteristics, transformational leadership, organizational commitment, job satisfaction and nurses' intention to leave.

Chapter II provided a comprehensive review of the literature, theoretical framework that guides this study, research questions and hypotheses identified for the study. Intention to leave was discussed as it relates to nurses. Transformational leadership was discussed as a leadership style where the transformational leader is able to communicate a clear and positive vision of the future, support and develop staff, encourage and recognize staff, foster trust and positive team dynamics, encourages innovative thinking, clearly articulates values and leads by examples, and inspires followers to exceed expectations (Bass, 1985; Carless et al., 2000). The empirical literature supports the proposition that transformational leadership may impact intention to leave and turnover of staff nurses (Kleinman, 2004). Job satisfaction and organizational commitment were defined and discussed as mediating variables between transformational leadership and intention to leave.

Chapter III presents the research methods used to test the hypotheses proposed in this study and to answer the research questions. The chapter discusses the research design, target population and sampling plan, instrumentation, procedures, methods of data analysis, and evaluation of research methods.

CHAPTER III

Research Methods

Chapter III presents a description of the methods used in this study to examine the relationship among leadership styles, job satisfaction, organizational commitment and intention to leave. The research questions and hypotheses evolved from gaps in the literature. The study design is discussed along with population, sampling plan, and setting. Instrumentation, methods of data analysis, procedures, and evaluation of research methods are also discussed.

Research Design

A non-experimental, exploratory (comparative) and explanatory (correlational) online survey research was conducted. The entire target population of 2409 non-supervisory registered nurses in 10 different acute care hospitals within Tenet South Florida Health System were invited to participate in an online survey to answer the research questions and test the hypotheses.

The survey consists of six parts: Part 1 is the *Demographic Characteristics* developed by the researcher. The items include: age, gender, race, primary language, marital status, and nursing education level, highest degree level, and hourly wage (RQ1 and RQ 2, and explanatory variables in H5 and H6). Part 2 is the *Work Profile Characteristics* developed by the researcher. The items include: tenure in job, tenure in Tenet, nursing unit, shift worked, and hospital (RQ1 and RQ3, and explanatory variables in H5 and H6). Part 3 is *Transformational Leadership*, and uses the Global Transformational Leadership Scale (GTL) developed by Carless, Wearing and Mann (2000) (RQ1, RQ2, RQ3 and H1, H2, H3, H4, H5 and H6). *Organizational*

Commitment, Part 4 of the survey is measured by the 24 item Organizational Commitment Scale, developed by Meyer and Allen (1991) (RQ1, RQ2, RQ3, H1, H2, H3, H5, and H6). *Job Satisfaction*, Part 5 of the survey uses the 31 item McCloskey/Mueller Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990) (RQ1, RQ2, RQ3, H1, H2, H4, H5, H6), and Part 6 is *Intention to Leave*, and consists of three items developed by Meyer, Allen, and Smith (1993).

Descriptive statistics, including measures of central tendency and frequency distributions were used to answer Research Question 1. To answer Research Question 2, independent *t*-tests and ANOVA with post hoc comparisons were used for the exploratory (comparative) design to examine differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their demographic characteristics. To answer Research Question 3 independent *t*-tests, and ANOVA with post hoc comparisons were used for the exploratory (comparative) design to examine differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their work profiles.

To test Hypothesis 1, multiple regression analysis was used to examine whether perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction. To test Hypothesis 2, multiple regression analysis was used to examine whether perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intentions to leave. To test Hypothesis 3, multiple mediated regression analysis was used to examine whether organizational commitment mediates

the relationship between transformational leadership and nurses' intentions to leave. To test Hypothesis 4, multiple mediated regression analysis was used to examine whether job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave. To test Hypothesis 5, multiple regression analysis was used to examine whether demographic characteristics, work profiles, perceptions of transformational leadership, and organizational commitment are significant explanatory variables of nurses' job satisfaction. To test Hypothesis 6, multiple regression analysis was used to examine whether demographic characteristics work profiles, perceptions of transformational leadership, and organizational commitment are significant explanatory variables of nurses' intention to leave.

Population, Sampling Plan, and Setting

Target Population and Setting

The target population for this study consisted of approximately 2409 full-time non-supervisory registered nurses employed in 10 Tenet South Florida acute care hospitals in Spring 2009. The 10 hospitals share similar attributes in that they are all acute care hospitals within Tenet Health System. All 10 facilities provide general medical-surgical, telemetry, and critical care services. Delray Medical Center and St Mary's Medical Center are both Level 2 trauma centers. Delray Medical Center, Palm Beach Gardens Medical Center, Florida Medical Center, and Palmetto General Hospital are open heart hospitals, which have a higher patient acuity.

With the use of the e-mail link sent to the nurses the survey was conducted at work or at home. Settings of employment for the nurses are acute care nursing units across a number of hospitals, which share similar operational attributes to include equipment, and type of shifts worked. The population served is similar in the hospitals where the average age of the population is 74. The average population age is lower in the hospitals that have obstetrics/gynecology and pediatrics as primary service lines (Palmetto, West Boca, and St. Mary's).

The total target population was invited to participate in the study. The census of each hospital and the estimated distribution of the target population for this study, based on human resources data, are shown in Table 3-1.

Table 3-1

Number of Hospital, Census, and Estimated Distribution of Full-time Non-Supervisory Registered Nurses

Hospital Name	Census (Beds)	Full Time RNs n	% of RNs
Coral Gables	256	103	4.3%
Delray Medical Center	493	388	16.1%
Florida Medical Center	459	201	8.3%
Good Samaritan	333	163	6.8%
Hialeah Hospital	378	138	5.7%
North Shore Medical Center	357	233	9.7%
Palm Beach Gardens	199	231	9.6%
Palmetto General	360	287	11.9%
St. Mary's Medical	460	463	19.2%
West Boca Medical	185	202	8.4%
Total	3480	2409	100.0%

Accessible Population

For this study, all members of the target population were accessible. Therefore, the target population was equal to the accessible population.

Sampling Plan

Since the entire target population of non-supervisory registered nurses employed at the 10 facilities was invited to participate in the survey, no sampling plan was used. One external validity strength of the study is that the entire target population of full-time non-supervisory RNs was asked to participate in the study providing a chance for each member of the population to be represented in the study. This includes collecting data on nurses employed during all shifts (7A-7P, 7A-3P, 3P-11P, 7P-7A, and 11P-7A) and in all

units units (critical care, medical surgical, telemetry, surgical, ambulatory care, emergency department, psychiatry, women’s services, and pediatrics). The final data producing sample was compared with the percentage distribution of the nurses from the select hospitals to judge the external validity of the study. The final data producing sample was self-selected based on those who elected to participate in the study, creating a sampling bias, a weakness to external validity.

Sample Size. An adequate sample size is important in order to conduct statistical analyses, and to strengthen internal validity. An adequate sample size is also important to allow for generalization of the study findings, strengthening external validity.

In this study, multiple regression analyses was conducted. According to Green (1991), a sample size estimate that is necessary for regression analyses is $n = 50 + 8m$, where n equals the sample size and m is the number of explanatory variables. The most explanatory variables are in research hypothesis 6:

Part 1: Demographic Characteristics	= 8
Part 2: Work Profile	= 5
Part 3: Transformational Leadership	= 1
Part 4: Organizational Commitment (three subscales)	= 3
Part 5: Job Satisfaction (eight subscales)	= 8

This represents a total of 25 explanatory variables. Subsequently, based on Green’s formula to conduct multiple regression analysis, the required minimum sample size for this study is $50 + 8(25) = 250$.

For exploratory factor analyses, the sample size should be “3 to 20 times the number of variables and absolute ranges from 100 to over 1,000” (Mundfrom, Shaw, & Ke, 2005, Abstract section, para. 1). The longest scale used in this study is Part 5, *Job Satisfaction*, measured with the 31 items of the McCloskey/Mueller Satisfaction Scale.

Based on the formula of 3 to 20 times the number of items, with a minimum of 100 and a maximum of 1000, the required sample would be: 3 x 31 items, resulting in a required sample size of 93 to 620 (20 x 31), but the minimum of 100 is required.

For an estimated target population of 2,409 non-supervisory nurses, the sample size needed was 322 (Gay & Airasian, 2000). Considering the sample size needed for statistical analyses, and based on the size of the population, a range of 322 to 620 is adequate. Based on a response rate of 30% and 2,409 surveys, the estimated data producing sample should be optimal at 722 for external validity purposes, while a response rate of 15% (361) would be minimally adequate.

Eligibility Criteria and Exclusion Criteria.

Eligibility criteria. Registered nurses were invited to participate in the study if they met the following criteria:

1. Employed full time at a Tenet South Florida Hospital as a non-supervisory registered nurse.
2. Able to read and write in English.
3. Beyond the 90 day orientation period.
4. Must be 18 years and over.

Exclusion criteria. Registered nurses were not included in the study if they met any of the following criteria:

1. Employed full time at a Tenet South Florida Hospital as supervisory registered nurse.
2. Employed as a part time or per diem registered nurse, or an agency registered nurse (Tenet contracted vendors, Tenet's internal vendor, and Resource Pool).

3. Unable to read and write in English.
4. Within the 90 day orientation period.
5. Less than 18 years of age.

Instrumentation

Instrumentation for this study consists of an online self-report survey that measures variables in six parts (see Appendix A). Part 1, *Demographic Characteristics*, includes questions about demographic data. Part 2, *Work Profile*, developed by the researcher, includes questions related to the organization and the specialty unit. Part 3, *Transformational Leadership*, is measured by the 7-item Global Transformational Leadership Scale (GTL). Part 4, *Organizational Commitment*, is measured by the 24 item organizational commitment questionnaire (three subscales) developed by Meyer and Allen (1991). Part 5, *Job Satisfaction*, is measured by a 31 item McCloskey/Mueller Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990). Part 6, *Intention to Leave*, is measured by three items developed by Meyer, Allen, & Smith (1993).

The six-part survey consists of 78 items, which takes approximately 10-15 minutes to complete. The constructs measured are summarized in Table 3-2.

Table 3-2

Constructs in the Survey

Part	Construct	Instrument Name and Developer(s)	Measures	Number of Items and Score Range
1	Demographic Characteristics	Developed by the Researcher	Fill in the Blank: Age and Hourly Income Dichotomous: Gender and Ethnicity Multiple Choice: Marital Status Race Nursing Education Level Highest Degree level	8 Items 2 2 4
2	Work Profile Characteristics	Developed by the Researcher	Fill in the Blank: Tenure in Job Tenure in Tenet Multiple Choice: Nursing Unit Shift Worked Hospital	5 Items 1 1 3
3	Transformational Leadership	<i>Global Transformational Leadership Scale</i> Carless, Wearing and Mann (2000)	5-Point Frequency Rating Scale: (Total Scale) Leader Behaviors:	7 items 1-5 scale 7-35 Score Range
4	Organizational Commitment	<i>Organizational Commitment survey</i> Meyer and Allen (1991)	7- Point Semantic Differential Scale: (Total Scale) Three Subscales: Affective Commitment Scale Continuance Commitment Scale Normative Commitment Scale	24 items 1-7 scale 8-56 Score Range 8(1-7) 8-56 8 (1-7) 8-56 8(1-7) 8-56
5	Job Satisfaction	<i>McCloskey/Mueller Satisfaction Scale</i> Mueller and McCloskey (1990)	5-Point Rating Scale: (Total Scale) Eight Subscales: Extrinsic Rewards Scheduling Satisfaction Family/Work Balance Co-Workers Interaction Professional Opportunities Praise/Recognition Control/Responsibility	31 items 1-5 scale 31-155 Score Range 3(1-5) 3-15 6(1-5) 6-30 3(1-5) 3-15 2 (1-5) 2-10 4 (1-5) 4-20 4 (1-5) 4-20 4 (1-5) 4-20 5 (1-5) 5-25
6	Intention to Leave	<i>Meyer, Allen, & Smith Intention to Leave Questionnaire</i> (1993)	7-Point Semantic Differential Scale:	3 items 1-7 scale 1-7 Score Range (3 items averaged)
Total Items				78 Items

Part 1. Demographic Characteristics

Part 1, *Demographic Characteristics*, developed by the researcher, includes eight items about gender, race, ethnicity, age in years, marital status, nursing education level, highest degree level, and income (See Appendix A, Part 1). The survey contains dichotomous responses (gender and ethnicity), fill in the blank for age in years and hourly salary, and multiple choices (marital status, race, nursing education level, and highest degree level).

Part 2. Work Profile

Part 2, *Work Profile Characteristics*, developed by the researcher, includes five items related to tenure in the job, tenure at Tenet, nursing unit, shift worked, and hospital (See Appendix A, Part 2) The survey contains fill in the blank (tenure in the job, and tenure at Tenet), and multiple choice items (nursing unit, shift worked, and hospital).

Part 3. Transformational Leadership

Description. Part 3, *Transformational Leadership*, was measured using the Global Transformational Leadership Scale (GTL) (Appendix A, Part 3), (Carless, et al., 2000). The GTL scale is a seven-item unidimensional scale that is a global measure of transformational leadership capturing complex leadership behaviors. The GTL is grounded in the research of transformational leadership by Bass and charismatic leadership by Conger and Kanungo (Carless et al., 2000).

A sample item is “communicates a clear and positive vision of the future” (vision). The response format for each item is a five point frequency rating scale: 1= Rarely, or never, 2 = Seldom, once in a while, 3 = Occasionally, sometimes, 4 = Fairly often, usually; and 5 = Very frequently, if not always (Carless et al., 2000). The total

scores range is from 7 to 35, where higher scores are associated with more transformational leadership behaviors.

Reliability. Cronbach's alpha for the GTL was .93 supporting the conclusion that the GTL is a reliable measure of transformational leadership (Carless et al., 2000). In this study, a Cronbach's alpha was conducted to estimate internal consistency reliability for the GTL.

Validity. Carless et al. (2000) used the MLQ and the Leadership Practice Inventory (LPI) and conducted Pearson r correlations to establish convergent validity of the GTL. Items of the GTL were matched to subscales of the MLQ and the LPI that had similar meanings such as: vision (similar to LPI-Inspiring a shared vision) and staff development (similar to MLQ- Individual consideration). The correlation between the item and the construct represented ranged from .71 to .87. The authors also calculated the correlation between total GTL score and scores on the LPI and MLQ. The correlations ranged from .76 to .88 (Carless et al., 2000).

The authors established discriminant validity of the GTL by comparing groups of managers who had different scores on the GTL. Ratings were obtained from leaders and subordinates. Independent t -tests were used to examine whether the GTL differentiates between the groups in areas such as a) elicit extra effort from subordinates, 2) show leader effectiveness, and 3) demonstrate high quality work performance. The scale differentiated between better performing and weaker performing managers. The results of the t -tests showed that the GTL discriminates significantly between the contrasted groups providing evidence of the discriminant validity of the GTL (Carless et al., 2000). Exploratory factor analyses with principal component factor analysis was used to assess

the factor structure of the GTL with Cattell's screen test and Kaiser's criterion showing that the items measured one dimension of leadership. Exploratory and confirmatory factor analyses have revealed that the GTL measures a single construct of leadership (Carless et al., 2000), and is a unidimensional scale.

To further establish construct validity and the unidimensional nature of the GTL, in this study exploratory factor analysis was conducted. To further establish convergent and divergent validity, correlations between the GTL and other scales in this study were calculated. For example, it was predicted there would be a positive relationship between leadership and job satisfaction, and an inverse relationship between leadership and intent to leave.

Part 4. Organizational Commitment

Description. Part 4, *Organizational Commitment*, was measured by Meyer and Allen's (1991) Organizational Commitment survey (Appendix A, Part 4) which contains 24 items organized into three subscales (8 items in each subscale). Responses for the subscales are on a seven point semantic differential scale ranging with anchors labeled as: 1) strongly disagree and 7) strongly agree. The subscales are the *Affective Commitment Scale* (ACS), (items numbers 1, 2, 3, 4, 5, 6, 7, 8), which assesses the emotional attachment to the organization; the *Continuance Commitment Scale* (CCS), (items numbers 9, 10, 11, 12, 13, 14, 15, 16), which assesses with cost associated with leaving the organization; and the *Normative Commitment Scale* (NCS), (items numbers 17, 18, 19, 20, 21, 22, 23, 24) which reflects the level of obligation that the employee feels to continue within the organization. Items numbers 4, 5, 6, 8, 9, 12, 18, 19, and 24 are reversed scored (Allen & Meyer, 1990; Tayyeb & Riaz, 2004). Averages are computed

for each score. Score ranges in value from 1 to 7 with higher scores indicating stronger commitment (Meyer & Allen, 1990).

Reliability. The internal consistency reliability estimates for each scale (Cronbach's alpha) were .87 (ACS), .75 (CCS) and .79 (NCS) (Tayyeb & Riaz, 2004). In this study, coefficient alphas were conducted to estimate internal consistency reliability for the total *Organizational Commitment* survey, and the *Affective Commitment Scale* (ACS), the *Continuance Commitment Scale* (CCS), and the *Normative Commitment Scale* (NCS).

Validity. Using regression analysis, Samad (2006) found an inverse relationship between organizational commitment and job satisfaction, and turnover intentions. The study used Meyer and Allen's *Organizational Commitment* survey as the measure of organizational commitment. Affective commitment was the strongest predictor of turnover intentions. The study by Tayyeb and Riaz (2004) further supports the proposition of the three component model of the organizational commitment. The major proposition with conflicting results in empirical studies is the distinction between the constructs of affective and continuance commitment (Tayyeb & Riaz, 2004). While Meyer and Allen (1991) report that they are unrelated, the CCS and ACS were found to be related (Tayyeb & Riaz, 2004).

Factor analysis was used to establish the three-factor structure (Allen & Meyer, 1990). Concurrent validity was established by comparing to the *Organizational Commitment Questionnaire* (OCQ), developed by Porter et al. (1974) which measured commitment similar to the scales developed by Meyer and Allen. Correlations between the ACS subscale and OCQ exceeded .80, while the correlations between OCQ and the

CCS were not significant (Allen & Meyer, 1990). Factor analytic studies of the *Affective, Normative, and Continuance Commitment* have shown that three scales measure distinct constructs, resulting in the *Organizational Commitment* survey being a multidimensional instrument (Meyer et al., 1993; Tayyeb & Riaz, 2004).

To further establish construct validity and the multidimensional nature of the instrument and the three component factor of the *Organizational Commitment* survey, in this study exploratory factor analysis was conducted. To further establish convergent and divergent validity in this study, correlations between the *Organizational Commitment* survey and other scales in this study were calculated.

Part 5. Job Satisfaction

Description. Part 5, *Job Satisfaction*, was measured by the 31 item McCloskey/Mueller Satisfaction Scale (MMSS) (1990), which specifically measures job satisfaction in hospital nurses. The MMSS (Appendix A, Part 5) is multidimensional with eight subscales, with the response format for each item measured on a five-point satisfaction rating scale ranging from “very dissatisfied” (1) to “very satisfied” (5). The subscales, item numbers, and score range are as follows: *Extrinsic Rewards* (3 items, score range = 3-15); *Scheduling Satisfaction* (6 items, score range = 6-30); *Family/Work Balance* (3 items, score range = 3-15); *Co-worker* (2 items, score range = 2-10); *Interaction* (4 items, score range = 4-20); *Professional Opportunities* (4 items, score range = 4 -20); *Praise/Recognition* (4 items, score range = 4 -20) and *Control/Responsibility* (5 items, score range = 5-25) (Mueller & McCloskey, 1990). Each subscale score is calculated by summing only the items for that scale. The total scale has a score range of 31-155. Higher scores indicate higher levels of satisfaction.

Reliability. The internal consistency reliability for the total scale which combined all 31 items from the eight subscales was 0.89 (Cronbach's alpha). The sample used for this study consisted of 190 nurses who were employed by a large Midwestern hospital six months from the time of hiring. Internal consistency reliabilities for the eight subscales were .52 (*Extrinsic Rewards*), .84 (*Scheduling Satisfaction*), .57(*Family/Work Balance*), .54(*Co-workers*), .72(*Interaction*), .64(*Professional Opportunities*), .80(*Praise/Recognition*), and .80(*Control/Responsibility*). The three subscales with fewer than four items had lower reliabilities. Torangeau et al. (2006) in their study of 8,456 nurses found internal reliability coefficients for the subscales ranging from 0.29 to 0.84. The low coefficients were consistent with the low coefficients found by Mueller and McCloskey (1990). Roberts, Jones, and Lynn (2004) in the study of 275 recent nursing graduates found internal consistency coefficients that ranged from .48 to .85, with only two of the subscales having estimates falling below the expected 0.70 criteria. Low reliability coefficients are challenging because the minimum criterion for sub-scale reliability is usually set at .60 (Green, 1991). For items to be considered reliable in a scale, the accepted coefficient alpha should be at .70 or higher (Torangeau et al., 2006). The test-retest reliability of the subscales ranged from 0.08 to 0.67 (Mueller & McCloskey, 1990). The authors noted that the test-retest correlations were expected to be at the same level or lower than the coefficient alphas because the test-retest correlation compared 6-month with 12-month responses, therefore reflecting actual change in what was being measured. This change can be seen for the subscales with especially low correlations: satisfaction with co-workers and family work balance. The items in these scales responsible for the low reliabilities were satisfaction with child care facilities and

satisfaction with nursing peers. Over time, family and work conditions had changes, therefore, producing the weak correlations (Mueller & McCloskey, 1990). In this study, Cronbach's alpha was obtained to estimate the internal consistency reliability of each job satisfaction subscale and the total scale.

Validity. In terms of construct validity, the MMSS measures eight work factors: extrinsic rewards, scheduling satisfaction, family/work balance, co-workers, interaction, professional opportunities, praise/recognition and control/responsibility (Mueller & McCloskey, 1990; Roberts et al., 2004; Torangeau et al., 2006). Criterion related validity was established by comparing the subscales to the Brayfield-Roth 1951 general job satisfaction scale and Hackman and Oldham's 1975 Job Diagnostic Survey (JDS) (Mueller & McCloskey, 1990).

Convergent validity of the subscales was established by comparing their correlations with characteristics of the Job Characteristics Inventory (JCI) (Mueller & McCloskey, 1990). The JCI autonomy scale correlated .31 with the MMSS Control/Responsibility satisfaction measure. The JCI feedback scale correlated .55 with the MMSS Interaction Scale. Using the Kaiser eigenvalue criterion of one for determining the number of factors, exploratory factor analysis identified eight independent dimensions from the nine extracted factors (Mueller & McCloskey, 1990). However, Tourangeau et al. (2006) could not replicate an eight-factor structure with the use of confirmatory factor analysis. Exploratory principal components analysis (PCA) with varimax was used to yield a seven factor structure with 23 items which explained 57.9% of the variance. To validate inclusion of items loading into a structure, a loading factor of at least .50 was established. Only 26 of the original 31 items had loadings

greater than .50 (Tourangeau et al., 2006). The MMSS can be appropriately used for nurses employed in a hospital and for both the novice and the expert nurse (Mueller & McCloskey, 1990; Roberts et al., 2004; Torangeau et al., 2006). To further establish construct validity and the multidimensional nature of the MMSS, in this study, exploratory factor analysis was conducted. Convergent and divergent validity were further established by correlations to other study scales.

Part 6. Intention to Leave

Description. Part 6, *Intention to Leave*, was measured by three questions using Meyer, Allen and Smith's (1993) *Intention to Leave* scale. Meyer et al. (1993) developed a three-item, unidimensional, scale as a measure of intention to leave (a predictor of turnover), with each item measured on a seven point semantic differential scale ranging from 1 to 7, with anchors labeled as: 1) strongly disagree and 7) strongly agree. The items specifically measured how frequently employees thought about leaving their current employer, how likely it was that they would search for a job in another organization, and how likely it was that they would actually leave the organization within the next year. The total score range is 1 to 7 (the three items responses are averaged to produce intention-to-leave scores). High scores are associated with the employee's greater intentions to leave the organization.

Reliability. The internal consistency reliability estimate for this scale was 0.87 (Cronbach's alpha) (Kickul, 2001). The sample used for this study was 151 employees in a small business that examined the types of communication that allowed small businesses to retain their employees. In this study, Cronbach's alpha was obtained to estimate the internal consistency reliability of the *Intention to Leave* scale.

Validity. Validity for the three questions was not reported (Kickul, 2001). The face validity of the questions established the content validity (questions directly asked the employees their intent to leave the organization). In this study, exploratory factor analysis was used to establish the uni-dimensional nature of the scale and convergent and divergent validity were established by correlations to other study scales.

Procedures: Ethical Considerations and Data Collection Methods

With the use of Internet-based data collection, issues beyond those associated with the traditional methods of data collection are discussed. Important issues are approval of scales, participant recruitment, server administration, storage and disposal of data and informed consent, and the sequence of procedures. The following section provides a sequence of data collection procedures, with ethical considerations that were taken to protect all human subjects involved in this study and promote beneficence, autonomy, and justice to all study participants.

1. The researcher contacted the developer of the scales and obtained approval to use the scales in this study. Permission was obtained for the *Global Transformational Leadership* scale (GTL), Meyer and Allen's *Organizational Commitment* survey, the *MMSS*, to measure *Job Satisfaction* and Myer, Allen and Smith's *Intention to Leave* scale (Appendix B).
2. Permission to conduct the study was obtained from Tenet Corporate (Appendix C). The researcher met with the Tenet Florida Region Chief Nursing Officers at the Regional Meeting to informally discuss with them the study to be implemented. After a successful defense and approval by the IRB, an e-mail was sent to each Chief Nursing Officer (see Appendix D) requesting each CNO

forward the invitation to participate to their respective nurses via e-mail. A second e-mail was sent to the CNOs that should be forwarded to the nurses (See Appendix E). This e-mail invitation contains a link to Survey Monkey.

3. Policies and procedures for Survey Monkey (See Appendix H).
 - a. A fee was paid to SurveyMonkey for a monthly, professional subscription.
 - b. SurveyMonkey was asked to agree not to track or record the IP or e-mail addresses, or other means of personal identification of the respondents.
 - c. SurveyMonkey used encryption for the survey link and survey pager during transmission.
 - d. SurveyMonkey.com will store collected data in an encrypted format on a professionally administered server.
4. An authorization for informed consent was posted on SurveyMonkey web site (Appendix G). The consent describes the study procedures and purpose, possible risks and benefits to the participants, issues related to maintenance of anonymity, and authorization for informed consent form. Following a successful proposal defense and before an IRB application, an online survey was created and posted on a secure Web site (Appendix A).
5. Immediately following the authorization for voluntary consent, if the participant chose to participate, they clicked an “I agree to participate in this study” button which took them to the filter questions and the survey (Appendix A).
6. The survey begins with filter questions that allowed for the exclusion of non-supervisory nurses. If the respondents answered appropriately to all the filter

questions, they were directed to the survey (See Appendix A). The Web site was not accessible until the study is approved by Lynn University's Institutional Review Board.

7. Upon achieving a successful proposal defense, an application for expedited review was submitted to the Lynn University Institutional Review Board (IRB) for approval
 - a. IRB Form 1, Application and Protocol, was submitted to the Lynn University Institutional Review Board
 - b. IRB Form 3, Request for Expedited Review, was submitted to the IRB (Appendix I).
8. Upon receiving approval from the Lynn University IRB to conduct the study, a request to forward the invitational e-mail to their respective nurses was sent to the Chief Nursing Officers inviting nurses to participate in the study (Appendix E).
 - a) The e-mail was sent in plain-text format without attachments to decrease the probability of it being blocked by the recipients' mail servers.
 - b) Participants were asked to copy the link to their browsers. Participants clicked on the survey link contained in the invitation e-mail (Appendix E).
 - c) Upon arrival at the Survey Monkey web site, participants reviewed the authorization for informed consent. The consent form described the purpose of the survey, along with the procedures, and the duration of the survey. Participation in the survey was voluntary.

- d) When participants agreed to participate, then they clicked on an agreement statement (“I agree to participate in this study”) at the end of the consent form to begin taking the online survey (see Appendix G).
 - e) When participants declined to click the agreement statement, they clicked “I do not agree to participate in this study,” and they were automatically exited from the survey.
 - f) *Reminder e-mail messages were sent to the participants at the beginning week and two weeks after the initial survey has been distributed (See Appendix F).* The data collection was conducted for an appropriate amount of time to allow for an adequate sample size, but did not exceed beyond one year after IRB approval.
 - g) Anonymity was maintained to the degree allowed by the technology that was used and responses were coded by hospital. No guarantee is made related to interception of data via the internet by any third parties. The participants remained anonymous to the researcher.
9. The online survey was removed at 11:59 pm eastern time on the last day of data collection.
 10. No later than one month after completion of the data collection, Lynn University IRB Report of Termination of Project (Form 8) was submitted to the IRB.
 11. Data was analyzed using SPSS 18.0 version.
 12. The researcher recorded the number of the initial sample (number of e-mails sent), the number of participants that entered Survey Monkey (some may not

complete due to the authorization for informed consent and filter questions), the actual number of surveys submitted, and the number of “usable” surveys.

13. The data will be kept confidential and stored electronically on “password protected” computers.
14. The data will be destroyed five years after completion of the study.

Methods of Data Analysis

Data analysis was done with the use of SPSS for Windows version 18.0. A number of statistical tests such as reliability estimates, frequency distributions, exploratory factor analyses (EFA), *t*-tests, ANOVA with post hoc comparisons, eta correlations, multiple regression analyses and multiple mediated regression analyses, were used to examine psychometric qualities of scales, to answer the research questions, and to test the hypotheses. For data coding, all survey data was input into SPSS.

Data Analysis for Psychometric Evaluation

Exploratory factor analysis was used to examine the psychometric properties of the scales. Internal consistency reliability (Cronbach’s alphas) was reported for the subscales and the total scales of Part 3: *Global Transformational Leadership Scale*, Part 4: *Organizational Commitment* survey, Part 5: *Satisfaction Scale* (MMSS), and Part 6: *Intention to Leave* survey.

Data Analyses to Answer Research Questions

Descriptive statistics, including measures of central tendency, and frequency distributions was used to answer Research Question 1 about the demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and nurses’ intention to leave.

To answer Research Question 2, independent *t*-tests and ANOVA with post hoc comparisons using Tukey's test were used for the exploratory (comparative) design to examine differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their demographic characteristics. ANOVA with post hoc comparisons using Tukey's test was conducted to compare differences in the same variables according to demographic characteristics (age, gender, marital status, race, language, nursing education level, highest education level, and salary).

To answer Research Question 3 independent *t*-tests, and ANOVA with post hoc comparisons using Tukey's test were used for the exploratory (comparative) design to examine differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their work profile (tenure in job, tenure in Tenet, nursing unit, shift worked, and hospital).

Data Analyses Planned to Test Research Hypotheses

To test Hypothesis 1, stepwise (forward, enter) multiple regression analysis was used to examine whether perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction. To test Hypothesis 2, stepwise (forward) multiple regression analysis was used to examine whether perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intentions to leave. To test Hypothesis 3, multiple mediated regression analysis was used to examine whether organizational commitment mediates the relationship between transformational leadership and nurses' intentions to leave. To test Hypothesis 4, multiple mediated

regression analysis was used to examine whether job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave. To test Hypothesis 5, multiple regression analysis was used to examine whether demographic and work profile characteristics, perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction. To test Hypothesis 6, stepwise (forward) multiple regression analysis was used to examine whether demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.

For each hypothesis (excluding Hypothesis 3 and Hypothesis 4), and prior to conducting multiple regression analyses and to identify variables to be entered into the hierarchical regression models, Pearson r and eta correlations were done to assess for significant or trend relationships between each explanatory and the dependent variable. Significant or trend categorical variables associated with respective dependent variables using eta were converted to dummy variables as recommended by Cohen (1968). Scaled variables and dummy variables were then correlated with each dependent variable using Pearson r correlation coefficient.

Based on the order of Pearson r correlations (strongest to the weakest), the variables were entered into the forward regression model, one at a time, until the model which is significant (F and p) with the highest adjusted R^2 and R^2 were produced. The variables continued to be added until there were none left or until their contribution to the adjusted R^2 and R^2 no longer improved or were no longer statistically significant (Gall, Gall & Borg, 2003).

The following procedures were used to select the variables for inclusion into the multiple regression models:

1. Categorical variables were correlated with the dependent variable using *eta*. *Eta* describes the strength of the relationship among categorical variables and the interval level dependent (Field, 2006). In the SPSS program, the means procedures was used to create ANOVA and measures of association tables for the purpose of reporting the *F*, *p*, *eta*, and *eta*² for each correlation.
2. If the categorical variables show significant or trend *eta* relationships, they were converted to dummy variables. For example, in the case of gender, a demographic characteristic, the two dummy variables were as follows: 1) the first variable was 0 for females and 1 for males, and 2) the second variable was 1 for females and 0 for males.
3. Based on the strength of the correlation, significant and trend variables were entered into the regression model, one at a time.
4. Using the enter method into a regression model, the variables were entered into separate blocks until a significant model produced the highest explanatory power (*R*²) and adjusted *R*².
5. The variance inflation factors (VIF), a measure of multicollinearity (Field, 2006) was assessed and reported. If the VIF values were below 10 (values were reported) and the tolerance was above .2 (values were reported), then multicollinearity was not a problem (Field, 2006).

For Hypotheses 3 and 4, multiple mediated regression analysis was used. A mediator exists when the effect of the independent variable on the dependent variable is

influenced by a mediator (Fields, 2006). For Hypothesis 3, there are two variables, transformational leadership and nurses' intention to leave. The mediating variable is organizational commitment. For Hypothesis 4, job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave. The Sobel test was used to test whether the mediator carries the influence of an independent variable to a dependent variable (Preacher & Hayes, 2008).

The notation that was used to represent the variables tested in the hypotheses in this study is as follows:

X_1 = Age in Years
 X_2 = Gender
 X_3 = Marital Status
 X_4 = Race
 X_5 = Ethnicity
 X_6 = Nursing Education Level
 X_7 = Highest Education Level
 X_8 = Hourly Wage

 X_9 = Tenure in Job
 X_{10} = Tenure in Tenet
 X_{11} = Nursing Unit
 X_{12} = Shift Worked
 X_{13} = Hospital
 X_{14} = Transformational Leadership
 X_{15} = Organizational Commitment
 X_{16} = Job Satisfaction

Dependent variables, varying with the hypotheses

Y_1 = Organizational Commitment
 Y_2 = Job Satisfaction
 Y_3 = Intention to Leave

Other notation:

b = unstandardized regression coefficient
 C = constant
 e = error
 z = mediated variable

Hypothesis 1 was designed to test if transformational leadership and organizational commitment explain job satisfaction of nurses. Hypothesis 1 was examined through stepwise (forward, enter) multiple regression analysis where the regression model used the following equation:

$$Y_2 = c + b_{14}X_{14} + b_{15}X_{15} + e$$

Hypothesis 2 was designed to test the explanatory relationship of transformational leadership, organizational commitment, job satisfaction and nurses' intention to leave. Hypothesis 2 was examined through stepwise (forward) multiple regression analysis where the regression model used the following equation:

$$Y_3 = c + b_{14}X_{14} + b_{15}X_{15} + b_{16}X_{16} + e$$

Hypothesis 3 was designed to test if organizational commitment mediates the relationship between transformational leadership and nurses' intentions to leave. Mediated multiple regression (MMR) was used to test Hypothesis 3 where the regression model used the following equation, where z_1 represents organizational commitment:

$$Y_3 = c + b_{14}X_{14} + b_{15}X_{15} + b_{17}Z_1 + b_{18}X_{14} \cdot Z_1 + b_{19} X_{15} \cdot Z_1 + e$$

Hypothesis 4 was designed to test if job satisfaction is a mediator in the relationship between transformational leadership and nurses' intention to leave. Mediated multiple regression (MMR) was used to test Hypothesis 4 where the regression model used the following equation, where z_2 represents job satisfaction:

$$Y_3 = c + b_{14}X_{14} + b_{16}X_{16} + b_{17}Z_2 + b_{18}X_{14} \cdot Z_2 + b_{19}X_{16} \cdot Z_2 + e$$

Hypothesis 5 was designed to test the explanatory relationship among demographic and work profile characteristics, perceptions of transformational leadership,

organizational commitment and nurses' job satisfaction. Hypothesis 5 was examined through stepwise (forward) multiple regression analysis where the regression model used the following equation:

$$Y_2 = c + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + b_{13}X_{13} + b_{14}X_{14} + b_{15}X_{15} + e$$

Hypothesis 6 was designed to test the explanatory relationship among demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, job satisfaction, and nurses' intention to leave. Hypothesis 6 was examined through stepwise (forward) multiple regression analysis where the regression model used the following equation:

$$Y_3 = c + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + b_{10}X_{10} + b_{11}X_{11} + b_{12}X_{12} + b_{13}X_{13} + b_{14}X_{14} + b_{15}X_{15} + b_{16}X_{16} + e$$

Evaluation of Research Methods

In this section, the degree to which the research methods contributed to strengths and weaknesses in internal and external validity are discussed. Internal validity refers to the causal relationship between the independent variables and dependent variables.

External validity refers to the extent to which the findings of a study can be applied to individuals and settings beyond those being studied (Gall, Gall & Borg, 2003).

Internal Validity

Strengths.

1. The majority of the instruments and scales (except for some subscales of the MMSS) used in this study have evidence of good estimates of reliability and validity has been established.

2. Research questions and hypotheses testing procedures are clear and consistent.
3. There was an adequate sample size used to conduct the study to enable high levels of data analysis.
4. Multiple regression analyses were used for hypotheses testing of correlational (explanatory) relationships.

Weaknesses.

1. The use of a non-experimental design is a weakness. The experimental design is more rigorous and allows for greater internal validity (Gall, Gall & Borg, 2003).
2. The MMSS scale did not have estimates of reliability above .60 for all the subscales, threatening the validity of the study.
3. The survey contained 78 items which may impact the completion rate.

External Validity

Strengths.

1. The entire target population was invited to participate in the study.
2. The sampling size was sufficient.
3. Inviting registered nurses from multiple hospitals within varying specialties increased the ability to generalize the findings to other organizations similar to Tenet.
4. Participants completed the survey in their natural setting and not in a laboratory.

Weaknesses.

1. Not all nurses were included such as part-time agency, and non agency nurses.

2. Although multiple hospitals were used in the study, the hospitals are limited to one part of the country, Florida, and the southern part of the state, which limit generalizability across settings
3. All the hospitals are for-profit hospitals within the same company.

Chapter III described the research methods that addressed the research questions and hypotheses about the relationship among transformational leadership, job satisfaction, organizational commitment, and non-supervisory nurses' intention to leave. The chapter included the proposed research design, population, sampling plan and setting, instrumentation, procedures considerations to include ethical issues, and data collection methods, methods of data analysis, and the evaluation of the research methods. Chapter IV will discuss the study findings.

CHAPTER IV

Results

Chapter IV presents the results of the study about the relationship among transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave. The data gathered from the completed on-line surveys were analyzed using the Statistical Program for the Social Sciences (SPSS) 18.0. Findings included in Chapter IV are: the final data-producing sample, response rate, psychometric evaluation of the subscales and total scales of the measures used in this study, answers to the research questions, and testing of the hypotheses.

Final Data Producing Sample

Data collection was accomplished through an on-line survey to an accessible population of over 2,409 registered nurses employed in ten Tenet South Florida hospitals. This represented 100% of the target population. Data was collected using an on-line survey using Survey Monkey. There were 409 participants that entered Survey Monkey and 409 actual surveys were submitted, a response rate of 17% for this self-selected sample that agreed to participate. With removal of participants due to incompleteness of the authorization for informed consent, and responding "no" to one or more of the filter questions, there were 264 "usable" surveys. Of the 264 valid surveys nine were missing information related to individual variables. Thus all usable surveys were utilized.

Representation by the hospitals of the final data-producing sample of full time RNs did not closely represent the distribution by hospital of the target population. Response rates from half of the hospitals represented contained over or under 5%. The largest over representation was Delray Medical Center (+14.9%), and the largest under

representation was Palmetto General (-7.6%). A comparative analysis of the data producing sample with the target population with representation by hospital is shown in Table 4-1.

Table 4-1

Target Population and Data Producing Sample with Representation by Hospital

Hospital Name	Target Full Time RNs (n)	Target % of Total	Data Producing Sample	Sample % of Total
Coral Gables	103	4.3%	45	17.6
Delray Medical Center	388	16.1%	79	31.0
Florida Medical Center	201	8.3%	6	2.4
Good Samaritan	163	6.8%	4	1.6
Hialeah Hospital	138	5.7%	5	2.0
North Shore Medical Center	233	9.7%	25	9.8
Palm Beach Gardens	231	9.6%	29	11.4
Palmetto General	287	11.9%	11	4.3
St. Mary's Medical	463	19.2%	42	16.5
West Boca Medical	202	8.4%	9	3.5
Total	2409	100%	255	

Reliability and Validity of the Measurement Scales

The survey was composed of six parts: Part 1 was the *Demographic Characteristics* developed by the researcher. The items included: age, gender, race, primary language, marital status, nursing education level, highest degree level, and hourly wage. Part 2 was the *Work Profile Characteristics* developed by the researcher. The items included: tenure in job, tenure in Tenet, nursing unit, shift worked, and hospital. Part 3 was *Transformational Leadership*, and used the Global Transformational Leadership Scale (GTL) developed by Carless, Wearing and Mann (2000).

Organizational Commitment, Part 4 of the survey, was measured by the 24 item *Organizational Commitment Scale*, developed by Meyer and Allen (1991), and organized into three subscales (8 items in each subscale). *Job Satisfaction*, Part 5 of the survey used the 31 item McCloskey/Mueller Satisfaction Scale (MMSS) (Mueller & McCloskey, 1990), which specifically measures job satisfaction in hospital nurses. The MMSS is multidimensional with eight subscales. Part 6 was *Intention to Leave*, and consisted of three items developed by Meyer, Allen, and Smith (1993).

Before testing hypotheses and answering research questions, reliability and validity analyses were conducted on each of the four scales in order to determine the adequacy of their psychometric qualities. Internal consistency reliability analysis using Cronbach's alpha and exploratory factor analysis for each of the four scales is presented.

Exploratory Factor Analysis and Internal Consistency Reliability Analysis of Part III: Transformational Leadership

Transformational leadership was measured by the *Global Transformational Leadership Scale (GTL)*, a seven-item unidimensional scale that is a global measure of transformational leadership (Carless, et al., 2000). The response format for each item is a five point frequency rating scale: 1= Rarely, or never, 2 = Seldom, once in a while, 3 = Occasionally, sometimes, 4 = Fairly often, usually; and 5 = Very frequently, if not always (Carless et al., 2000). The total scores range is from 7 to 35, where higher scores are associated with more transformational leadership behaviors. Cronbach's alpha for the GTL was .93 supporting the conclusion that the GTL is a reliable measure of transformational leadership (Carless et al., 2000). In this study, internal consistency reliability using Cronbach's alpha coefficient was estimated for the GTL.

Prior to factor analysis being conducted on the *Global Transformational Leadership* scale, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was performed resulting in an outcome of 0.954. Field (2006) and Pallant (2007) indicate that an outcome above 0.9 is indicative of factor analysis being appropriate. Bartlett's Test of Sphericity was also completed resulting in a significance value of .000, which is highly significant, further indicating that factor analysis on the scale is appropriate (Field, 2006).

The 7-item, *Part III: Global Transformational Leadership* scale has good internal consistency. The calculated Cronbach's alpha for this study was .978. The GTL is a unidimensional measure of transformational leadership. Corrected item-total correlation for the GTL were all acceptable, ranging from .882 to .940, and are shown in Table 4-2.

Table 4-2

Coefficient Alphas and Corrected Item-total Correlations for Part III: 7-Item Global Transformational Leadership Scale

Item	Corrected Item Total Correlation	Cronbach's Alpha if Item Deleted
GTL		
7 Items (score range 7-35)		
Communicates a clear and positive vision of the future	.882	.977
Treats staff as individuals, supports and encourages their development	.932	.974
Gives encouragement and recognition of staff	.888	.976
Fosters trust, involvement and cooperation among team	.940	.973
Encourages thinking about problems in new ways and questions assumptions	.931	.973
Is clear about his/her values and practices what he/she preaches	.917	.974
Instills pride and respect in others and inspires me by being highly competent	.934	.973
<i>Total Scale Coefficient Alpha = .978</i>		

To further establish construct validity of the *Global Transformational Leadership* scale, principal components analysis using varimax rotation was conducted for the total sample. Exploratory factor analysis (EFA) resulted in one factor emerging from the

analysis. Items with eigenvalues greater than 1.0 were used to extract factors. The eigenvalues was 6.188 explaining 88.394% of the total variance for the unidimensional scale. Factor loadings for the GTL consisted of seven items ranging from .913 to .957, and the result is presented in Table 4-3.

Table 4-3

Factor Loadings for the Global Transformational Leadership Scale (GTL): Total Sample (N=264)

Item #	Factor Loadings
GTL 1: Communicates a clear and positive vision of the future	.913
GTL 2: Treats staff as individuals, supports and encourages their development	.951
GTL 3: Gives encouragement and recognition of staff	.917
GTL 4: Fosters trust, involvement and cooperation among team	.957
GTL 5: Encourages thinking about problems in new ways and questions assumptions	.950
GTL 6: Is clear about his/her values and practices what he/she preaches	.940
GTL 7: Instills pride and respect in others and inspires me by being highly competent	.953

Exploratory Factor Analysis and Reliability Analysis for the Three Component Organizational Commitment scale

Organizational Commitment was measured by Meyer and Allen's (1991) *Three-Component Organizational Commitment* scale which contains 24 items organized into three subscales (8 items in each subscale). Responses for the subscales are on a seven point semantic differential scale with anchors labeled as: 1) strongly disagree and 7) strongly agree. The subscales are the *Affective Commitment Scale (ACS)*, (items numbers 1, 2, 3, 4, 5, 6, 7, 8), which assesses the emotional attachment to the

organization; the *Continuance Commitment Scale* (CCS), (items numbers 9, 10, 11, 12, 13, 14, 15, 16), which assesses the cost associated with leaving the organization; and the *Normative Commitment Scale* (NCS), (items numbers 17, 18, 19, 20, 21, 22, 23, 24) which reflects the level of obligation that the employee feels to continue with the organization. Items numbers 4, 5, 6, 8, 9, 12, 18, 19, and 24 are reversed scored (Allen & Meyer, 1990; Tayyeb & Riaz, 2004). Averages are computed for each score. Scores range in value from 1 to 7 with higher scores indicating stronger commitment (Meyer & Allen, 1990). The internal consistency reliability estimates for each scale (Cronbach's alpha) were .87 (ACS), .75 (CCS) and .79 (NCS) (Tayyeb & Riaz, 2004).

Reliability analysis. For this study the internal consistency reliability estimates for each scale were .906 (ACS), .686 (CCS) and .756 (NCS). Preliminary analysis of internal consistency reliability estimates for the 24 item Three Component Organizational Commitment measure is presented in Table 4.4

Table 4-4

Corrected Item-total Correlations for the Affective Commitment Scale, the Continuance Commitment Scale, and the Normative Commitment Scale

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Affective Commitment Scale (.906)		
ORGCOM1	.765	.889
ORGCOM2	.727	.893
ORGCOM3	.591	.905
ORGCOM4 (RC) ^a	.549	.907
ORGCOM5 (RC)	.770	.888
ORGCOM6 (RC)	.815	.884
ORGCOM7	.696	.895
ORGCOM8 (RC)	.703	.894
Continuance Commitment Scale (.686)		
ORGCOM9 (RC)	.102	.720
ORGCOM10	.563	.611
ORGCOM11	.577	.609
ORGCOM12 (RC)	-.046	.750

Table 4-4 Continued

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ORGC0M13	.465	.637
ORGC0M14	.491	.631
ORGC0M15	.527	.622
ORGC0M16	.458	.637
Normative Commitment Scale (.756)		
ORGC0M17	.340	.749
ORGC0M18 (RC)	.405	.740
ORGC0M19 (RC)	.513	.719
ORGC0M20	.646	.693
ORGC0M21	.402	.741
ORGC0M22	.614	.699
ORGC0M23	.488	.724
ORGC0M24 (RC)	.222	.769

^aNote. RC=Reverse Coded, ORGC0M=Organizational Commitment

The inter-item correlation matrix for the Affective Commitment Scale is presented in Table 4.5.

Table 4-5

Inter-Item Correlation Matrix for Affective Scale

	ORGC0M1	ORGC0M2	ORGC0M3	ORGC0M4 (RC)	ORGC0M5 (RC)	ORGC0M6 (RC)	ORGC0M7	ORGC0M8 (RC)
ORGC0M1	1.000	.758	.581	.439	.591	.623	.668	.505
ORGC0M2	.758	1.000	.627	.346	.577	.584	.582	.493
ORGC0M3	.581	.627	1.000	.337	.400	.463	.525	.392
ORGC0M4 (RC)	.439	.346	.337	1.000	.517	.527	.394	.509
ORGC0M5 (RC)	.591	.577	.400	.517	1.000	.842	.523	.711
ORGC0M6 (RC)	.623	.584	.463	.527	.842	1.000	.616	.721
ORGC0M7	.668	.582	.525	.394	.523	.616	1.000	.512

Table 4-5 Continued

	ORGC0M1	ORGC0M2	ORGC0M3	ORGC0M4 (RC)	ORGC0M5 (RC)	ORGC0M6 (RC)	ORGC0M7	ORGC0M8 (RC)
ORGC0M8 (RC)	.505	.493	.392	.509	.711	.721	.512	1.000

The Inter-Item Correlation Matrix for the Continuance Commitment Scale is presented in Table 4.6. Judging from the small to moderate correlation with the rest of the CCS items, ORGC0M9 (*I am not afraid of what might happen if I quit my job without having another one lined up*), and ORGC0M12 (*It wouldn't be too costly for me to leave my organization now*) should be removed.

Table 4-6

Inter-Item Correlation Matrix for Continuance Commitment Scale

	ORGC0M9 (RC)	ORGC0M10	ORGC0M11	ORGC0M12 (RC)	ORGC0M13	ORGC0M14	ORGC0M15	ORGC0M16
ORGC0M9 (RC)	1.000	.146	.170	.145	.049	-.129	-.060	.103
ORGC0M10	.146	1.000	.784	-.082	.394	.322	.264	.369
ORGC0M11	.170	.784	1.000	-.157	.492	.285	.265	.397
ORGC0M12 (RC)	.145	-.082	-.157	1.000	-.118	.011	.078	-.089
ORGC0M13	.049	.394	.492	-.118	1.000	.425	.350	.274
ORGC0M14	-.129	.322	.285	.011	.425	1.000	.729	.321

Table 4-6 Continued

	ORGC0M9 (RC)	ORGC0M10	ORGC0M11	ORGC0M12 (RC)	ORGC0M13	ORGC0M14	ORGC0M15	ORGC0M16
ORGC0M15	-.060	.264	.265	.078	.350	.729	1.000	.458
ORGC0M16	.103	.369	.397	-.089	.274	.321	.458	1.000

The Inter-Item Correlation Matrix for the Normative Commitment Scale is presented in Table 4.7. Judging from the small to moderate correlation with the rest of the NCS items, ORGC0M 24 (*I do not think that wanting to be a “company man” or “company woman” is sensible anymore*) should also be removed.

All three items, ORGC0M9, ORGC0M12, and ORGC0M24 are all reverse coded items. For these items strong agreement reflects a lower level of commitment. For this study the data was checked for accuracy and items that were reverse coded were re-coded to ensure accuracy. It was noted in performing preliminary reliability estimates that for ORGC0M12 the Cronbach alpha improved when the item was not reverse coded. For all three items Cronbach alpha values increased if the items were removed. ORGC0M9 (*I am not afraid of what might happen if I quit my job without having another one lined up*), and ORGC0M 12 (*It wouldn't be too costly for me to leave my organization now*) may have been misunderstood by the participants. ORGC0M24 used terminology that was outdated and the terminology use of “company man” and “company woman” may not be clear to some respondents who may have found the wording

confusing. In examining the population, with each acute care hospital belonging to the larger enterprise, of Tenet Healthcare, respondents may not have been certain whether “company” referred to their individual hospital or to the Tenet Healthcare enterprise.

Table 4-7

Inter-Item Correlation Matrix for Normative Commitment Scale

	ORGC0M17	ORGC0M18 (RC)	ORGC0M19 (RC)	ORGC0M20	ORGC0M21	ORGC0M22	ORGC0M23	ORGC0M24 (RC)
ORGC0M17	1.000	.130	.216	.458	.163	.240	.274	.016
ORGC0M18 (RC)	.130	1.000	.467	.310	.105	.227	.147	.393
ORGC0M19 (RC)	.216	.467	1.000	.388	.210	.299	.306	.301
ORGC0M20	.458	.310	.388	1.000	.427	.528	.434	.133
ORGC0M21	.163	.105	.210	.427	1.000	.485	.292	.055
ORGC0M22	.240	.227	.299	.528	.485	1.000	.647	.120
ORGC0M23	.274	.147	.306	.434	.292	.647	1.000	-.031
ORGC0M24 (RC)	.016	.393	.301	.133	.055	.120	-.031	1.000

These findings are similar to the psychometric findings of Xu and Bassham (2010) where items with weak correlations on the CCS and NCS were removed to include item number 24. For further analyses in this study the Three Component Organizational Commitment scale will be composed of the ACS (8 items), CCS (6 items), and the NCS (7 items). The corrected reliability estimates for each scale with the items deleted were .906 (ACS), .805 (CCS), and .769 (NCS) and are presented in Table

4.8. Reported values above .7 are acceptable, although values above .8 are preferable (Pallant, 2007).

Table 4-8

Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Three Component Organizational Commitment Measure

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Affective Commitment Scale (.906)		
ORGCOM1	.765	.889
ORGCOM2	.727	.893
ORGCOM3	.591	.905
ORGCOM4 (RC) ^a	.549	.907
ORGCOM5 (RC)	.770	.888
ORGCOM6 (RC)	.815	.884
ORGCOM7	.696	.895
ORGCOM8 (RC)	.703	.894
Continuance Commitment Scale (.805)		
ORGCOM10	.593	.768
ORGCOM11	.625	.761
ORGCOM13	.528	.783
ORGCOM14	.573	.773
ORGCOM15	.568	.774
ORGCOM16	.493	.791
Normative Commitment Scale (.769)		
ORGCOM17	.362	.763
ORGCOM18 (RC)	.339	.771
ORGCOM19 (RC)	.477	.742
ORGCOM20	.667	.701
ORGCOM21	.421	.755
ORGCOM22	.636	.707
ORGCOM23	.537	.730

^aNote. RC=Reverse Coded, ORGCOM=Organizational Commitment

Before factor analysis was conducted on the *Organizational Commitment* measure, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was performed with an outcome of .854. Values between .8 and .9 are “great” and indicate that factor analysis is appropriate (Field, 2006, p. 640). Bartlett’s Test of Sphericity was completed

with results showing a significance value of .000 indicating high significance. This further validates that performing factor analysis on the scale is appropriate (Field, 2006).

To further establish construct validity of the *Three Component Organizational Commitment* scale principal components analysis with varimax rotation was conducted. Exploratory factor analysis was conducted on the now 21-item *Three Component Organizational Commitment* scale. Three factors, affective commitment, continuance commitment, and normative commitment were expected to emerge from the analysis. Items with eigenvalues greater than 1.0 were used to extract factors. Exploratory factor analysis (EFA) resulted in four factors being extracted. The eigenvalues totals for Factor 1 through Factor 4 range from 1.331 to 6.613 and the total variance explained was 62.096%. Factor 1 consisted of 16 items with factor loadings ranging from .423 to .817, factor 2 consisted of six items with factor loadings ranging from .597 to .796, factor 3 consisted of three items with factor loadings ranging from .414 to .561, and factor 4 consisted of two items with ranges of .555 and .624.

To reduce the number of factors in the analysis and to evaluate the factor loadings, principal component analysis using varimax rotation and a forced three factor model was performed. Three factors were extracted for the factor analysis which accounted for 55.758% of the total variance explained. Eigenvalues ranged from 1.711 to 6.613. According to Field (2006), a loading of 0.4 is satisfactory in research for exploratory purposes, so a cutoff of 0.4 was established for this study. The factor loadings according to the three subscales are as follows: *affective commitment* consisting of eight items with a factor loading of .572 to .865, *continuance commitment* consisting of six items with a factor loading of .618 to .749, and *normative commitment* consisting

of six items with a factor loading of .417 to .801. Although ORGCOM18 (a reverse coded item), *I do not believe that a person must always be loyal to his or her organization*, did not fit the construct of the factor loading after varimax rotation (factor loading at .417), it was not excluded from further analyses. The factor loadings for Part IV: 21 item Three Component Organizational Commitment measure after a three factor extraction is presented in Table 4-9.

Table 4-9

Factor Item Loadings for Part IV: 21-Item Three Component Organizational Commitment Measure After Extraction

Item # and Part 4: Three Component Organizational Commitment measure	Loadings for Factor 1 Affective Commitment Scale	Loadings for Factor 2 Continuance Commitment Scale	Loadings for Factor 3 Normative Commitment Scale
ORGCOM5 (RC)	.865		
ORGCOM6 (RC)	.851		
ORGCOM8 (RC)	.783		
ORGCOM2	.744		
ORGCOM1	.743		
ORGCOM7	.709		
ORGCOM4 (RC)	.607		
ORGCOM3	.572		
ORGCOM11		.749	
ORGCOM10		.747	
ORGCOM14		.717	
ORGCOM15		.699	
ORGCOM13		.682	
ORGCOM16		.618	
ORGCOM22			.801
ORGCOM23			.765
ORGCOM20			.714
ORGCOM21			.602
ORGCOM19 (RC)			.486
ORGCOM17			.417
ORGCOM18 (RC)			

^aNote. RC= Reverse Coded, ORGCOM= Organizational Commitment

Exploratory Factor Analysis and Internal Consistency Reliability Analysis of

Part V: Job Satisfaction

Part 5, *Job Satisfaction*, was measured by the 31 item McCloskey/Mueller Satisfaction Scale (MMSS) (1990), which specifically measures job satisfaction for

hospital nurses. The MMSS has eight subscales, with the response format for each item measured on a five-point satisfaction rating scale ranging from “very dissatisfied” (1) to “very satisfied” (5). The subscales, item numbers, and score range are as follows:

Extrinsic Rewards (3 items, score range = 3-15); *Scheduling Satisfaction* (6 items, score range = 6-30); *Family/Work Balance* (3 items, score range = 3-15); *Co-worker* (2 items, score range = 2-10); *Interaction* (4 items, score range = 4-20); *Professional Opportunities* (4 items, score range = 4-20); *Praise/Recognition* (4 items, score range = 4-20) and *Control/Responsibility* (5 items, score range = 5-25) (Mueller & McCloskey, 1990). Each subscale score is calculated by summing only the items for that scale. The total scale has a score range of 31-155. Higher scores indicate higher levels of satisfaction.

For the 31-item MMSS total scale, the overall Cronbach’s Alpha reported for this study was .94. This suggests very good internal consistency reliability for the scale. Reported values above .7 are acceptable, although values above .8 are preferable (Pallant, 2007). Internal consistency reliability for the 31 item MMSS is presented in Table 4.10.

Table 4-10

*Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Part V: 31-Item McCloskey/Mueller Satisfaction Scale (MMSS)
(Total Scale Coefficient Alpha= .948)*

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
JOBSAT1	.483	.947
JOBSAT2	.552	.947
JOBSAT3	.554	.947
JOBSAT4	.461	.947
JOBSAT5	.499	.947
JOBSAT6	.535	.947
JOBSAT7	.321	.948
JOBSAT8	.545	.947
JOBSAT9	.562	.946
JOBSAT10	.559	.947
JOBSAT11	.370	.948
JOBSAT12	.330	.948
JOBSAT13	.636	.946
JOBSAT14	.510	.947
JOBSAT15	.481	.947
JOBSAT16	.581	.946
JOBSAT17	.693	.945
JOBSAT18	.619	.946
JOBSAT19	.680	.945
JOBSAT20	.638	.946
JOBSAT21	.659	.946
JOBSAT22	.747	.945
JOBSAT23	.737	.945
JOBSAT24	.778	.944
JOBSAT25	.632	.946
JOBSAT26	.775	.944
JOBSAT27	.613	.946
JOBSAT28	.561	.946
JOBSAT29	.683	.945
JOBSAT30	.747	.945
JOBSAT31	.756	.944

In examining the internal consistency coefficients of the eight subscales, the results show that two of the subscales with fewer than four items had lower reliabilities. The low coefficients were consistent with the low coefficients found by Mueller and McCloskey (1990). Roberts, Jones, and Lynn (2004) in the study of 275 recent nursing graduates found internal consistency coefficients that ranged from .48 to .85, with only

two of the subscales having estimates falling below the expected 0.70 criteria. The recommended minimum coefficients are .60 (Green, 1991). The internal consistency reliability for the eight subscales of this study is presented in Table 4-11.

Table 4-11

Coefficient Alphas for Eight Subscales of Part V: 31-Item McCloskey/Mueller Satisfaction Scale (MMSS)
(Total Scale Coefficient Alpha = .94)

Sub -Scale	Number of Items	Item Numbers	Cronbach's Alpha
Satisfaction with Extrinsic Reward	3	1, 2, 3	.81
Satisfaction with Scheduling	6	4, 5, 6, 8, 9, 10	.79
Satisfaction with Balance of Family and Work	3	7, 11, 12	.49
Satisfaction with Co-Workers	2	14, 15	.51
Satisfaction with Interaction Opportunities	4	16, 17, 18, 19	.86
Satisfaction with Professional Opportunities	4	20, 21, 27, 28	.81
Satisfaction with Praise and Recognition	4	13, 24, 25, 26	.85
Satisfaction with Control and Responsibility	5	22, 23, 29, 30, 31	.90

Before factor analysis was conducted on the *MMSS*, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy was performed with an outcome of .917. An outcome above .9 indicates that factor analysis was appropriate (Field, 2006; Pallant, 2007). Bartlett's Test of Sphericity was completed with results showing a significance value of .000 indicating high significance. This further validates that performing factor analysis on the scale is appropriate (Field, 2006).

To further establish construct validity of the *MMSS*, principal components analysis with varimax rotation was conducted. Exploratory factor analysis was conducted on the 31-item *MMSS*. Eight factors, extrinsic rewards, scheduling, balance of family and work, co-workers, interaction opportunities, professional opportunities,

praise and recognition, and control and responsibility were expected to emerge from the analysis. The analysis revealed the presence of seven components with eigenvalues exceeding 1.0, ranging from 1.037 to 12.419, and explaining 69.308% of the total variance. The factor values were as follows: factor 1 consisted of 31 items with factor loadings ranging from .348 to .805, factor 2 consisted of 12 items with factor loadings ranging from .305 to .467, factor 3 consisted of 7 items with factor loadings ranging from .339 to .576, factor 4 consisted of 6 items with factor loadings ranging from .329 to .445, factor 5 consisted of 3 items with factor loadings ranging from .321 to .437, factor 6 consisted of 4 items with factor loadings ranging from .338 to .399, and factor 7 consisted of 2 items with a factor loading of .332 to .342.

According to Field (2006), a loading of .4 is satisfactory in research for exploratory purposes, so a cutoff of 0.4 was established for this study. The factor loadings were as follows: factor 1 consisted of 8 items with factor loadings ranging from .527 to .798, factor 2 consisted of 5 items with factor loadings ranging from .484 to .763, factor 3 consisted of 5 items with factor loadings ranging from .413 to .799, factor 4 consisted of 4 items with factor loadings ranging from .487 to .824, factor 5 consisted of 3 items with factor loadings ranging from .485 to .832, factor 6 consisted of 3 items with factor loadings ranging from .622 to .669, and factor 7 consisted of 3 items with factor loadings ranging from .538 to .788. The factor loadings for Part V: 31 item MMSS after a seven factor extraction is presented in Table 4-12

Table 4-12

Factor Item Loadings for Part V: 31-Item McCloskey/Mueller Satisfaction Scale (MMSS) After Extraction

Item # and Part 5: MMSS	Loadings for Factor 1 Praise & Recognition	Loadings for Factor 2 Interaction Opportunities	Loadings for Factor 3 Scheduling	Loadings for Factor 4 Extrinsic Rewards	Loadings for Factor 5 Control and Responsibility	Loadings for Factor 6 Co- workers	Loadings for Factor 7 Balance of Family and Work
Jobsat10	.524						.538
Jobsat13	.527						
Jobsat22	.759						
Jobsat23	.643						
Jobsat24	.787						
Jobsat25	.525	.429				.432	
Jobsat26	.798						
Jobsat29	.404				.485		
Jobsat30	.690				.421		
Jobsat31	.668				.409		
Jobsat17		.732					
Jobsat18		.763					
Jobsat19		.677					
Jobsat20		.562					
Jobsat21		.484					
Jobsat5			.724				
Jobsat6			.718				
Jobsat7			.413				
Jobsat8			.613				
Jobsat9			.799				
Jobsat1				.743			
Jobsat2				.824			
Jobsat3				.707			
Jobsat4				.487		.459	
Jobsat27					.774		
Jobsat28					.832		
Jobsat11							.723
Jobsat12							.788
Jobsat14						.669	
Jobsat15						.650	
Jobsat16						.622	

The subscale *Professional Opportunities* (items 20, 21, 27, 28) did not load as distinct factors, but were loaded on Factor 2, *Interaction Opportunities* (items 20 and 21) and on Factor 5, *Control and Responsibility* (27 and 28). Conceptually the items loading on these factors also made sense (*opportunities to interact with faculty of the*

College of Nursing-item #20; opportunities to write and publish-item #28). Although the four items (JOBSAT 20, 21, 27, 28) did not fit the construct of the factor loading after varimax rotation, they were not excluded from further analyses, but were included with Factor 2 (*Interaction Opportunities*) and Factor 5 (*Control and Responsibility*), as the *Revised 31 item McCloskey/Mueller Satisfaction Scale (MMSS)*. These findings are similar to the other psychometric findings where the principal component analysis (PCA) with varimax was implemented and yielded seven factors with eigenvalues greater than 1.0 (Tourangeau et al., 2006). The internal consistency reliability for the seven subscales of the *Revised 31 item McCloskey/Mueller Satisfaction Scale (MMSS)* used in this study is presented in Table 4-13.

Table 4-13

Coefficient Alphas for Seven Subscales of Part V: Revised 31-Item McCloskey/Mueller Satisfaction Scale (MMSS)
(Total Scale Coefficient Alpha = .94)

Subscale	Number of Items	Item Numbers	Cronbach's Alpha
Satisfaction with Extrinsic Reward	4	1, 2, 3,4	.81
Satisfaction with Scheduling	5	5, 6, 7, 8, 9	.79
Satisfaction with Balance of Family and Work	3	10, 11, 12	.67
Satisfaction with Co-Workers	3	14, 15, 16	.68
Satisfaction with Interaction Opportunities	5	17, 18, 19, 20, 21	.87
Satisfaction with Praise and Recognition	8	13, 22, 23, 24, 25, 26, 30, 31	.93
Satisfaction with Control and Responsibility	3	27, 28, 29	.83

Exploratory Factor Analysis and Internal Consistency Reliability Analysis of

Part VI: Intention to Leave

Part 6, *Intention to Leave*, was measured by three questions comprising Meyer, Allen and Smith's (1993) *Intention to Leave* scale. Meyer et al. (1993) developed a

three-item, unidimensional, scale as a measure of intention to leave (a predictor of turnover), with each item measured on a seven point semantic differential scale ranging from 1 to 7, with anchors labeled as: 1) strongly disagree and 7) strongly agree. The items specifically measured how frequently employees thought about leaving their current employer, how likely it was that they would search for a job in another organization, and how likely it was that they would actually leave the organization within the next year. The total score range is 1 to 7 (the three items responses are averaged to produce intention-to-leave scores). High scores are associated with the employee's greater intentions to leave the organization.

Prior to factor analysis being conducted on the *Intention to Leave* scale, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was performed resulting in an outcome of 0.759. Field (2006) indicates that an outcome between .7 and .8 is good and indicative of factor analysis being appropriate. Bartlett's Test of Sphericity was also completed resulting in a significance value of .000, which is highly significant, further indicating that factor analysis on the scale is appropriate (Field, 2006).

To further establish construct validity of the *Intention to Leave* scale, principal components analysis using varimax rotation was conducted for the total sample. Exploratory factor analysis (EFA) resulted in one factor emerging from the analysis. Items with eigenvalues greater than 1.0 were used to extract factors. The eigenvalue was 2.565 explaining 85.489% of the total variance for the unidimensional scale. Factor loadings for the *Intention to Leave* scale consisted of three items ranging from .917 to .929, and the result is presented in Table 4-14.

Table 4-14

Initial Factor Item Loadings for Part VI: 3-Item Intention to Leave Scale After Extraction

Item # and Part VI: Intention to Leave	Loadings for Factor 1
INTENTLEAVE2	.929
INTENTLEAVE1	.927
INTENTLEAVE3	.917

For the 3-item *Intention to Leave* scale, the overall Cronbach's Alpha reported for this study was 0.915. This suggests very good internal consistency reliability for the scale. Reported values above .7 are acceptable, although values above .8 are preferable (Pallant, 2007). The Cronbach's alpha if item deleted for the total scale is presented in Table 4-15.

Table 4-15

Corrected Item-total Correlations and Cronbach's Alpha if Item Deleted for Part VI: 3-Item Intention to Leave Scale (Total Scale Coefficient Alpha = 0.915)

Item # Part V: Intention to Leave Scale	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
INTLEAVE1	.833	.874
INTLEAVE2	.838	.870
INTLEAVE3	.815	.889

In this study, convergent and divergent validity of the scales were examined through Pearson *r* correlations. Higher Pearson *r* correlations typically indicate similar measures are related to each other. Lower correlations indicate divergent relationships. Convergent validity was established among the three subscales of the *Three Component*

Organizational Commitment scale. *Affective Commitment scale* was significantly and positively related to the *Normative Commitment scale* ($r = .534, p = .000$). Convergent validity was not established between the *Continuance Commitment scale* and the *Normative Commitment scale* ($r = .182, p = .005$). Convergent validity was also established with *ACS* and *Intention to Leave* ($r = -.661, p = .000$) and between *NCS* and *Intention to Leave* ($r = -.418, p = .000$).

Convergent validity was established between the *GTL* and the *ACS* ($r = .603, p = .000$) and between the *GTL* and the 31 item *MMSS* ($r = .598, p = .000$). Convergent validity was also established with *GTL* and *Intention to Leave* ($r = -.541, p = .000$).

The *Revised 31 item McCloskey/Mueller Satisfaction Scale* was significantly and positively related to its seven subscales: *extrinsic rewards* ($r = .663, p = .000$), *schedule* ($r = .805, p = .000$), *family and work* ($r = .536, p = .000$), *co-workers* ($r = .645, p = .000$), *interaction opportunities* ($r = .853, p = .000$), *praise and recognition* ($r = .875, p = .000$), and *control and responsibility* ($r = .892, p = .000$). Convergent validity was also established between the *Revised-MMSS* and *Intention to Leave* ($r = -.630, p = .000$).

Divergent validity was established between the three subscales of the *Organizational Commitment scale*. Results of the Pearson r correlations to establish convergent and divergent validity for the scales in this study are presented in Table 4-16. Scales were modified to reflect psychometric properties that were best suited for the study. Research questions were then answered and hypotheses tested.

Table 4-16

Pearson r Correlation Matrix of Study Scales: Convergent and Divergent Validity

Variables	Global Transformational Leadership	Affective Commitment Scale	Continuance Commitment Scale	Normative Commitment Scale	Revised MMSS Total	Extrinsic Reward	Scheduling	Family and Work	Co-Workers	Interaction Opportunities	Praise and Recognition	Control and Responsibility	Intention to Leave
Global Transformational Leadership 7 Items	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>	<i>p</i>
Affective Commitment Scale 8 Items	.603		.031	.534									
Continuance Commitment Scale 6 Items	-.069	.627		.182									
Normative Commitment Scale 7 Items	.303	.000	.005										
Revised MMSS Total 31 Items	.598	.664	-.069	.437									
Extrinsic Reward 3 Items	.322	.476	.078	.298	.663								
	.000	.000	.234	.000	.000								

Table 4-16 Continued

Variables	Global Transformational Leadership		Affective Commitment Scale		Continuance Commitment Scale		Normative Commitment Scale		Revised MMSS Total		Extrinsic Reward		Scheduling		Family and Work		Co-Workers		Interaction Opportunities		Praise and Recognition		Control and Responsibility		Intention to Leave		
	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	r	p	
Scheduling 6 Items	.425	.000	.552	.000	-.049	.460	.338	.000	.805	.000	.514	.000															
Family and Work 3 Items	.181	.006	.250	.000	-.051	.440	.159	.016	.536	.000	.340	.000	.430	.000													
Co-Workers 2 Items	.344	.000	.383	.000	-.028	.673	.279	.000	.645	.000	.407	.000	.478	.000	.347	.000											
Interaction Opportunities 6 Items	.466	.000	.514	.000	-.044	.509	.328	.000	.853	.000	.498	.000	.632	.000	.332	.000	.538	.000									
Praise and Recognition 4 Items	.690	.000	.650	.000	-.090	.173	.420	.000	.875	.000	.472	.000	.622	.000	.364	.000	.550	.000	.713	.000							
Control and Responsibility 7 items	.579	.000	.600	.000	-.112	.090	.426	.000	.892	.000	.482	.000	.588	.000	.420	.000	.484	.000	.710	.000	.792	.000					
Intention to Leave 3 Items	-.541	.000	-.661	.000	-.074	.268	-.418	.000	-.630	.000	-.438	.000	-.491	.000	-.275	.000	-.394	.000	-.501	.000	-.598	.000	-.575	.000			

Research Questions

Research Question 1

What are the demographic characteristics, work profiles, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave of nurses?

Demographic characteristics. Descriptive statistics were used to answer Research Question 1. Included in this are frequency distributions, and measures of central tendency (mean). The final data producing sample was 264 respondents. The demographic characteristics of the target population showed a mean age of 41.61 with a range of 22 to 76 years. 12.9% of the population was male and 87.1% female, which is representative of the current national RN population, where 7.9 % of the registered nurses in the United States are male (Roth & Coleman, 2008). The majority of the data producing sample was married (55.7%); and was White (72.7%) with English as the primary language spoken (81.8%). With the characteristic of highest nursing education level, there was an almost equal representation between the Associate, or Diploma, in Nursing and the Bachelor in nursing (46.2% and 47.3% respectively). However, the majority of the sample had earned a Bachelor as the highest degree level earned (50.8%). The average hourly wage for the data producing sample was \$32.18, with a range between \$20 and \$58.24. The demographic characteristics of the data-producing sample are shown in Table 4-17.

Table 4-17

Demographic Characteristics of Employees by Age, Gender, Marital Status, Race, Language, Nursing Education, Highest Degree, and Hourly Wage

Demographic Characteristics	Frequency	Valid Percent
Age (n=260)		
Less than 28	50	19.2
29 to 33	40	15.4
34 to 40	42	16.2
41 to 50	49	18.8
51 to 55	40	15.4
56 and above	39	15.0
Gender (n=264)		
Male	34	12.9
Female	230	87.1
Marital Status (n=264)		
Married	147	55.7
Single, Never Married	72	27.3
Divorced or Separated	36	13.6
Widow or Widower	9	3.4
Race (n=264)		
White	192	72.7
Black or African American	46	17.4
American Indian or Alaskan Native	1	.4
Asian	21	8.0
Native Hawaiian/Other Pacific Islander	4	1.5
Language(n=264)		
English	216	81.8
Spanish	31	11.7
Creole	7	2.7
Other	10	3.8
Highest Nursing Education Level (n=264)		
Associate	122	46.2
Bachelor in Nursing	125	47.3
Master in Nursing	16	6.1
Doctoral Degree in Nursing	1	.4
Highest Degree Level (n =264)		
Associate	102	38.6
Bachelor	134	50.8
Master	25	9.5
Doctoral	3	1.1

Table 4-17 Continued

Demographic Characteristics	Frequency	Valid Percent
Hourly Wage (n =244)		
Less than 20.00	1	.4
20.01 to 27.00	65	24.6
28.00 to 36.00	106	40.2
37.00 to 43.00	66	25.0
44.00 to 51.00	5	1.9
52.00 and above	1	.4

Work profile characteristics. The work profile characteristics of the data producing sample showed that the average time as a registered nurse was 13.89 years with a range of less than one year to 50 years. The mean length of employment in the current job was 6.8 years, while the majority of the nurses (41%) were between 2 to 5 years in the current job. The mean length of employment with Tenet Healthcare was 7.46 years with the majority of the nurses having between 2 to 7 years of employment with Tenet Healthcare. The majority of the sample primarily worked in critical care, which was indicative of all intensive care units (36.1%), while the 7A-7P shift had the greatest representation (49.8%). The work profile characteristics of the data-producing sample are shown in Table 4-18.

Table 4-18

Work Profile Characteristics of Employees by Length of Employment in Job, Length of Time as an RN, Length of Employment with Tenet, Nursing Unit, Shift Worked, and Hospital

Work Profile Characteristics	Frequency	Valid Percent
Length of Employment in Current Job (n=249)		
Less than one year	52	20.9
2 to 5 years	102	41.0
6 to 9 years	24	9.6
10 to 13 years	26	10.4
14 to 17 years	15	6.0
18 to 21 years	19	7.6
22 to 25 years	3	1.3
Over 26 years	8	3.2
Length of Time as a Registered Nurse (n=252)		
Less than one year	26	10.3
2 to 9 years	85	33.7
10 to 17 years	53	21.0
18 to 25 years	39	15.5
26 to 33 years	32	12.7
34 to 41 years	15	6.0
Over 42 years	2	.8
Length of Employment with Tenet (n=250)		
Less than one year	43	17.2
2 to 7 years	111	44.4
8 to 14 years	49	19.6
15 to 20 years	27	10.8
21 to 26 years	15	6.0
Over 27 years	5	2.0
Nursing Unit (n=255)		
Critical Care	92	36.1
Medical Surgical	62	24.3
Telemetry	44	17.3
Surgical	0	0
Ambulatory Care	12	4.7
Emergency Department	25	9.8
Psychiatry	1	.4
Women's Services	2	.8
Pediatrics	17	6.6

Table 4-18 continued

Work Profile Characteristics	Frequency	Valid Percent
Shift Worked (n=255)		
7A-7P	127	49.8
7A-3P	38	14.9
3P-11P	0	0
7P-7A	89	34.9
11A-7P	1	.4
Hospitals (n=255)		
Coral Gables	45	17.6
Delray Medical Center	79	31.0
Florida Medical Center	6	2.4
Good Samaritan	4	1.6
Hialeah Hospital	5	2.0
Northshore Medical Center	25	9.8
Palm Beach Gardens	29	11.4
Palmetto General	11	4.3
St. Mary's Medical	42	16.5
West Boca Medical	9	3.4

Perceptions of transformational leadership descriptive analysis. Exploratory analysis of the *Global Transformational Leadership Scale (GTL)* is presented in Table 4-19. The response format for each of the 7 items is a five point frequency rating scale: 1= Rarely, or never, 2 = Seldom, once in a while, 3 = Occasionally, sometimes, 4 = Fairly often, usually; and 5 = Very frequently, if not always (Carless et al., 2000). The total score range is from 7 to 35, where higher scores are associated with more transformational leadership behaviors.

The lowest average GTL score was GTL5 “Encourages thinking about problems in new ways and questions assumptions” at 3.70. The highest GTL score was 3.90 for GTL2 “Treats staff as individuals, supports and encourages their development.” Average item scores for the Global Transformational Leadership Scale ranged from 3.70 to 3.90.

The mean total GTL score was 26.36 indicating an overall perception of high transformational leadership behaviors.

Table 4-19

Mean Scale and Average Item Scores for the 7-Item Global Transformational Leadership Scale

Scale/Item	N	1 Rarely, or never	2 Seldom or once in a while	3 Occasionally, Sometimes	4 Fairly Often, usually	5 Very Frequently, if not always	Average Item Score
GTL 7 items (Score range 7-35; mean total GTL 26.36)							
GTL1 Communicates a clear and positive vision of the future	247	5.3%	11.3%	17.4%	31.2%	34.8%	3.79
GTL2 Treats staff as individuals, supports and encourages their development	247	5.3%	6.5%	17.4%	34.4%	36.4%	3.90
GTL3 Gives encouragement and recognition of staff	247	6.5%	8.9%	21.0%	30.4%	33.2%	3.75
GTL4 Fosters trust, involvement and cooperation among team	247	6.1%	10.5%	19.8%	30.8%	32.8%	3.74
GTL5 Encourages thinking about problems in new ways and questions assumptions	247	6.5%	9.7%	22.3%	30.3%	31.2%	3.70
GTL6 Is clear about his/her values and practices what he/she preaches	247	6.5%	9.3%	19.0%	33.2%	32.0%	3.75
GTL7 Instills pride and respect in others and inspires me by being highly competent	247	6.1%	11.3%	19.0%	30.4%	33.2%	3.73

Perceptions of organizational commitment descriptive analysis. Exploratory analysis of the *Three Component Organizational Commitment scale (Revised)* is presented in Table 4-20. The revised scale contains 21 items organized into three subscales. Responses for the subscales are on a seven point semantic differential scale ranging with anchors labeled as: 1) strongly disagree and 7) strongly agree. The subscales are the *Affective Commitment Scale (ACS)*, (items numbers 1, 2, 3, 4, 5, 6, 7, 8), which assesses the emotional attachment to the organization; the *Continuance Commitment Scale (CCS)*, (items numbers 10, 11, 13, 14, 15, 16), which assesses the cost associated with leaving the organization; and the *Normative Commitment Scale (NCS)*, (items numbers 17, 18, 19, 20, 21, 22, 23) which reflects the level of obligation that the employee feels to continue within the organization. For the revised scale, item numbers 9, 12, and 24 were deleted. Item numbers 4, 5, 6, 8, 18, and 19 are reversed scored. Averages are computed for items within a scale to yield an overall score for each of the components of organizational commitment. For each of the three subscales, score ranges in value from 1 to 7 with higher scores indicating stronger commitment (Meyer & Allen, 1990).

The highest *affective commitment* scale mean score was ORGCOM2 “I enjoy discussing my organization with people outside it” at 5.01. The lowest *affective commitment* scale mean score was ORGCOM4, a reverse coded item, “I think that I could easily become as attached to another organization as I am to this one” at 3.58. The highest *continuance commitment* scale mean score was ORGCOM 11 “Too much in my life would be disrupted if I decided I wanted to leave my organization now” at 4.59. The

lowest *continuance commitment* scale mean score was ORGCOM14 “I feel that I have too few options to consider leaving this organization at 3.32. The highest *normative commitment* scale mean score was ORGCOM18, a reverse coded item, “I do not believe that a person must always be loyal to his or her organization” at 4.85. The lowest *normative commitment* scale mean score was ORGCOM21 “If I got another offer for a better job elsewhere I would not feel it was right to leave my organization” at 3.69. The mean score for the *affective commitment* subscale was 36.52 (range 8-56). The mean score for the *continuance commitment* subscale was 24.26 (range 6-42 for the revised six items subscale). The overall mean score for the *normative commitment* subscale was 31.14 (range 7-49 for the revised seven items subscale).

Table 4-20

Mean Scale and Average Item Scores for the 21-Item Three Component Organizational Commitment Scale (Revised)

Scale/Item	N	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree	Average Item Score
ORGCOM1 I would be very happy to spend the rest of my career with this organization.	240	5.4%	6.3%	9.6%	21.2%	12.9%	31.3%	13.3%	4.77
ORGCOM2 I enjoy discussing my organization with people outside it.	240	1.7%	6.2%	13.3%	9.2%	20.0%	36.7%	12.9%	5.01
ORGCOM3 I really feel as if this organization's problems are my own.	240	9.6%	15.8%	7.1%	12.5%	21.3%	27.0%	6.7%	4.28

Table 4-20 continued

Scale/Item	N	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree	Average Item Score
ORGC0M4 (R) I think that I could easily become as attached to another organization as I am to this one.	240	5.8%	10.4%	8.3%	25.0%	19.2%	23.8%	7.5%	3.58
ORGC0M5 (R) I do not feel like 'part of the family' at my organization.	240	17.9%	25.4%	20.0%	9.6%	12.9%	10.9%	3.3%	4.80
ORGC0M6 (R) I do not feel 'emotionally attached' to this organization.	240	16.7%	25.4%	18.7%	9.2%	12.1%	12.1%	5.8%	4.66
ORGC0M7 This organization has a great deal of personal meaning for me.	240	5.4%	6.7%	12.5%	17.1%	16.2%	26.7%	15.4%	4.74
ORGC0M8 (R) I do not feel a strong sense of belonging to my organization.	240	16.7%	24.1%	17.9%	14.2%	12.1%	9.2%	5.8%	4.68
ORGC0M10 It would be very hard for me to leave my organization right now, even if I wanted to.	240	6.7%	14.6%	10.4%	12.5%	12.5%	26.6%	16.7%	4.56
ORGC0M11 Too much in my life would be disrupted if I decided I wanted to leave my organization now.	240	5.4%	14.2%	12.5%	10.4%	14.2%	27.9%	15.4%	4.59
ORGC0M13 Right now, staying with my organization is a matter of necessity as much as desire.	240	5.8%	14.6%	9.6%	16.3%	17.4%	22.1%	14.2%	4.48
ORGC0M14 I feel that I have too few options to consider leaving this organization.	240	17.1%	27.9%	11.3%	15.0%	12.0%	11.7%	5.0%	3.32

Table 4-20 Continued

Scale/Item	N	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree	Average Item Score
ORGC0M15 One of the few serious consequences of leaving this organization would be scarcity of available alternatives.	240	17.5%	25.4%	12.9%	14.6%	13.3%	10.0%	6.3%	3.36
ORGC0M16 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.	240	12.9%	15.8%	12.5%	14.6%	17.9%	16.3%	10.0%	3.98
ORGC0M17 I think that people these days move from company to company too often.	239	3.8%	5.0%	7.0%	24.6%	22.9%	29.6%	7.1%	4.77
ORGC0M18 (R) I do not believe that a person must always be loyal to his or her organization.	239	17.5%	25.8%	18.3%	16.3%	10.0%	8.8%	3.3%	4.85
ORGC0M19 (R) Jumping from organization to organization does not seem at all unethical to me.	239	10.0%	20.8%	17.9%	25.0%	12.1%	10.0%	4.2%	4.46
ORGC0M20 One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	239	5.0%	12.9%	11.7%	18.7%	23.8%	20.0%	7.9%	4.36
ORGC0M21 If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.	239	10.9%	20.5%	15.5%	19.2%	13.8%	15.1%	5.0%	3.69

Table 4-20 Continued

Scale/Item	N	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree	Average Item Score
ORGCOM22 I was taught to believe in the value of remaining loyal to one's organization.	239	4.6%	10.5%	9.6%	15.5%	24.3%	23.8%	11.7%	4.63
ORGCOM23 Things were better in the days when people stayed with one organization for most of their careers	239	5.4%	8.0%	8.8%	34.7%	16.7%	17.6%	8.8%	4.37

Perceptions of job satisfaction descriptive analysis. The 31 item *McCloskey/Mueller Satisfaction Scale (MMSS)* specifically measures job satisfaction in hospital nurses. The *MMSS (Revised)* has seven subscales, with the response format for each item measured on a five-point satisfaction rating scale ranging from “very dissatisfied” (1) to “very satisfied” (5). The revised subscales, item numbers, and score range are as follows: *Extrinsic Rewards* (4 items, score range = 4-20); *Scheduling Satisfaction* (5 items, score range = 5-25); *Family/Work Balance* (3 items, score range = 3-15); *Co-worker* (3 items, score range = 3-15); *Interaction Opportunities* (5 items, score range = 5-25; revised from 4 items); *Praise/Recognition* (8 items, score range = 8 -40; revised from 4 items) and *Control/Responsibility* (3 items, score range = 3-15; revised from five items). Each subscale score is calculated by summing only the items for that scale. The total scale has a score range of 31-155. Higher scores indicate higher levels of satisfaction (Mueller & McCloskey, 1990).

The *McCloskey/Mueller Satisfaction Scale (MMSS)* resulting from exploratory analysis is presented in Table 4-21. The lowest average *extrinsic reward* score was item JOBSAT 3 “How satisfied are you with your benefits package (insurance, retirement)?” at 3.21. The highest average *extrinsic reward* score was item JOBSAT2 “How satisfied are you with your vacation?” at 3.53. The lowest average *scheduling satisfaction* score was JOBSAT7 “How satisfied are you with opportunity for part-time work?” at 3.33. The highest average *scheduling satisfaction* scores were JOBSAT5 “How satisfied are you with flexibility in scheduling your hours?” and JOBSAT6 “How satisfied are you with the opportunity to work straight days?” at 4.12. The lowest average *family/work balance* score was JOBSAT12 “How satisfied are you with child care facilities?” at 2.72. The highest average *family/work balance* score was JOBSAT10 “How satisfied are you with compensation for working week-ends?” at 3.22. The highest average *coworkers* score was JOBSAT14 “How satisfied are you with your nursing peers?” at 4.04. JOBSAT15 “How satisfied are you with the physicians you work with?” has the lowest average *coworkers* score at 3.76. The lowest average *interaction opportunity* score was JOBSAT20 “How satisfied are you with opportunities to interact with faculty of the College of Nursing?” at 3.25. The highest average *revised interaction opportunity* score was JOBSAT17 “How satisfied are you with opportunities for social contact at work?” at 3.91. The lowest average *praise and recognition* score was JOBSAT31 “How satisfied are you with your participation in organizational decision making?” at 3.03. The highest average *praise and recognition* score was JOBSAT13 “How satisfied are you with your immediate supervisor?” at 3.83. The lowest average *control and responsibility* was

JOBSAT28 “How satisfied are you with opportunities to write and publish?” at 2.99. The highest average *control and responsibility* was JOBSAT29 “How satisfied are you with your amount of responsibility?” at 3.58. Average item scores for the 31-item *McCloskey/Mueller Satisfaction Scale (MMSS) Questionnaire* ranged from 2.72 to 4.12.

Table 4-21

Mean Scale and Average Item Scores for the 31-Item McCloskey/Mueller Satisfaction Scale

Scale/Item	N	1 Very Dissatisfied	2 Moderately Dissatisfied	3 Neither satisfied, or dissatisfied	4 Moderately Satisfied	5 Very Satisfied	Average Item Score
Extrinsic Rewards 4 items (Subscale score range 4-20)							
JOBSAT1 How satisfied are you with your salary?	232	7.8%	13.8%	16.3%	55.2%	6.9%	3.40
JOBSAT2 How satisfied are you with your vacation?	232	6.5%	11.2%	22.8%	42.3%	17.2%	3.53
JOBSAT3 How satisfied are you with your benefits package (insurance retirement)	232	10.8%	20.3%	18.1%	39.2%	11.6%	3.21
JOBSAT4 How satisfied are you with your hours?	232	2.2%	4.3%	11.6%	48.3%	33.6%	4.07
Extrinsic Reward Total Score							14.20
Scheduling Satisfaction 5 items (Subscale score range 5-25)							
JOBSAT5 How satisfied are you with flexibility in scheduling your hours	232	3.4%	3.0%	9.5%	46.6%	37.5%	4.12

Table 4-21 Continued

Scale/Item	N	1 Very Dissatisfied	2 Moderately Dissatisfied	3 Neither satisfied, or dissatisfied	4 Moderately Satisfied	5 Very Satisfied	Average Item Score
JOBSAT6 How satisfied are you with the opportunity to work straight days?	232	2.2%	4.7%	16.4%	32.3%	44.4%	4.12
JOBSAT7 How satisfied are you with opportunity for part-time work?	232	4.7%	4.7%	59.5%	14.7%	16.4%	3.33
JOBSAT8 How satisfied are you with week-ends off per month?	232	3.9%	8.6%	16.8%	39.7%	31.0%	3.85
JOBSAT9 How satisfied are you with flexibility in scheduling your week-ends off?	232	3.4%	6.9%	19.4%	35.4%	34.9%	3.91
Scheduling Satisfaction Total Score							19.34
Family and Work Balance 3 items (Subscale score range 3-15)							
JOBSAT 10 How satisfied are you with compensation for working week-ends?	232	16.8%	11.2%	22.0%	33.2%	16.8%	3.22
JOBSAT11 How satisfied are you with maternity leave time?	232	6.5%	4.3%	74.1%	6.5%	8.6%	3.06
JOBSAT12 How satisfied are you with child care facilities?	232	18.1%	6.0%	66.4%	5.2%	4.3%	2.72
Family and Work Balance Total Score							9.00
Co-Workers 3 items (Subscale score range 3-15)							
JOBSAT14 How satisfied are you with your nursing peers?	232	1.7%	6.0%	11.2%	48.3%	32.8%	4.04

Table 4-21 Continued

Scale/Item	N	1 Very Dissatisfied	2 Moderately Dissatisfied	3 Neither satisfied, or dissatisfied	4 Moderately Satisfied	5 Very Satisfied	Average Item Score
JOBSAT15 How satisfied are you with the physicians you work with?	232	4.7%	9.9%	11.2%	52.6%	21.6%	3.76
JOBSAT16 How satisfied are you with the delivery of care method used on your unit (functional, team, primary)?	232	2.2%	7.8%	15.5%	49.1%	25.4%	3.88
Co-Workers Total Score							11.69
Revised Interaction Opportunities 5 items (Subscale score range 5-25)							
JOBSAT17 How satisfied are you with opportunities for social contact at work?	232	2.2%	2.1%	23.3%	47.4%	25.0%	3.91
JOBSAT18 How satisfied are you with opportunities for social contact with colleagues after work?	232	1.7%	4.3%	33.6%	35.8%	24.6%	3.77
JOBSAT19 How satisfied are you with opportunities to interact professionally with other disciplines?	232	2.2%	6.9%	18.1%	50.8%	22.0%	3.84
JOBSAT20 How satisfied are you with opportunities to interact with faculty of the College of Nursing?	232	3.0%	9.9%	54.3%	24.6%	8.2%	3.25

Table 4-21 Continued

Scale/Item	N	1 Very Dissatisfied	2 Moderately Dissatisfied	3 Neither satisfied, or dissatisfied	4 Moderately Satisfied	5 Very Satisfied	Average Item Score
JOB SAT21 How satisfied are you with opportunities to belong to department and institutional committees?	232	3.9%	5.6%	37.1%	37.9%	15.5%	3.56
Interaction Opportunities Total Score Praise and Recognition 8 items (Subscale score range 8-40)							18.32
JOB SAT13 How satisfied are you with your immediate supervisor?	232	8.2%	8.2%	15.9%	28.0%	39.7%	3.83
JOB SAT22 How satisfied are you with control over what goes on in your work setting?	232	9.9%	21.6%	16.3%	37.5%	14.7%	3.25
JOB SAT23 How satisfied are you with opportunities for career advancement?	232	8.6%	15.9%	25.9%	30.2%	19.4%	3.36
JOB SAT24 How satisfied are you with recognition for your work from superiors?	232	14.2%	16.4%	18.5%	27.6%	23.3%	3.29
JOB SAT25 How satisfied are you with recognition of your work from peers?	232	4.3%	9.9%	17.7%	41.4%	26.7%	3.76
JOB SAT26 How satisfied are you with amount of encouragement and positive feedback?	232	8.2%	19.8%	20.3%	27.6%	24.1%	3.40
JOB SAT30 How satisfied are you with your control over work conditions?	232	10.3%	23.7%	18.1%	30.2%	17.7%	3.21
JOB SAT31 How satisfied are you with your participation in organizational decision making?	232	13.4%	23.7%	25.0%	22.4%	15.5%	3.03
Praise and Recognition Total Score							27.13

Table 4-21 Continued

Scale/Item	N	1 Very Dissatisfied	2 Moderately Dissatisfied	3 Neither satisfied, or dissatisfied	4 Moderately Satisfied	5 Very Satisfied	Average Item Score
Control and Responsibility 3 items (Subscale score range 3-15)							
JOB SAT27 How satisfied are you with opportunities to participate in nursing research?	232	9.1%	10.8%	56.0%	14.2%	9.9%	3.05
JOB SAT28 How satisfied are you with opportunities to write and publish?	232	9.9%	9.1%	60.7%	12.5%	7.8%	2.99
JOB SAT29 How satisfied are you with your amount of responsibility?	232	5.6%	12.1%	20.2%	43.1%	19.0%	3.58
Control and Responsibility Total Score							9.62

The mean scores for the subscales were as follows: *extrinsic rewards* 14.20 (score range 4-20; revised from 3 items), *scheduling satisfaction* 19.34 (score range 5-25; revised from 6 items), *family and work balance* 9.00 (score range 3-15; revised from 2 items), *co-worker* 11.69 (score range 3-15; revised from 2 items) *interaction opportunities* 18.32 (score range 5-25; revised from 4 items), *praise and recognition* 27.13 (score range 8 -40; revised from 4 items), and *control and responsibility* 9.62 (score range 3-15; revised from five items). The total 31-item scale mean score was 109.29 (score range 31-155).

Intention to leave descriptive analysis. *Intention to Leave*, was measured by three questions comprising Meyer, Allen and Smith's (1993) *Intention to Leave* scale. Each item was measured on a seven point semantic differential scale ranging from 1 to 7, with anchors labeled as: 1) strongly disagree and 7) strongly agree. The items specifically measured how frequently employees thought about leaving their current employer, how likely it was that they would search for a job in another organization, and how likely it was that they would actually leave the organization within the next year. The total score range is 1 to 7 (the three items responses are averaged to produce intention-to-leave scores). Higher scores are associated with the employee's greater intentions to leave the organization. The lowest average *intention to leave* score was item was INTENTLEAVE3 "I am likely to actually leave the organization within the next year" at 2.80. The highest average intention to leave score was item was INTENTLEAVE1 "I frequently think about leaving my current employer" at 3.17. Results from the exploratory analysis of the *Intention to Leave Scale* are presented in Table 4-22.

Table 4-22

Mean Scale and Average Item Scores for the 3-Item Intention to Leave Scale

Scale/Item	N	1 Strongly Disagree	2 Disagree	3 Slightly Disagree	4 Undecided	5 Slightly Agree	6 Agree	7 Strongly Agree	Average Item Score
INTENTLEAVE1 I frequently think about leaving my current employer	226	26.5%	24.8%	9.8%	11.5%	9.3%	7.5%	10.6%	3.17
INTENTLEAVE2 I am likely to search for a job in another organization	226	27.9%	23.0%	10.6%	10.6%	8.0%	11.9%	8.0%	3.15
INTENTLEAVE3 I am likely to actually leave the organization within the next year	226	39.4%	19.5%	8.0%	13.7%	4.4%	4.4%	10.6%	2.80
Intention to Leave Total Score									9.12

Research Question 2

Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to their demographic characteristics?

Differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave were analyzed according to their demographic characteristics (age, gender, marital status, race, language, highest nursing education level, highest degree, and hourly wage). The seven item *Global Transformational Leadership scale*, the 21-item *Revised Three-Component Organizational Commitment scale*, the 31-item *McCloskey/Mueller Satisfaction Scale*, and the three-item *Intention to Leave scale* were used. To examine differences in demographic variables, independent t-tests and ANOVA with post hoc comparisons were used. Differences in perceptions of transformational leadership, organizational

commitment, job satisfaction, and intention to leave were analyzed using either Independent *t*-tests (gender) or ANOVA (age, marital status, race, language, highest nursing education level, highest degree level, and hourly wage).

Differences According to Age

In order to compare the nurses' perception of *transformational leadership*, *organizational commitment*, *job satisfaction*, and *intention to leave* according to the demographic profile of *age*, ANOVA with post hoc comparisons was performed. There was no significant difference in the perception of *Global Transformational Leadership* for all the age groups.

There was not a significant effect of *age* on Total ACS. However, there was a significant effect of age on Total CCS ($p = .039$) and Total NCS ($p = .008$). Post-hoc comparisons using the Tukey HSD test indicated that the mean Total CCS for the 29-33 age group ($M = 21.46$; $SD = 8.07$) was significantly different from the 51-55 age group ($M = 27.15$; $SD = 7.30$). Post-hoc comparisons using the Tukey HSD test indicated that the mean Total NCS for the ≤ 28 age group ($M = 29.28$; $SD = 6.38$) was significantly different from the 51-55 age group ($M = 34.32$; $SD = 6.12$). Mean Total NCS for the 29-33 age group ($M = 28.35$; $SD = 8.20$) was also significantly different from the 51-55 age group ($M = 34.32$; $SD = 6.12$).

There was not a significant effect of *age* on total *job satisfaction*. However there was a significant effect of *age* on two subscales of the MMSS; satisfaction with *scheduling* ($p = .004$), and satisfaction with *co-workers* ($p = 0.15$). Post-hoc comparisons using the Tukey HSD test indicated that the mean *scheduling* satisfaction

scores for the ≤ 28 age group ($M = 17.74$; $SD = 3.88$) is significantly different from the 51-55 age group ($M = 20.78$; $SD = 3.27$). The mean *co-workers* satisfaction scores for the ≤ 28 age group ($M = 11.07$; $SD = 2.60$) is significantly different than the 51-55 age group ($M = 12.72$; $SD = 2.12$). The mean co-worker satisfaction scores for the 29-33 age group ($M = 11.11$; $SD = 2.69$) is also significantly different than the 51-55 age group.

There was no significant difference in the total *intention to leave* scores for all the age groups. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to Age are shown in Table 4-23.

Table 4-23

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Age: ANOVA and Post Hoc Comparisons

Variable and Age Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =223)				5	2.240	.051	
<= 28	48	24.21					
29 to 33	40	28.43					
34 to 40	39	28.79					
41 to 50	45	26.51					
51 to 55	35	25.49					
56 and above	36	25.83					
Organizational Commitment (N = 236)							
Total ACS				5	1.859	.102	
<= 28	47	32.79					
29 to 33	37	37.14					
34 to 40	39	37.97					
41 to 50	44	37.66					
51 to 55	34	39.12					
56 and above	35	36.46					

Table 4-23 Continued

Variable and Age Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total CCS				5	2.383	.039	
<= 28	47	25.15					
29 to 33	37	21.46					
34 to 40	39	22.77					
41 to 50	44	23.77					
51 to 55	34	27.15					
56 and above	35	25.17					
51 to 55 > less than =28			1.99				.869
51 to 55 > 29 to 33			5.69				.031
51 to 55 > 34 to 40			4.38				.170
51 to 55 > 41 to 50			3.37				.417
51 to 55 > 56 and above			1.98				.903
Total NCS				5	3.221	.008	
<= 28	47	29.28					
29 to 33	37	28.35					
34 to 40	39	31.72					
41 to 50	44	31.52					
51 to 55	34	34.32					
56 and above	35	32.00					
51 to 55 > less than =28			5.05				.026
51 to 55 > 29 to 33			5.97				.008
51 to 55 > 34 to 40			2.60				.640
51 to 55 > 41 to 50			2.80				.534
51 to 55 > 56 and above			2.32				.770
Total Job Satisfaction (N = 228)				5	2.191	.056	
<= 28	46	103.09					
29 to 33	37	106.70					
34 to 40	37	112.78					
41 to 50	41	114.83					
51 to 55	33	113.88					
56 and above	34	106.85					
Extrinsic Reward				5	.975	.434	
<= 28	46	14.39					
29 to 33	37	13.54					
34 to 40	37	14.05					
41 to 50	41	14.98					
51 to 55	33	14.70					
56 and above	34	13.82					

Table 4-23 Continued

Variable and Age Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Scheduling				5	3.541	.004	
< = 28	46	17.74					
29 to 33	37	18.62					
34 to 40	37	19.59					
41 to 50	41	19.88					
51 to 55	33	20.79					
56 and above	34	19.97					
51 to 55 > less than =28			3.05				.004
51 to 55 > 29 to 33			2.17				.132
51 to 55 > 34 to 40			1.19				.744
51 to 55 > 41 to 50			.909				.893
51 to 55 > 56 and above			.817				.941
Family and Work Balance				5	1.644	.149	
< = 28	46	8.50					
29 to 33	37	8.32					
34 to 40	37	9.32					
41 to 50	41	9.61					
51 to 55	33	9.15					
56 and above	34	9.00					
Co-Workers				5	2.902	.015	
< = 28	46	11.07					
29 to 33	37	11.11					
34 to 40	37	11.76					
41 to 50	41	12.05					
51 to 55	33	12.73					
56 and above	34	11.85					
51 to 55 > less than =28			1.66				.016
51 to 55 > 29 to 33			1.62				.032
51 to 55 > 34 to 40			.970				.456
51 to 55 > 41 to 50			.678				.784
51 to 55 > 56 and above			.874				.596
Interaction Opportunities					1.408	.223	
< = 28	46	17.57					
29 to 33	37	17.76					
34 to 40	37	18.78					
41 to 50	41	19.39		5			
51 to 55	33	18.58					
56 and above	34	18.24					

Table 4-23 Continued

Variable and Age Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Praise and Recognition				5	2.315	.045	
< = 28	46	24.91					
29 to 33	37	27.84					
34 to 40	37	29.41					
41 to 50	41	28.59					
51 to 55	33	28.00					
56 and above	34	24.65					
Control and Responsibility				5	1.553	.175	
< = 28	46	8.91					
29 to 33	37	9.51					
34 to 40	37	9.86					
41 to 50	41	10.34					
51 to 55	33	9.94					
56 and above	34	9.32					
Intention to Leave (N =223)				5	.860	.509	
< = 28	46	9.33					
29 to 33	36	9.50					
34 to 40	36	8.31					
41 to 50	39	8.08					
51 to 55	32	8.41					
56 and above	34	10.29					

Differences According to Gender

In order to compare the nurses' perception of *transformational leadership*, *organizational commitment*, *job satisfaction*, and *intention to leave* according to the demographic profile of *gender*, independent *t*-tests were performed. Males perceived higher transformational leadership ($M = 27.03$, $SD = 8.96$) than females ($M = 26.25$, $SD = 7.63$). However, there was no significant difference in the *GTL* scores for males and females ($t = .526$, $p = .600$).

There was also no significant difference in *ACS* scores for males and females ($t = -.762$; $p = .451$). However, for the *CCS*, females ($M = 24.26$; $SD = 7.89$) reported higher

scores than males ($M = 21.33$; $SD = 7.93$), which was significantly different ($t = -2.22$; $p = .027$). There was no significant difference in *NCS* scores between males and females ($t = -1.63$; $p = .104$). Although males reported higher total *job satisfaction* ($M = 111.20$; $SD = 20.63$) than females ($M = 108.96$; $SD = 20.83$), there was no significant difference in total *job satisfaction* between males and females ($t = .544$; $p = .587$). There was no significant difference in *intention to leave* between males and females ($t = .276$; $p = .782$). Results of independent *t*-tests of nurses' *Demographic Characteristics, Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *Gender* are presented in Table 4-24.

Table 4-24

Comparison of Nurses' Demographic Characteristics, Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Gender: Independent t-test

Variable and Gender	N	Mean	Mean Difference	t-value	p-value
Total GTL			.779	.526	.600
Males	32	27.03			
Females	214	26.25			
Total ACS (Organizational Commitment)			-1.95	-.762	.451
Males	30	34.80			
Females	209	36.75			
Total CCS (Organizational Commitment)			-3.43	-2.221	0.27
Males	30	21.33			
Females	209	24.76			
Total NCS (Organizational Commitment)			-2.34	-1.63	.104
Males	30	29.10			
Females	208	31.44			
Total Job Satisfaction			2.25	.544	.587
Males	29	111.21			
Females	202	108.96			
Extrinsic Reward			-.262	-.386	.700
Males	29	13.97			
Females	202	14.23			
Scheduling Satisfaction			-.179	-.243	.809
Males	29	19.17			
Females	202	19.35			
Family and Work Balance			.483	.984	.326
Males	29	9.41			
Females	202	8.93			
Co-Workers			-.072	-.159	.874
Males	29	11.62			
Females	202	11.69			
Interaction Opportunities			-.248	-.338	.736
Males	29	18.10			
Females	202	18.35			
Praise and Recognition			2.56	1.58	.115
Males	29	29.34			
Females	202	26.78			
Control and Responsibility			-.038	-.071	.943
Males	29	9.59			
Females	202	9.62			
Intention to Leave			.312	.276	.782
Males	29	9.41			
Females	196	9.10			

Differences According to Marital Status

In order to compare the nurses' perception of *transformational leadership*, *organizational commitment*, *job satisfaction*, and *intention to leave* according to the demographic profile of *marital status*, ANOVA with post hoc comparisons were performed. There was no significant difference in the perception of *Global Transformational Leadership* for all the marital status groups ($p = .223$).

Related to *organizational commitment*, there was a significant effect of *marital status* on Total ACS ($p = .004$). Post-hoc comparisons using the Tukey HSD test indicated that the mean ACS scores for the married group ($M = 38.45$; $SD = 10.94$) is significantly different than the Single, Never Married group ($M = 33.56$; $SD = 9.56$). There was not a significant effect of marital status on Total CCS ($p = .204$) and Total NCS ($p = .060$).

There was a significant effect of marital status on the total *job satisfaction* of registered nurses ($p = .018$). Within the *job satisfaction* subscales, there was also a significant difference in *co-worker* satisfaction ($p = .000$) and satisfaction with *praise and recognition* ($p = .020$) according to marital status. Post-hoc comparisons using the Tukey HSD test indicated that the mean total *job satisfaction* of registered nurses for the Married group ($M = 112.23$; $SD = 21.61$) is significantly different from the Single, Never Married group of registered nurses ($M = 103.26$; $SD = 19.27$). Post-hoc comparisons also revealed that for the subscale of *co-worker* satisfaction, the Single, Never Married group differed significantly from all the marital status groups. For satisfaction with

praise and recognition, the married group was significantly different in mean scores (M = 28.40; SD = 8.60) than the single, never married group (M = 25.15; SD = 7.13).

There was no significant difference in *intention to leave* for all the *marital status* groups. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *Marital Status* are shown in Table 4-25.

Table 4-25

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Marital Status: ANOVA and Post Hoc Comparisons

Variable and Marital Status Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =247)				3	1.470	.223	
Married	137	26.99					
Single, Never Married	66	25.62					
Divorced or Separated	35	24.60					
Widow, or Widower	9	29.11					
Organizational Commitment (N = 240)							
Total ACS				3	4.601	.004	
Married	133	38.45					
Single, Never Married	64	33.56					
Divorced or Separated	34	33.44					
Widow, or Widower	9	40.56					
Married > single, never married			4.89				.013
Married > divorced or separated			5.01				.066
Married > widow, or widower			-2.10				.938
Total CCS				3	1.544	.204	
Married	133	23.90					
Single, Never Married	64	23.73					
Divorced or Separated	34	27.00					
Widow, or Widower	9	23.67					

Table 4-25 Continued

Variable and Marital Status Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total NCS				3	2.497	.060	
Married	133	31.72					
Single, Never Married	64	29.06					
Divorced or Separated	34	32.27					
Widow, or Widower	9	33.11					
Total Job Satisfaction (N = 232)				3	3.418	.018	
Married	131	112.23					
Single, Never Married	62	103.26					
Divorced or Separated	30	106.43					
Widow, or Widower	9	117.78					
Married > single, never married			8.97				.025
Married > divorced or separated			5.80				.500
Married > widow, or widower			-5.55				.860
Extrinsic Reward				3	1.819	.144	
Married	131	14.58					
Single, Never Married	62	13.79					
Divorced or Separated	30	13.20					
Widow, or Widower	9	14.89					
Scheduling				3	1.585	.194	
Married	131	19.64					
Single, Never Married	62	18.50					
Divorced or Separated	30	19.43					
Widow, or Widower	9	20.33					
Family and Work Balance				3	1.337	.263	
Married	131	9.09					
Single, Never Married	62	8.54					
Divorced or Separated	30	9.23					
Widow, or Widower	9	10.00					
Co-Workers				3	6.758	.000	
Married	131	11.99					
Single, Never Married	62	10.65					
Divorced or Separated	30	12.13					
Widow, or Widower	9	12.89					
Single, never married < married			-1.35				.001
Single, never married < divorced or separated			-1.49				.014
Single, never married < widow, or widower			-2.24				.024

Table 4-25 Continued

Variable and Marital Status Group	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Interaction Opportunities				3	1.213	.306	
Married	131	18.66					
Single, Never Married	62	17.69					
Divorced or Separated	30	17.93					
Widow, or Widower	9	19.11					
Praise and Recognition				3	3.344	.020	
Married	131	28.39					
Single, Never Married	62	25.15					
Divorced or Separated	30	24.97					
Widow, or Widower	9	29.67					
Married > single, never married			3.25				.047
Married > divorced or separated			3.43				.156
Married > widow, or widower			-1.27				.968
Control and Responsibility				3	2.550	.057	
Married	131	9.88					
Single, Never Married	62	8.94					
Divorced or Separated	30	9.53					
Widow, or Widower	9	10.89					
Intention to Leave (N =226)				3	.744	.527	
Married	125	8.66					
Single, Never Married	62	9.94					
Divorced or Separated	30	9.27					
Widow, or Widower	9	9.67					

Differences According to Race

To compare the nurses' perception of *transformational leadership*, *organizational commitment*, *job satisfaction*, and *intention to leave* according to the demographic profile of *race*, ANOVA with post hoc comparisons were performed. There was no significant effect of *race* on perceptions of *Global Transformational Leadership*. Post hoc tests were not performed because at least one group had fewer than two cases.

Related to *Organizational Commitment*, there was a significant effect of *race* on *Affective Commitment* ($p = .026$). *Affective Commitment* was significantly higher for registered nurses in the *Asian* group ($M = 41.65$), than for the *White* group ($M = 36.25$), the *Black* group ($M = 35.85$), the *American Indian, or Alaskan Native* group ($M = 10.00$), and the *Native Hawaiian, or Pacific Islander* group ($M = 35.67$). Post hoc tests were not performed because at least one group had fewer than two cases.

There was no significant effect of *race* on *Total Job Satisfaction*. However, *race* had a significant effect on satisfaction with *extrinsic reward* ($p = .036$) and on satisfaction with *co-workers* ($p = .019$). Post hoc tests were not performed because at least one group had fewer than two cases. There was no significant effect of *race* on nurses' *Intention to Leave*. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *Race* are shown in Table 4-26.

Table 4-26

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Race: ANOVA and Post Hoc Comparisons

Variable and Race	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =247)				4	1.913	.109	
White	183	25.99					
Black, or African American	40	26.78					
American Indian, or Alaskan Native	1	11.00					
Asian	20	29.35					
Native Hawaiian, or Pacific Islander	3	28.33					
Organizational Commitment (N = 240)							
Total ACS				4	2.817	.026	
White	176	36.25					
Black, or African American	40	35.85					
American Indian, or Alaskan Native	1	10.00					
Asian	20	41.65					
Native Hawaiian, or Pacific Islander	3	35.67					
Total CCS				4	.324	.862	
White	176	24.27					
Black, or African American	40	25.15					
American Indian, or Alaskan Native	1	20.00					
Asian	20	23.30					
Native Hawaiian, or Pacific Islander	3	22.00					
Total NCS (N =239)							
White	175	30.75					
Black, or African American	40	31.85					
American Indian, or Alaskan Native	1	33.00		4	.565	.688	
Asian	20	33.05					
Native Hawaiian, or Pacific Islander	3	31.00					
Total Job Satisfaction (N = 232)				4	1.078	.368	
White	171	108.98					
Black, or African American	37	107.22					
American Indian, or Alaskan Native	1	89.00					
Asian	20	117.20					
Native Hawaiian, or Pacific Islander	3	107.00					
Extrinsic Reward							
White	171	14.26					
Black, or African American	37	14.03					
American Indian, or Alaskan Native	1	4.00		4	2.623	.036	
Asian	20	14.75					
Native Hawaiian, or Pacific Islander	3	12.67					

Table 4-26 Continued

Variable and Race	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Scheduling				4	.883	.475	
White	171	19.58					
Black, or African American	37	18.49					
American Indian, or Alaskan Native	1	18.00					
Asian	20	19.10					
Native Hawaiian, or Pacific Islander	3	17.67					
Family and Work Balance				4	1.054	.380	
White	171	8.80					
Black, or African American	37	9.65					
American Indian, or Alaskan Native	1	10.00					
Asian	20	9.35					
Native Hawaiian, or Pacific Islander	3	9.33					
Co-Workers				4	3.006	.019	
White	171	11.86					
Black, or African American	37	10.78					
American Indian, or Alaskan Native	1	7.00					
Asian	20	12.10					
Native Hawaiian, or Pacific Islander	3	11.67					
Interaction Opportunities				4	.701	.592	
White	171	18.39					
Black, or African American	37	17.68					
American Indian, or Alaskan Native	1	15.00					
Asian	20	19.05					
Native Hawaiian, or Pacific Islander	3	18.67					
Praise and Recognition					2.208	.069	
White	171	26.49					
Black, or African American	37	27.51					
American Indian, or Alaskan Native	1	23.00		4			
Asian	20	32.05					
Native Hawaiian, or Pacific Islander	3	28.00					
Control and Responsibility				4	1.644	.164	
White	171	9.60					
Black, or African American	37	9.08					
American Indian, or Alaskan Native	1	12.00					
Asian	20	10.80					
Native Hawaiian, or Pacific Islander	3	9.00					
Intention to Leave (N = 226)				4	1.654	.162	
White	167	9.33					
Black, or African American	35	8.77					
American Indian, or Alaskan Native	1	21.00					
Asian	20	7.45					
Native Hawaiian, or Pacific Islander	3	9.33					

Differences According to Language

To compare the nurses' Perception of *Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to the demographic profile of *language*, ANOVA with post hoc comparisons were performed. There was a significant effect of *language* on *perceptions of transformational leadership* as measured by the *GTL* ($p = .018$). Post-hoc comparisons using the Tukey HSD test indicated that the mean Total *GTL* of the group of registered nurses who identified *Spanish* ($M = 30.20$; $SD = 7.56$) as the primary language spoken is significantly different than the *English* speaking group ($M = 25.64$).

Related to *organizational commitment*, there was a significant effect of *language* on Total *ACS* ($p = .007$). Post-hoc comparisons using the Tukey HSD test revealed that the Total *ACS* for the *Spanish* speaking group ($M = 42.28$) is significantly different than the *English* speaking group ($M = 35.42$). Within the *language* groups, although not significantly different, a trend relationship was indicated in the *Job Satisfaction* subscale of *Normative Commitment* ($p = .030$)

There was a significant effect of *language* on total *Job Satisfaction* ($p = .024$); and the subscales of satisfaction with *family and work balance* ($p = .007$), and satisfaction with *praise and recognition* ($p = .001$). Post-hoc comparisons using the Tukey HSD test indicated that for *Job Satisfaction* the *Spanish* group ($M = 119.96$; $SD = 22.14$) is significantly different than the *English* group ($M = 107.49$; $SD = 20.52$). The *Spanish* group ($M = 10.44$; $SD = 2.64$) also was significantly different than the *English* group with satisfaction with *family and work balance* ($M = 8.75$; $SD = 2.44$). Related to

satisfaction with *praise and recognition*, the Spanish group (M = 32.70; SD = 8.00) was significantly higher than the English group (M = 26.16; SD = 8.04).

There was not a significant effect of language on intention to leave. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *Language* are shown in Table 4-27.

Table 4-27

*Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Language:
ANOVA and Post Hoc Comparisons*

Variable and Language	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =247)				3	3.417	.018	
English	202	25.64					
Spanish	30	30.20					
Creole	7	28.43					
Other	8	28.25					
Spanish > English			4.56				.014
Spanish > Creole			1.77				.947
Spanish > Other			1.95				.920
Organizational Commitment (N = 240)							
Total ACS				3	4.121	.007	
English	196	35.42					
Spanish	29	42.28					
Creole	7	41.14					
Other	8	38.38					
Spanish > English			6.85				.007
Spanish > Creole			1.13				.994
Spanish > Other			3.90				.791
Total CCS				3	.957	.414	
English	196	24.58					
Spanish	29	23.93					
Creole	7	22.43					
Other	8	20.13					

Table 4-27 Continued

Variable and Language	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total NCS (N =239)					3.038	.030	
English	196	30.49					
Spanish	29	33.55		3			
Creole	7	34.43					
Other	7	35.86					
Total Job Satisfaction (N = 232)				3	3.207	.024	
English	190	107.49					
Spanish	27	119.96					
Creole	7	116.14					
Other	8	110.25					
Spanish > English			12.47				.018
Spanish > Creole			3.82				.971
Spanish > Other			9.71				.641
Extrinsic Reward							
English	190	14.07					
Spanish	27	14.85		3	.516	.671	
Creole	7	14.57					
Other	8	14.75					
Scheduling				3	.352	.787	
English	190	19.26					
Spanish	27	20.00					
Creole	7	19.29					
Other	8	18.88					
Family and Work Balance				3	4.186	.007	
English	190	8.75					
Spanish	27	10.44					
Creole	7	9.86					
Other	8	9.25					
Spanish > English			1.69				.004
Spanish > Creole			.59				.940
Spanish > Other			1.19				.611
Co-Workers				3	.882	.451	
English	190	11.58					
Spanish	27	12.22					
Creole	7	12.43					
Other	8	11.75					

Table 4-27 Continued

Variable and Language	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Praise and Recognition				3	5.853	.001	
English	190	26.16					
Spanish	27	32.70					
Creole	7	30.43					
Other	8	28.50					
Spanish > English			6.54				.000
Spanish > Creole			2.28				.906
Spanish > Other			4.20				.554
Control and Responsibility				3	1.170	.322	
English	190	9.49					
Spanish	27	10.48					
Creole	7	10.00					
Other	8	9.38					
Intention to Leave (N = 226)							
English	186	9.32					
Spanish	25	7.36		3	.955	.415	
Creole	7	9.28					
Other	8	10.00					

Differences According to Highest Nursing Education Level

To compare the nurses' *Perception of Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to the demographic profile of *Highest Nursing Education Level*, ANOVA with post hoc comparisons were performed. There was not a significant effect of *highest nursing education level* on perception of *transformational leadership*.

There was a significant effect of *highest nursing education* on *organizational commitment* in the component of *continuance commitment* ($p = .036$) and *normative commitment* ($p = .010$). Post-hoc comparisons using the Tukey HSD test indicated that *continuance commitment* in the *Associate (or Diploma) in Nursing* group ($M = 25.20$; SD

= 7.99) is significantly higher than the *Master in Nursing* group (M = 19.67; SD = 8.01). *Normative commitment* in the *Associate (or Diploma) in Nursing* (M = 32.70; SD = 6.91) group is significantly higher than the *Bachelor in Nursing* group (M = 29.75; SD = 7.38).

There was not a significant effect of *highest nursing education level* on *job satisfaction*, nor was there a significant effect on *intention to leave*. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *highest nursing education level* are shown in Table 4-28.

Table 4-28

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Highest Nursing Education Level: ANOVA and Post Hoc Comparisons

Variable and Nursing Education Level	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =247)				2	.845	.431	
Associate (or Diploma) in Nursing	114	26.96					
Bachelor in Nursing	118	25.69					
Master in Nursing	15	27.07					
Organizational Commitment (N = 240)							
Total ACS				2	1.133	.324	
Associate (or Diploma) in Nursing	110	37.58					
Bachelor in Nursing	115	35.79					
Master in Nursing	15	34.27					
Total CCS				2	3.366	.036	
Associate (or Diploma) in Nursing	110	25.20					
Bachelor in Nursing	115	24.02					
Master in Nursing	15	19.67					
Associate (or Diploma) in Nursing > Bachelor in Nursing			1.18				.501
Associate (or Diploma) in Nursing > Master in Nursing			5.53				.031

Table 4-28 Continued

Variable and Nursing Education Level	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total NCS (N =239)					4.698	.010	
Associate (or Diploma) in Nursing	110	32.70					
Bachelor in Nursing	115	29.75					
Master in Nursing	15	30.47					
Associate (or Diploma) in Nursing > Bachelor in Nursing			2.95	2			.007
Associate (or Diploma) in Nursing > Master in Nursing			2.23				.505
Total Job Satisfaction (N = 232)				2	.201	.818	
Associate (or Diploma) in Nursing	106	110.16					
Bachelor in Nursing	112	108.40					
Master in Nursing	14	109.93					
Extrinsic Reward							
Associate (or Diploma) in Nursing	106	14.29					
Bachelor in Nursing	112	14.01		2	.597	.551	
Master in Nursing	14	15.00					
Scheduling				2	.404	.668	
Associate (or Diploma) in Nursing	106	19.37					
Bachelor in Nursing	112	19.21					
Master in Nursing	14	20.14					
Family and Work Balance				2	.931	.396	
Associate (or Diploma) in Nursing	106	9.16					
Bachelor in Nursing	112	8.79					
Master in Nursing	14	9.50					
Co-Workers				2	.953	.387	
Associate (or Diploma) in Nursing	106	11.87					
Bachelor in Nursing	112	11.47					
Master in Nursing	14	12.00					
Interaction Opportunities				2	.486	.616	
Associate (or Diploma) in Nursing	106	18.40					
Bachelor in Nursing	112	18.15					
Master in Nursing	14	19.14					
Praise and Recognition				2	.579	.561	
Associate (or Diploma) in Nursing	106	27.34					
Bachelor in Nursing	112	27.22					
Master in Nursing	14	24.86					

Table 4-28 Continued

Variable and Nursing Education Level	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Control and Responsibility				2	.247	.781	
Associate (or Diploma) in Nursing	106	9.74					
Bachelor in Nursing	112	9.55					
Master in Nursing	14	9.29					
Intention to Leave (N = 226)							
Associate (or Diploma) in Nursing	103	8.50					
Bachelor in Nursing	109	9.48		2	1.613	.202	
Master in Nursing	14	11.00					

Differences According to Highest Degree Level

To compare the nurses' *Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to the demographic profile of *highest degree level*, ANOVA with post hoc comparisons were performed. Within the *degree levels*, although not significantly different, a trend relationship was indicated in the perception of *Transformational Leadership* ($p = .020$) where the *Associate* degree group reported the highest perception of *Transformational Leadership* ($M = 28.02$) and the *Doctorate* group the lowest ($M = 16.50$). There was not a significant effect of *highest degree level* on *organizational commitment* or on *job satisfaction*.

According to Field (2006), problems resulting from the violations of the homogeneity assumptions can be corrected by using the Brown-Forsythe test or the Welch test. When violations of test assumptions occur, it is recommended that the multiple comparison tests that are used are specifically designed for situations when population variances differ. The Games-Howell procedure is powerful and is accurate

when sample sizes are unequal (Field, 2006). Analysis of the effect of *degree level* on *intention to leave* reveal that the assumption of homogeneity of variance was violated (significance value was .010 for Levene's test). Welch's test reveals that there was a significant effect of *highest degree level* on *intention to leave* ($p = .000$). Post-hoc comparisons using the Games-Howell test reveal that the *doctorate level* ($M = 14.50$) reported significantly higher *intention to leave* than the *Associate level* ($M = 8.20$) and the *Bachelor level* ($M = 9.34$). Results of ANOVA of comparison of Demographic characteristics, *Global Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to *highest degree level* are shown in Table 4-29.

Table 4-29

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Highest Degree Level: ANOVA and Post Hoc Comparisons

Variable and Degree Level	N	Mean	Mean Difference	df	F	p	Post Hoc Comparison
GTL (N =247)				3	3.338	.020	
Associate	95	28.02					
Bachelor	127	25.54					
Master	23	24.91					
Doctorate (PhD, DNSc, Ed. D.)	2	16.50					
Organizational Commitment (N = 240)							
Total ACS							
Associate	93	38.40					
Bachelor	123	35.94		3	2.417	.067	
Master	22	32.36					
Doctorate (PhD, DNSc, Ed. D.)	2	30.50					

Table 4-29 Continued

Variable and Degree Level	N	Mean	Mean Difference	df	F	p	Post Hoc Comparison
Total CCS				3	.364	.779	
Associate	93	24.91					
Bachelor	123	24.00					
Master	22	23.41					
Doctorate (PhD, DNSc, Ed. D.)	2	22.50					
Total NCS (N =239)				3	2.418	.067	
Associate	93	32.60					
Bachelor	123	30.14					
Master	22	30.18					
Doctorate (PhD, DNSc, Ed. D.)	2	36.00					
Total Job Satisfaction (N = 232)				3	1.244	.295	
Associate	90	111.81					
Bachelor	120	108.17					
Master	20	106.70					
Doctorate (PhD, DNSc, Ed. D.)	2	90.00					
Extrinsic Reward				3	1.956	.121	
Associate	90	14.31					
Bachelor	120	14.17					
Master	20	14.45					
Doctorate (PhD, DNSc, Ed. D.)	2	8.50					
Scheduling				3	.463	.708	
Associate	90	19.51					
Bachelor	120	19.11					
Master	20	20.00					
Doctorate (PhD, DNSc, Ed. D.)	2	18.50					
Family and Work Balance				3	1.349	.259	
Associate	90	9.40					
Bachelor	120	8.72					
Master	20	8.95					
Doctorate (PhD, DNSc, Ed. D.)	2	8.50					
Co-Workers				3	.934	.425	
Associate	90	11.93					
Bachelor	120	11.46					
Master	20	12.00					
Doctorate (PhD, DNSc, Ed. D.)	2	11.00					
Interaction Opportunities				3	.188	.904	
Associate	90	18.41					
Bachelor	120	18.28					
Master	20	18.40					
Doctorate (PhD, DNSc, Ed. D.)	2	16.50					

Table 4-29 Continued

Variable and Degree Level	N	Mean	Mean Difference	df	F	p	Post Hoc Comparison
Praise and Recognition				3	2.179	.091	
Associate	90	28.17					
Bachelor	120	26.99					
Master	20	24.25					
Doctorate (PhD, DNSc, Ed. D.)	2	18.00					
Control and Responsibility				3	2.023	.111	
Associate	90	10.08					
Bachelor	120	9.45					
Master	20	8.65					
Doctorate (PhD, DNSc, Ed. D.)	2	9.00					
Intention to Leave (N = 226)							
Associate	88	8.20					
Bachelor	117	9.34					
Master	19	11.52					
Doctorate (PhD, DNSc, Ed. D.)	2	14.50		3 ^a	10.41 ^a	.000 ^a	
Doctorate > Associate			6.30 ^b				.002 ^b
Doctorate > Bachelor			5.16 ^b				.004 ^b
Doctorate > Master			2.97 ^b				.225 ^b

^aNote. Robust Test of Equality Means -Welch

^bNote. Games-Howell procedure

Differences According to Hourly Wage

To compare the nurses' perception of *transformational leadership*, *organizational commitment*, *job satisfaction*, and *intention to leave* according to the demographic profile of *hourly wage*, ANOVA with post hoc comparisons were performed. There was not a significant effect of *hourly wage* on perception of *transformational leadership*.

Analysis of the effect of *hourly wage* on *organizational commitment* reveal that the assumption of homogeneity of variance was violated for *affective commitment* (significance value was .004 for Levene's test), and for *continuance commitment* (significance value was .002 for Levene's test) Welch's test reveals that there was a

significant effect of *hourly wage* on *affective commitment* ($p = .003$). Post-hoc comparisons using the Games-Howell test reveal that the \$28 - \$36 *hourly wage* group ($M = 36.55$) reported significantly higher *affective commitment* than the \$44 - \$51 *hourly wage* group ($M = 30.25$) at $p = .018$. The \$37 - \$43 *hourly wage* group ($M = 37.43$) reported significantly higher *affective commitment* than the \$44 - \$51 *hourly wage* group ($M = 30.25$) at $p = .008$.

There was a significant effect of *hourly wage* on total *job satisfaction* ($p = .034$). There was also a significant effect of *hourly wage* on satisfaction with *scheduling* ($p = .000$), satisfaction with *co-workers* ($p = .021$), and satisfaction with *interaction opportunities* ($p = .016$). Post-hoc comparisons using the Tukey HSD test reveal that the \$37 - \$43 *hourly wage* group ($M = 114.55$) reported significantly higher *job satisfaction* than the \$20.01 - \$27 *hourly wage* group ($M = 104.01$) at $p = .018$. The \$28 - \$36 *hourly wage* group ($M = 19.73$) reported higher satisfaction with *scheduling* than the \$20.01 - \$27 *hourly wage* group ($M = 17.77$) at $p = .005$. The \$37 - \$43 *hourly wage* group ($M = 20.41$) also reported higher satisfaction with *scheduling* than the \$20.01 - \$27 *hourly wage* group ($M = 17.77$) at $p = .000$. The \$37 - \$43 *hourly wage* group ($M = 12.34$) also reported higher satisfaction with *co-workers* than the \$20.01 - \$27 *hourly wage* group ($M = 11.32$) at $p = .049$. The \$37 - \$43 *hourly wage* group ($M = 19.34$) also reported higher satisfaction with *interaction opportunities* than the \$20.01 - \$27 *hourly wage* group ($M = 17.32$) at $p = .01$.

There was a significant effect of *hourly wage* on *intention to leave* ($p = .038$). Post-hoc comparisons using the Tukey HSD test reveal that the registered nurses in the

\$44 - \$51 *hourly wage* group (M = 18.67) reported significantly higher *intention to leave* than all the hourly wage groups. Results of ANOVA of comparison of *Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *hourly wage* are shown in Table 4-30.

Table 4-30

Comparison of Demographic Characteristics, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Hourly Wage: ANOVA and Post Hoc Comparisons

Variable and Hourly Wage	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N=226)				3	2.644	.050	
20.01 to 27.00	61	25.10					
28.00 to 36.00	99	27.76					
37.00 to 43.00	62	24.79					
44.00 to 51.00	4	23.75					
Organizational Commitment (N = 219)							
Total ACS				3 ^a	22.83 ^a	.003 ^a	
20.01 to 27.00	59	34.12					
28.00 to 36.00	95	36.55					
37.00 to 43.00	61	37.43					
44.00 to 51.00	4	30.25					
44.00 - 51.00 > 20.01 - 27.00			-3.87 ^b				.164 ^b
44.00 - 51.00 > 28.00 - 36.00			-6.30 ^b				.018 ^b
44.00 - 51.00 > 37.00 - 43.00			-7.17 ^b				.008 ^b
Total CCS				3 ^a	14.31 ^a	.201 ^a	
20.01 to 27.00	59	23.85					
28.00 to 36.00	95	23.55					
37.00 to 43.00	61	26.28					
44.00 to 51.00	4	22.75					
Total NCS (N =219)							
20.01 to 27.00	59	30.76					
28.00 to 36.00	94	30.56					
37.00 to 43.00	61	31.75		3 ^a	14.33 ^a	.803 ^a	
44.00 to 51.00	4	32.75					

Table 4-30 Continued

Variable and Hourly Wage	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total Job Satisfaction (N = 211)							
20.01 to 27.00	56	104.02					
28.00 to 36.00	94	108.88			2.944	.034	
37.00 to 43.00	58	114.55					
44.00 to 51.00	3	109.67		3			
37.00 – 43.00 > 20.01- 27.00			10.53				.018
37.00 – 43.00 > 28.00 - 36.00			5.67				.281
37.00 – 43.00 > 44.00 - 51.00			4.89				.972
Extrinsic Reward							
20.01 to 27.00	56	14.00					
28.00 to 36.00	94	13.85			2.091	.102	
37.00 to 43.00	58	15.12		3			
44.00 to 51.00	3	13.33					
Scheduling							
20.01 to 27.00	56	17.77					
28.00 to 36.00	94	19.73			6.272	.000	
37.00 to 43.00	58	20.41		3			
44.00 to 51.00	3	18.33					
20.01 – 27.00 > 28.00 - 36.00			-1.97				.005
20.01 – 27.00 > 37.00 – 43.00			-2.65				.000
20.01 – 27.00 > 44.00 - 51.00			-.57				.993
Family and Work Balance							
20.01 to 27.00	56	8.82					
28.00 to 36.00	94	8.78			.847	.470	
37.00 to 43.00	58	9.28		3			
44.00 to 51.00	3	10.33					
Co-Workers							
20.01 to 27.00	56	11.32					
28.00 to 36.00	94	11.74			3.304	.021	
37.00 to 43.00	58	12.34		3			
44.00 to 51.00	3	9.67					
37.00 – 43.00 > 20.01- 27.00			1.02				.049
37.00 – 43.00 > 28.00 - 36.00			.600				.321
37.00 – 43.00 > 44.00 - 51.00			2.68				.140

Table 4-30 Continued

Variable and Hourly Wage	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Interaction Opportunities				3	3.501	.016	
20.01 to 27.00	56	17.32					
28.00 to 36.00	94	18.38					
37.00 to 43.00	58	19.34					
44.00 to 51.00	3	20.00					
37.00 – 43.00 > 20.01- 27.00			2.02				.011
37.00 – 43.00 > 28.00 - 36.00			.961				.341
37.00 – 43.00 > 44.00 - 51.00			-.655				.989
Praise and Recognition				3	1.165	.324	
20.01 to 27.00	56	25.34					
28.00 to 36.00	94	26.91					
37.00 to 43.00	58	28.07					
44.00 to 51.00	3	27.33					
Control and Responsibility				3	.737	.531	
20.01 to 27.00	56	9.45					
28.00 to 36.00	94	9.48					
37.00 to 43.00	58	9.98					
44.00 to 51.00	3	10.67					
Intention to Leave (N = 205)							
20.01 to 27.00	56	9.13					
28.00 to 36.00	90	9.08					
37.00 to 43.00	56	9.18					
44.00 to 51.00	3	18.67					
				3	2.853	.038	
44.00 - 51.00 > 20.01- 27.00			9.54				.024
44.00 - 51.00 > 28.00 - 36.00			9.59				.021
44.00 - 51.00 > 37.00 - 43.00			9.48				.025

^aNote. Robust Test of Equality Means -Welch

^bNote. Games-Howell procedure

Research Question 3

Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to work profiles?

Differences in nurses' *Perceptions of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* were analyzed

according to their work profile (length of employment in current job, length of time as a registered nurse, length of employment with Tenet, primary nursing unit, shift worked, and hospital). The seven item *Global Transformational Leadership scale*, the 21-item *Revised Three-Component Organizational Commitment scale*, the 31-item *McCloskey/Mueller Satisfaction Scale*, and the three-item *Intention to Leave scale* were used. To examine differences in each of the *work profile* variables ANOVA with post hoc comparisons were used.

Differences According to Length of Employment in Current Job

To evaluate the nurses' *perception of transformational leadership, organizational commitment, job satisfaction, and intention to leave* according to the work profile of *length of employment in current job*, ANOVA with post hoc comparisons was performed. There was not a significant effect of the registered nurses' *length of employment in current job* on perception of *transformational leadership*.

There was a significant effect of *length of employment in current job* on *organizational commitment* in the components of *affective commitment* ($p = .026$) and on *continuance commitment* ($p = .002$). Post-hoc comparisons using the Tukey HSD test reveal that registered nurses with 7-10 years of employment in their current job ($M = 39.39$) reported significantly higher *affective commitment* than nurses who were employed in their current job for 1- 3 years (34.25) at $p = .032$. Nurses employed in their current job for ten or more years reported significantly higher *continuance commitment* than all other groups.

There was not a significant effect of *length of employment in current job* on total *job satisfaction*. However, there was a significant effect of *length of employment in current job* on satisfaction with *scheduling* ($p = .004$). Nurses with ten or more years of employment in their current job ($M = 20.70$) reported higher satisfaction with *scheduling* than the 1-3 years group ($M = 18.44$; $p = .006$) and the 3.1 – 6.9 years group ($M = 18.65$; $p = .027$).

There was not a significant effect of *length of employment in current job* on registered nurses' *intention to leave*. Results of ANOVA of comparison of *Work Profile*, *Global Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to *length of employment in current job* are shown in Table 4-31.

Table 4-31

*Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Employment in Current Job:
ANOVA and Post Hoc Comparisons*

Variable and Time in Current Job	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =241)				3	1.221	.303	
1.0 to 3.0	66	25.55					
3.1 to 6.9	55	25.56					
7.0 to 10.0	63	27.86					
Above 10	57	26.53					
Organizational Commitment (N = 234)							
Total ACS				3	3.131	.026	
1.0 to 3.0	65	34.25					
3.1 to 6.9	51	35.22					
7.0 to 10.0	62	39.39					
Above 10	56	37.95					
7.0 to 10.0 > 1.0 to 3.0			5.14				.032
7.0 to 10.0 > 3.1 to 6.9			4.17				.157
7.0 to 10.0 > Above 10			1.44				.879
Total CCS				3	4.936	.002	
1.0 to 3.0	65	23.95					
3.1 to 6.9	51	22.76					
7.0 to 10.0	62	22.90					
Above 10	56	27.68					
Above 10 > 1.0 to 3.0			3.72				.044
Above 10 > 3.1 to 6.9			4.91				.007
Above 10 > 7.0 to 10.0			4.78				.005
Total NCS (N =233)							
1.0 to 3.0	65	29.63					
3.1 to 6.9	51	30.96					
7.0 to 10.0	61	31.80		3	1.311	.272	
Above 10	56	31.98					

Table 4-31 Continued

Variable and Time in Current Job	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total Job Satisfaction (N = 226)							
1.0 to 3.0	64	106.06					
3.1 to 6.9	48	108.31		3	1.223	.302	
7.0 to 10.0	61	110.13					
Above 10	53	113.26					
Extrinsic Reward							
1.0 to 3.0	64	14.14					
3.1 to 6.9	48	14.29		3	.961	.412	
7.0 to 10.0	61	13.79					
Above 10	53	14.85					
Scheduling							
1.0 to 3.0	64	18.44		3	4.488	.004	
3.1 to 6.9	48	18.65					
7.0 to 10.0	61	19.67					
Above 10	53	20.70					
Above 10 > 1.0 to 3.0			2.26				.006
Above 10 > 3.1 to 6.9			2.05				.027
Above 10 > 7.0 to 10.0			1.02				.442
Family and Work Balance							
1.0 to 3.0	64	9.03		3	1.589	.193	
3.1 to 6.9	48	9.50					
7.0 to 10.0	61	8.49					
Above 10	53	9.15					
Co-Workers							
1.0 to 3.0	64	11.48		3	2.199	.089	
3.1 to 6.9	48	11.33					
7.0 to 10.0	61	11.75					
Above 10	53	12.38					
Interaction Opportunities							
1.0 to 3.0	64	17.55		3	1.723	.163	
3.1 to 6.9	48	18.33					
7.0 to 10.0	61	18.52					
Above 10	53	19.06					
Praise and Recognition							
1.0 to 3.0	64	26.02		3	.753	.522	
3.1 to 6.9	48	26.83					
7.0 to 10.0	61	28.20					
Above 10	53	27.26					

Table 4-31 Continued

Variable and Time in Current Job	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Control and Responsibility				3	.437	.726	
1.0 to 3.0	64	9.41					
3.1 to 6.9	48	9.38					
7.0 to 10.0	61	9.70					
Above 10	53	9.87					
Intention to Leave (N = 220)				3	1.598	.191	
1.0 to 3.0	61	8.50					
3.1 to 6.9	47	10.57					
7.0 to 10.0	61	9.21					
Above 10	51	8.39					

Differences According to Length of Time as a Registered Nurse

To evaluate the nurses' *Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to the work profile of *length of time as a registered nurse*, ANOVA with post hoc comparisons were performed. There was not a significant effect of the *length of time as a registered nurse* on perception of *transformational leadership*.

There was a significant effect of *length of time as a registered nurse* on *organizational commitment* in the component of *continuance commitment* ($p = .015$). Post-hoc comparisons using the Tukey HSD test reveal that registered nurses in the greater than 27 years group reported higher continuance commitment ($M = 28.00$) than nurses in the 2.1- 6.0 group ($M = 22.33$; $p = .017$) and the 6.1 – 11.0 group ($M = 22.03$; $p = .017$).

There was a significant effect of *length of time as a registered nurse* on total *job satisfaction* ($p = .059$) and the components of satisfaction with *extrinsic reward* ($p =$

.028) and satisfaction with *scheduling* ($p = .004$). Post-hoc comparisons using the Tukey HSD test reveal that 6.1 to 11.0 group ($M = 118.62$) reported significantly higher *job satisfaction* than the 2.1 to 6.0 group ($M = 103.86$) at $p = .025$. The 6.1 to 11.0 group ($M = 15.29$) also reported higher satisfaction with *extrinsic reward* than the 2.1 to 6.0 group (12.98) at $p = .031$. The 6.1 to 11.0 group ($M = 20.82$) reported higher satisfaction with *scheduling* than the group with 2 years or less time as a registered nurse ($M = 18.02$; $p = .010$) and the 2.1 to 6.0 group ($M = 18.29$; $p = .031$).

There was not a significant effect of the *length of time as a registered nurse* on *intention to leave*. Results of ANOVA of comparison of *Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *length of time as a registered nurse* are shown in Table 4-32.

Table 4-32

*Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Time as a Registered Nurse:
ANOVA and Post Hoc Comparisons*

Variable and Time as RN	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =244)				5	1.374	.235	
<= 2.0	48	25.73					
2.1 to 6.0	45	26.78					
6.1 to 11.0	37	29.08					
11.1 to 18.0	39	26.64					
18.1 to 27.0	36	24.72					
Above 27.1	39	25.79					
Organizational Commitment (N = 237)							
Total ACS				5	2.006	.079	
<= 2.0	47	34.68					
2.1 to 6.0	43	34.65					
6.1 to 11.0	35	41.11					
11.1 to 18.0	38	37.82					
18.1 to 27.0	36	36.58					
Above 27.1	38	36.63					
Total CCS				5	2.987	.015	
<= 2.0	47	24.15					
2.1 to 6.0	43	22.33					
6.1 to 11.0	35	22.02					
11.1 to 18.0	38	24.29					
18.1 to 27.0	36	25.17					
Above 27.1	38	28.00					
Above 27.1 > less than = 2.0			3.85				.222
Above 27.1 > 2.1 to 6.0			5.67				.017
Above 27.1 > 6.1 to 11.0			5.97				.017
Above 27.1 > 11.1 to 18.0			3.71				.314
Above 27.1 > 18.1 to 27.0			2.83				.633
Total NCS (N =236)				5	1.655	.146	
<= 2.0	47	30.57					
2.1 to 6.0	43	28.60					
6.1 to 11.0	35	32.11					
11.1 to 18.0	38	31.34					
18.1 to 27.0	36	32.31					
Above 27.1	37	32.54					

Table 4-32 Continued

Variable and Time as RN	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total Job Satisfaction (N = 229)							
<= 2.0	45	106.91					
2.1 to 6.0	42	103.86					
6.1 to 11.0	34	118.62					
11.1 to 18.0	37	110.86					
18.1 to 27.0	34	110.08					
Above 27.1	37	108.84					
				5	2.163	.059	
6.1 to 11.0 > less than = 2.0			11.71				.126
6.1 to 11.0 > 2.1 to 6.0			14.76				.025
6.1 to 11.0 > 11.1 to 18.0			7.75				.607
6.1 to 11.0 > 18.1 to 27.0			8.53				.525
6.1 to 11.0 > Above 27.1			9.78				.343
Extrinsic Reward							
<= 2.0	45	14.82					
2.1 to 6.0	42	12.98					
6.1 to 11.0	34	15.29			2.563	.028	
11.1 to 18.0	37	13.95					
18.1 to 27.0	34	13.82					
Above 27.1	37	14.78					
				5			
6.1 to 11.0 > less than = 2.0			.472				.989
6.1 to 11.0 > 2.1 to 6.0			2.32				.031
6.1 to 11.0 > 11.1 to 18.0			1.35				.522
6.1 to 11.0 > 18.1 to 27.0			1.47				.446
6.1 to 11.0 > Above 27.1			.51				.987
Scheduling							
<= 2.0	45	18.02					
2.1 to 6.0	42	18.29					
6.1 to 11.0	34	20.82					
11.1 to 18.0	37	19.84					
18.1 to 27.0	34	19.88					
Above 27.1	37	19.92					
				5	3.533	.004	
6.1 to 11.0 > less than = 2.0			2.81				.010
6.1 to 11.0 > 2.1 to 6.0			2.54				.031
6.1 to 11.0 > 11.1 to 18.0			.99				.861
6.1 to 11.0 > 18.1 to 27.0			.94				.892
6.1 to 11.0 > Above 27.1			.90				.899

Table 4-32 Continued

Variable and Time as RN	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Family and Work Balance				5	.942	.455	
< = 2.0	45	9.27					
2.1 to 6.0	42	8.33					
6.1 to 11.0	34	9.38					
11.1 to 18.0	37	9.08					
18.1 to 27.0	34	8.82					
Above 27.1	37	9.16					
Co-Workers							
< = 2.0	45	11.42					
2.1 to 6.0	42	11.02					
6.1 to 11.0	34	12.24		5	1.910	.094	
11.1 to 18.0	37	11.65					
18.1 to 27.0	34	11.97					
Above 27.1	37	12.30					
Interaction Opportunities				5	2.045	.073	
< = 2.0	45	17.82					
2.1 to 6.0	42	17.45					
6.1 to 11.0	34	19.71					
11.1 to 18.0	37	18.65					
18.1 to 27.0	34	19.06					
Above 27.1	37	17.92					
Praise and Recognition				5	1.836	.107	
< = 2.0	45	26.11					
2.1 to 6.0	42	26.81					
6.1 to 11.0	34	30.68					
11.1 to 18.0	37	27.86					
18.1 to 27.0	34	26.71					
Above 27.1	37	25.43					
Control and Responsibility				5	1.474	.199	
< = 2.0	45	9.44					
2.1 to 6.0	42	8.98					
6.1 to 11.0	34	10.50					
11.1 to 18.0	37	9.84					
18.1 to 27.0	34	9.82					
Above 27.1	37	9.32					
Intention to Leave (N = 220)							
< = 2.0	45	8.67					
2.1 to 6.0	40	10.20					
6.1 to 11.0	33	7.85		5	1.609	.159	
11.1 to 18.0	36	7.64					
18.1 to 27.0	32	10.22					
Above 27.1	37	9.92					

Differences According to Length of Employment with Tenet

To evaluate the nurses' Perception of *Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to the work profile of *length of employment with Tenet*, ANOVA with post hoc comparisons was performed. While there was a trend relationship indicated ($p = .046$), there was not a significant effect of the *length of employment with Tenet* on perception of *transformational leadership*.

There was a significant effect of *length of employment with Tenet* on *organizational commitment* in all three components, *affective commitment* ($p = .005$), *continuance commitment* ($p = .002$), and *normative commitment* ($p = .011$). Post-hoc comparisons using the Tukey HSD test reveal that registered nurses in the greater than 17 years group ($M = 40.63$) reported significantly higher *affective commitment* than registered nurses in the less than two years group ($M = 32.92$, $p = .003$). Registered nurses in the 17.1 years and above group ($M = 27.50$) reported significantly higher *continuance commitment* than registered nurses who have been with Tenet from 3 to 7 years ($M = 21.56$; $p = .002$) and the 8 to 12 years group ($M = 22.51$; $p = .027$). Registered nurses in the 17.1 years and above group ($M = 34.43$) also reported significantly higher *normative commitment* than registered nurses who have been with Tenet less than or equal to two years ($M = 29.48$; $p = .008$) and the 8 to 12 years group ($M = 30.00$; $p = .042$).

There was not a significant effect of *length of employment with Tenet* on total *job satisfaction* of registered nurses. While there was a trend relationship indicated with

satisfaction with co-workers ($p = .035$), there was not a significant difference noted. There was, however, a significant effect of *length of employment with Tenet* on components of job satisfaction: satisfaction with *scheduling* ($p = .000$), and *interaction opportunities* ($p = .024$). Analysis of the effect of *length of employment with Tenet* on *satisfaction with family and work life balance* reveal that the assumption of homogeneity of variance was violated (significance value was .019 for Levene's test). However, Welch's test reveal that there was not a significant effect of *length of employment with Tenet* on *satisfaction with family and work life balance* ($p = .169$). Post-hoc comparisons using the Tukey HSD test reveal that registered nurses in the 13 to 17 years group ($M = 20.61$) reported significantly higher *satisfaction with scheduling* than registered nurses who have been with Tenet two years and less ($M = 18.16$; $p = .009$) and registered nurses who have been with Tenet 3 to 7 years ($M = 18.23$; $p = .015$). Nurses in the greater than 17.1 years group also reported higher *satisfaction with scheduling* ($M = 20.62$). Nurses in the greater than 17.1 years group also reported higher *satisfaction with interaction opportunities* ($M = 19.58$) than nurses with two years or less with Tenet ($M = 17.47$; $p = .038$).

There was not a significant effect of *length of employment with Tenet* on *intention to leave*. Results of ANOVA of comparison of *Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *length of employment with Tenet* are shown in Table 4-33.

Table 4-33

*Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Length of Employment with Tenet:
ANOVA and Post Hoc Comparisons*

Variable and Employment Time with Tenet	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =242)				4	2.463		.046
< = 2	53	24.38					
3 to 7	55	25.51					
8 to 12	39	28.18					
13 to 17	49	28.41					
Above 17.1	46	26.22					
Organizational Commitment (N = 235)							
Total ACS				4	3.784	.005	
< = 2	52	32.92					
3 to 7	50	35.54					
8 to 12	39	37.64					
13 to 17	48	37.88					
Above 17.1	46	40.63					
Above 17.1 > less than = 2.0			7.71				.003
Above 17.1 > 3 to 7			5.09				.117
Above 17.1 > 8 to 12			2.99				.674
Above 17.1 > 13 to 17			2.76				.697
Total CCS				4	4.284	.002	
< = 2.0	52	23.94					
3 to 7.0	50	21.56					
8 to 12	39	22.51					
13 to 17	48	25.25					
Above 17.1	46	27.50					
Above 17.1 > less than = 2.0			3.56				.154
Above 17.1 > 3 to 7			5.94				.002
Above 17.1 > 8 to 12			4.99				.027
Above 17.1 > 13 to 17			2.25				.618

Table 4-33 Continued

Variable and Employment Time with Tenet	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total NCS (N =234)				4	3.352	.011	
<= 2.0	52	29.48					
3 to 7.0	49	30.67					
8 to 12	39	30.00					
13 to 17	48	31.00					
Above 17.1	46	34.43					
Above 17.1 > less than = 2.0							
Above 17.1 > 3 to 7			4.95				.008
Above 17.1 > 8 to 12			3.76				.088
Above 17.1 > 13 to 17			4.43				.042
			3.43				.150
Total Job Satisfaction (N = 227)							
<= 2.0	51	105.25					
3 to 7.0	48	105.98					
8 to 12	39	108.31		4	2.300	.060	
13 to 17	44	113.11					
Above 17.1	45	115.71					
Extrinsic Reward							
<= 2.0	51	14.16					
3 to 7.0	48	13.94					
8 to 12	39	13.46		4	1.394	.237	
13 to 17	44	14.98					
Above 17.1	45	14.73					
Scheduling				4	5.343	.000	
<= 2.0	51	18.16					
3 to 7.0	48	18.23					
8 to 12	39	19.44					
13 to 17	44	20.61					
Above 17.1	45	20.62					
13 to 17 > less than = 2.0			2.46				.009
13 to 17 > 3 to 7			2.38				.015
13 to 17 > 8 to 12			1.18				.570
13 to 17 > Above 17.1			-.009				1.000
Above 17.1 > less than = 2.0			2.47				.008
Above 17.1 > 3 to 7			2.39				.013
Above 17.1 > 8 to 12			1.19				.558
Above 17.1 > 13 to 17			.009				1.000

Table 4-33 Continued

Variable and Employment Time with Tenet	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Family and Work Balance				4	1.966	.101	
< = 2.0	51	9.20					
3 to 7.0	48	9.23					
8 to 12	39	8.28					
13 to 17	44	8.70					
Above 17.1	45	9.64					
Co-Workers				4	2.642	.035	
< = 2.0	51	11.55					
3 to 7.0	48	11.10					
8 to 12	39	11.43					
13 to 17	44	12.30					
Above 17.1	45	12.31					
Interaction Opportunities				4	2.882	.024	
< = 2.0	51	17.47					
3 to 7.0	48	17.79					
8 to 12	39	17.97					
13 to 17	44	19.07					
Above 17.1	45	19.58					
Above 17.1 > less than = 2.0			2.11				.038
Above 17.1 > 3 to 7			1.79				.124
Above 17.1 > 8 to 12			1.60				.256
Above 17.1 > 13 to 17			.51				.964
Praise and Recognition				4	1.313	.266	
< = 2.0	51	25.31					
3 to 7.0	48	26.60					
8 to 12	39	27.87					
13 to 17	44	27.64					
Above 17.1	45	28.87					
Control and Responsibility				4	.887	.472	
< = 2.0	51	9.41					
3 to 7.0	48	9.08					
8 to 12	39	9.85					
13 to 17	44	9.82					
Above 17.1	45	9.96					
Intention to Leave (N = 221)				4	2.418	.050	
< = 2.0	48	8.35					
3 to 7.0	47	11.17					
8 to 12	39	9.26					
13 to 17	44	8.52					
Above 17.1	43	8.00					

Differences According to Nursing Unit

To evaluate nurses' *Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to the work profile of *nursing unit*, ANOVA with post hoc comparisons was performed. There was a significant effect of *nursing unit* on perception of *transformational leadership* ($p = .029$). Post-hoc comparisons using the Tukey HSD test reveal that registered nurses in the *Telemetry unit* reported significantly higher perception of *transformational leadership* ($M = 30.02$) than nurses in *Critical Care* ($M = 25.72$; $p = .043$) and *Pediatrics* ($M = 23.47$; $p = .048$).

There was a significant effect of *nursing unit* on the three components of *organizational commitment: affective commitment* ($p = .001$), *continuance commitment* ($p = .019$), and *normative commitment* ($p = .006$). Post-hoc comparisons using the Tukey HSD test reveal that nurses who indicated *Telemetry* as their primary unit reported significantly higher *affective commitment* ($M = 41.29$) than nurses in *Critical Care* ($M = 34.73$; $p = .017$) and nurses in the *Pediatric unit* ($M = 29.88$; $p = .003$). Nurses in the *Pediatric* unit reported significantly higher *continuance commitment* ($M = 28.82$) than nurses in the *Emergency Department* ($M = 20.48$) at $p = .017$. While *Women Services* reported the highest *normative commitment* (38.50), post-hoc comparisons showed no significant differences in *normative commitment* amongst the *nursing units*.

There was not a significant effect of *nursing unit* on total *job satisfaction*. There was a significant effect of *nursing unit* on *intention to leave*. Analysis reveal that the assumption of homogeneity of variance was violated for *intention to leave* (significance

value was .004 for Levene's test). Welch's test reveals that there was a significant effect of *nursing unit* on *intention to leave* ($p = .026$). Post-hoc comparisons using the Games-Howell test reveal that nurses in the *Critical Care* unit report significantly higher *intention to leave* ($M = 9.96$; $p = .010$) than nurses in the *Telemetry* unit ($M = 6.71$). Nurses in the *Medical Surgical* unit also report significantly higher *intention to leave* ($M = 9.91$; $p = .035$) than nurses in the *Telemetry* unit. Results of ANOVA of comparison of *Work Profile*, *Global Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to *nursing unit* are shown in Table 4-34.

Table 4-34

Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Nursing Unit: ANOVA and Post Hoc Comparisons

Variable and Nursing Unit	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =246)				6	2.388	.029	
Critical Care	89	25.74					
Medical-Surgical	59	25.73					
Telemetry	44	30.02					
Ambulatory Care	12	27.25					
Emergency Department	23	24.96					
Women's Services	2	26.50					
Pediatrics	17	23.47					
Telemetry > Critical Care			4.28				.043
Telemetry > Medical-Surgical			4.29				.078
Telemetry > Ambulatory Care			2.77				.925
Telemetry > Emergency Department			5.07				.142
Telemetry > Women's Services			3.52				.996
Telemetry > Pediatrics			6.55				.048

Table 4-34 Continued

Variable and Nursing Unit	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Organizational Commitment (N = 239)							
Total ACS				6	3.755	.001	
Critical Care	84	34.73					
Medical-Surgical	59	35.66					
Telemetry	42	41.29					
Ambulatory Care	12	41.17					
Emergency Department	23	37.96					
Women's Services	2	44.00					
Pediatrics	17	29.88					
Telemetry > Critical Care			6.56				.017
Telemetry > Medical-Surgical			5.62				.108
Telemetry > Ambulatory Care			.12				1.000
Telemetry > Emergency Department			3.33				.880
Telemetry > Women's Services			-2.71				1.000
Telemetry > Pediatrics			11.40				.003
Total CCS				6	2.588	.019	
Critical Care	84	23.70					
Medical-Surgical	59	24.78					
Telemetry	42	23.74					
Ambulatory Care	12	26.83					
Emergency Department	23	20.48					
Women's Services	2	32.50					
Pediatrics	17	28.82					
Pediatrics > Critical Care							.179
Pediatrics > Medical-Surgical			5.12				.498
Pediatrics > Telemetry			4.04				.268
Pediatrics > Ambulatory Care			5.09				.994
Pediatrics > Emergency Department			1.99				.017
Pediatrics > Women's Services			8.35				.996
			-3.68				
Total NCS (N =238)				6	3.130	.006	
Critical Care	84	29.50					
Medical-Surgical	58	31.84					
Telemetry	42	33.52					
Ambulatory Care	12	35.50					
Emergency Department	23	29.26					
Women's Services	2	38.50					
Pediatrics	17	29.29					

Table 4-34 Continued

Variable and Nursing Unit	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total Job Satisfaction (N = 231)							
Critical Care	79	107.78					
Medical-Surgical	57	105.23					
Telemetry	42	115.71					
Ambulatory Care	11	116.00		6	1.575	.155	
Emergency Department	23	113.00					
Women's Services	2	101.50					
Pediatrics	17	105.53					
Extrinsic Reward							
Critical Care	79	13.75					
Medical-Surgical	57	13.51					
Telemetry	42	15.05					
Ambulatory Care	11	15.09		6	1.922	.078	
Emergency Department	23	14.13					
Women's Services	2	16.50					
Pediatrics	17	15.71					
Scheduling							
Critical Care	79	19.03					
Medical-Surgical	57	18.37					
Telemetry	42	19.57					
Ambulatory Care	11	20.27		6	2.112	.053	
Emergency Department	23	21.09					
Women's Services	2	22.00					
Pediatrics	17	20.18					
Family and Work Balance							
Critical Care	79	8.91					
Medical-Surgical	57	8.93					
Telemetry	42	9.64					
Ambulatory Care	11	9.18					
Emergency Department	23	9.22					
Women's Services	2	7.00					
Pediatrics	17	7.82					
Co-Workers							
Critical Care	79	11.75					
Medical-Surgical	57	11.51					
Telemetry	42	11.83					
Ambulatory Care	11	12.00		6	.248	.960	
Emergency Department	23	11.78					
Women's Services	2	12.00					
Pediatrics	17	11.24					

Table 4-34 Continued

Variable and Nursing Unit	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Interaction Opportunities				6	1.462	.192	
Critical Care	79	18.19					
Medical-Surgical	57	17.68					
Telemetry	42	19.12					
Ambulatory Care	11	19.00					
Emergency Department	23	19.13					
Women's Services	2	13.50					
Pediatrics	17	18.18					
Praise and Recognition				6	2.169	.047	
Critical Care	79	26.70					
Medical-Surgical	57	25.93					
Telemetry	42	30.26					
Ambulatory Care	11	30.27					
Emergency Department	23	27.26					
Women's Services	2	23.50					
Pediatrics	17	23.65					
Control and Responsibility				6	1.616	.144	
Critical Care	79	9.47					
Medical-Surgical	57	9.30					
Telemetry	42	10.24					
Ambulatory Care	11	10.18					
Emergency Department	23	10.39					
Women's Services	2	7.00					
Pediatrics	17	8.76					
Intention to Leave (N = 225)				6 ^a	14.383 ^a	.026 ^a	
Critical Care	76	9.96					
Medical-Surgical	55	9.91					
Telemetry	41	6.71					
Ambulatory Care	11	6.64					
Emergency Department	23	8.35					
Women's Services	2	5.50					
Pediatrics	17	11.53					
Telemetry > Critical Care			-3.25 ^b				.010 ^b
Telemetry > Medical-Surgical			-3.20 ^b				.035 ^b
Telemetry > Ambulatory Care			.07 ^b				1.000 ^b
Telemetry > Emergency Department			-1.64 ^b				.837 ^b
Telemetry > Women's Services			1.21 ^b				.967 ^b
Telemetry > Pediatrics			-4.82 ^b				.131 ^b

^aNote. Robust Test of Equality Means -Welch

^bNote. Games-Howell procedure

Differences According to Shift Worked

To evaluate nurses' *Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to the work profile of *shift worked*, ANOVA with post hoc comparisons was performed. There was not a significant effect of *shift worked* on the *perception of transformational leadership*. Analysis reveals that the assumption of homogeneity of variance was violated for *GTL* (significance value was .022 for Levene's test). Welch's test reveals that there was no significant effect of *shift worked* on *perception of transformational leadership* ($p = .786$).

In terms of *organizational commitment*, there was no significant effect of *shift worked* on *affective commitment* and on *continuance commitment*. However, there was a significant effect noted on *normative commitment* ($p = .011$). Post-hoc comparisons using the Tukey HSD test reveal that nurses who worked the *7am to 3pm* shift reported significantly higher *normative commitment* ($M = 34.43$) than nurses who worked the *7am to 7pm* shift ($M = 30.60$; $p = .016$) and the *7pm to 7am* shift ($M = 30.36$; $p = .014$).

There was no significant effect of *shift worked* on *job satisfaction*. There was no significant effect of *shift worked* on *intention to leave*. Results of ANOVA of comparison of *Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to *shift worked* are shown in Table 4-35.

Table 4-35

Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Shift Worked: ANOVA and Post Hoc Comparisons

Variable and Shift Worked	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =245)				2 ^a	.211 ^a	.786 ^a	
7A to 7P	122	26.55					
7A to 3P	37	26.92					
7P to 7A	86	26.01					
Organizational Commitment (N = 238)							
Total ACS				2	.672	.512	
7A to 7P	117	36.42					
7A to 3P	37	38.41					
7P to 7A	84	36.02					
Total CCS				2	1.846	.160	
7A to 7P	117	23.63					
7A to 3P	37	26.51					
7P to 7A	84	24.19					
Total NCS (N =237)				2	4.584	.011	
7A to 7P	116	30.60					
7A to 3P	37	34.43					
7P to 7A	84	30.36					
7A to 3P > 7A to 7P			3.83				.016
7A to 3P > 7P to 7A			4.08				.014
Total Job Satisfaction (N = 230)							
7A to 7P	114	109.55					
7A to 3P	35	112.51		2	.643	.526	
7P to 7A	81	107.77					
Extrinsic Reward							
7A to 7P	114	14.26					
7A to 3P	35	14.40		2	.081	.922	
7P to 7A	81	14.14					
Scheduling							
7A to 7P	114	19.79					
7A to 3P	35	19.63		2	2.609	.076	
7P to 7A	81	18.59					

Table 4-35 Continued

Variable and Shift Worked	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Family and Work Balance							
7A to 7P	114	8.85					
7A to 3P	35	9.23		2	.401	.670	
7P to 7A	81	9.09					
Co-Workers							
7A to 7P	114	11.88					
7A to 3P	35	11.83		2	1.073	.344	
7P to 7A	81	11.41					
Interaction Opportunities							
7A to 7P	114	18.46					
7A to 3P	35	19.03		2	1.305	.273	
7P to 7A	81	17.88					
Praise and Recognition							
7A to 7P	114	26.80					
7A to 3P	35	28.43		2	.528	.590	
7P to 7A	81	27.09					
Control and Responsibility							
7A to 7P	114	9.52		2	.397	.673	
7A to 3P	35	9.97					
7P to 7A	81	9.58					
Intention to Leave (N = 224)							
7A to 7P	111	9.16		2	.145	.865	
7A to 3P	32	8.56					
7P to 7A	81	9.10					

^aNote. Robust Test of Equality Means -Welch

Differences According to Hospital

To evaluate the nurses' *Perception of Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave* according to the work profile of *hospital*, ANOVA with post hoc comparisons was performed. Analysis reveals that the assumption of homogeneity of variance was violated for *GTL*

(significance value was .005 for Levene's test). Welch's test reveals that there was a significant effect of *hospital* on *perception of transformational leadership* ($p = .000$). Post-hoc comparisons using Games-Howell procedure reveal that nurses in the *Coral Gables* group reported significantly higher *perception of transformational leadership* ($M = 32.07$) than nurses at *Delray Medical Center* ($M = 26.48$; $p = .000$), *Northshore Medical Center* ($M = 25.25$; $p = .006$), *Palm Beach Gardens* ($M = 21.07$; $p = .000$), and *St. Mary's Medical Center* ($M = 24.71$; $p = .000$). Nurses at *Delray Medical Center* reported significantly higher *perception of transformational leadership* than nurses at *Palm Beach Gardens* at $p = .032$.

There was a significant effect of *hospital* on *organizational commitment*, in the three components: *affective commitment* ($p = .000$), *continuance commitment* ($p = .001$), and *normative commitment* ($p = .010$). Post-hoc comparisons using Tukey's test reveal that there were significant differences in *affective commitment* and *continuance commitment*. Nurses at *Coral Gables* reported significantly higher *affective commitment* ($M = 44.93$) than nurses at *Delray Medical Center* ($M = 34.44$; $p = .000$), *Northshore Medical Center* ($M = 33.87$; $p = .001$), *Palm Beach Gardens* ($M = 32.70$; $p = .000$), and *St. Mary's Medical Center* ($M = 32.78$; $p = .000$). Nurses at *West Boca Medical Center* also reported significantly higher *affective commitment* ($M = 41.17$) than nurses at *Palm Beach Gardens* ($p = .039$), and nurses at *St. Mary's Medical Center* ($p = .030$). Nurses at *St. Mary's* reported significantly higher *continuance commitment* ($M = 28.98$) than nurses at *Coral Gables* ($M = 22.58$; $p = .005$) and nurses at *Delray Medical Center* ($M = 21.97$; $p = .000$).

There was a significant effect of *hospital* on *job satisfaction* ($p = .000$). Post-hoc comparisons (Tukey HSD test) reveal that nurses at *Coral Gables* reported significantly higher *job satisfaction* ($M = 128.00$) than nurses at *Delray Medical Center* ($M = 107.74$; $p = .000$), *Florida Medical Center* ($M = 98.40$; $p = .025$), *Northshore Medical Center* ($M = 104.45$; $p = .000$), *Palm Beach Gardens* ($M = 95$; $p = .000$), *Palmetto General* ($M = 102.22$; $p = .006$), and *St. Mary's Medical Center* ($M = 104.00$; $p = .000$).

There was a significant effect of *hospital* where nurses worked on *intention to leave* ($p = .001$, Welch's test). Post-hoc comparison using Games-Howell procedure reveal that nurses at *Delray Medical Center* reported significantly higher *intention to leave* ($M = 10.03$) than nurses at *Coral Gables* ($M = 5.98$; $p = .001$) and nurses at *West Boca Medical Center* ($M = 4.50$; $p = .022$). Nurses at *Northshore Medical Center* also reported higher *intention to leave* ($M = 11.52$) than nurses at *Coral Gables* ($p = .003$), and nurses at *West Boca Medical Center* ($p = .006$). Results of ANOVA of comparison of *Work Profile*, *Global Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* according to *Hospital* are shown in Table 4-36.

Table 4-36

Comparison of Work Profile, Global Transformational Leadership, Organizational Commitment, Job Satisfaction, and Intention to Leave According to Hospital: ANOVA and Post Hoc Comparisons

Variable and Hospital	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
GTL (N =247)				9 ^a	27.564 ^a	.000 ^a	
Coral Gables	45	32.07					
Delray Medical Center	75	26.48					
Florida Medical Center	6	24.50					
Good Samaritan	4	30.50					
Hialeah Hospital	4	28.00					
Northshore Medical Center	24	25.25					
Palm Beach Gardens	29	21.07					
Palmetto General	11	22.36					
St. Mary's Medical Center	42	24.71					
West Boca Medical Center	7	28.57					
Coral Gables > Delray Medical Center			5.59 ^b				.000 ^b
Coral Gables > Florida Medical Center			7.57 ^b				.576 ^b
Coral Gables > Good Samaritan			1.57 ^b				.999 ^b
Coral Gables > Hialeah Hospital			4.07 ^b				.985 ^b
Coral Gables > Northshore Medical			6.82 ^b				.006 ^b
Coral Gables > Palm Beach Gardens			10.99 ^b				.000 ^b
Coral Gables > Palmetto General			9.70 ^b				.144 ^b
Coral Gables > St. Mary's Medical			7.35 ^b				.000 ^b
Coral Gables > West Boca Medical			3.50 ^b				.983 ^b
Organizational Commitment (N = 240)							

Table 4-36 Continued

Variable and Hospital	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total ACS				9	6.511	.000	
Coral Gables	45	44.93					
Delray Medical Center	73	34.44					
Florida Medical Center	6	34.83					
Good Samaritan	4	43.00					
Hialeah Hospital	4	41.50					
Northshore Medical Center	23	33.87					
Palm Beach Gardens	27	32.70					
Palmetto General	11	35.64					
St. Mary's Medical Center	41	32.78					
West Boca Medical Center	6	41.17					
Coral Gables > Delray Medical Center			10.49				.000
Coral Gables > Florida Medical Center			10.10				.345
Coral Gables > Good Samaritan			1.93				1.000
Coral Gables > Hialeah Hospital			3.43				1.000
Coral Gables > Northshore Medical			11.06				.001
Coral Gables > Palm Beach Gardens			12.23				.000
Coral Gables > Palmetto General			9.30				.134
Coral Gables > St. Mary's Medical			12.15				.000
Coral Gables > West Boca Medical			-2.23				1.000
Total CCS				9	3.388	.001	
Coral Gables	45	22.58					
Delray Medical Center	73	21.97					
Florida Medical Center	6	27.83					
Good Samaritan	4	30.00					
Hialeah Hospital	4	24.00					
Northshore Medical Center	23	25.00					
Palm Beach Gardens	27	25.26					
Palmetto General	11	23.73					
St. Mary's Medical Center	41	28.98					
West Boca Medical Center	6	20.00					
St. Mary's > Coral Gables			6.40				.005
St. Mary's > Delray Medical Center			7.00				.000
St. Mary's > Florida Medical Center			1.14				1.000
St. Mary's > Good Samaritan			-1.02				1.000
St. Mary's > Hialeah Hospital			4.98				.965
St. Mary's > Northshore Medical			3.98				.602
St. Mary's > Palm Beach Gardens			3.72				.626
St. Mary's > Palmetto General			5.25				.584
St. Mary's > West Boca Medical			3.73				.185

Table 4-36 Continued

Variable and Hospital	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Total NCS (N =239)							
Coral Gables	45	33.60					
Delray Medical Center	72	29.43					
Florida Medical Center	6	30.83					
Good Samaritan	4	37.50					
Hialeah Hospital	4	37.00					
Northshore Medical Center	23	32.22		9	2.475	.010	
Palm Beach Gardens	27	29.70					
Palmetto General	11	33.82					
St. Mary's Medical Center	41	29.39					
West Boca Medical Center	6	34.67					
Total Job Satisfaction (N = 232)							
Coral Gables	45	128.00					
Delray Medical Center	70	107.74					
Florida Medical Center	5	98.40					
Good Samaritan	4	108.25					
Hialeah Hospital	4	113.25					
Northshore Medical Center	22	104.45					
Palm Beach Gardens	26	95.00					
Palmetto General	9	102.22					
St. Mary's Medical Center	41	104.00					
West Boca Medical Center	6	120.83		9	8.193	.000	
Coral Gables > Delray Medical Center			20.26				.000
Coral Gables > Florida Medical Center			29.60				.025
Coral Gables > Good Samaritan			19.75				.555
Coral Gables > Hialeah Hospital			14.75				.874
Coral Gables > Northshore Medical			23.55				.000
Coral Gables > Palm Beach Gardens			33.00				.000
Coral Gables > Palmetto General			25.78				.006
Coral Gables > St. Mary's Medical			24.00				.000
Coral Gables > West Boca Medical			7.17				.996
Extrinsic Reward							
Coral Gables	45	15.93					
Delray Medical Center	70	13.71					
Florida Medical Center	5	12.20					
Good Samaritan	4	11.75					
Hialeah Hospital	4	15.00					
Northshore Medical Center	22	13.18		9	3.417	.001	
Palm Beach Gardens	26	13.00					
Palmetto General	9	13.11					
St. Mary's Medical Center	41	15.27					
West Boca Medical Center	6	12.83					

Table 4-36 Continued

Variable and Hospital	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Scheduling							
Coral Gables	45	21.09					
Delray Medical Center	70	19.80					
Florida Medical Center	5	17.40					
Good Samaritan	4	21.25					
Hialeah Hospital	4	19.00					
Northshore Medical Center	22	17.82		9	4.628	.000	
Palm Beach Gardens	26	16.54					
Palmetto General	9	18.00					
St. Mary's Medical Center	41	19.20					
West Boca Medical Center	6	22.00					
Family and Work Balance							
Coral Gables	45	10.91					
Delray Medical Center	70	8.54					
Florida Medical Center	5	9.40					
Good Samaritan	4	9.75					
Hialeah Hospital	4	9.75					
Northshore Medical Center	22	9.50		9	6.577	.000	
Palm Beach Gardens	26	8.38					
Palmetto General	9	8.78					
St. Mary's Medical Center	41	7.51					
West Boca Medical Center	6	10.00					
Co-Workers							
Coral Gables	45	12.71					
Delray Medical Center	70	11.57					
Florida Medical Center	5	10.60					
Good Samaritan	4	13.00					
Hialeah Hospital	4	13.25					
Northshore Medical Center	22	10.91		9	4.290	.000	
Palm Beach Gardens	26	9.92					
Palmetto General	9	12.22					
St. Mary's Medical Center	41	11.83					
West Boca Medical Center	6	13.00					
Interaction Opportunities							
Coral Gables	45	20.51					
Delray Medical Center	70	18.53					
Florida Medical Center	5	17.80					
Good Samaritan	4	17.00					
Hialeah Hospital	4	18.00					
Northshore Medical Center	22	17.41		9	4.195	.000	
Palm Beach Gardens	26	16.15					
Palmetto General	9	16.11					
St. Mary's Medical Center	41	17.80					
West Boca Medical Center	6	20.67					

Table 4-36 Continued

Variable and Hospital	N	Mean	Mean Difference	df	F	p	Tukey Post Hoc Comparison
Praise and Recognition							
Coral Gables	45	35.44					
Delray Medical Center	70	26.09					
Florida Medical Center	5	23.20					
Good Samaritan	4	26.00					
Hialeah Hospital	4	29.25					
Northshore Medical Center	22	26.41		9	10.461	.000	
Palm Beach Gardens	26	22.27					
Palmetto General	9	25.00					
St. Mary's Medical Center	41	23.49					
West Boca Medical Center	6	31.50					
Control and Responsibility							
Coral Gables	45	11.40					
Delray Medical Center	70	9.50					
Florida Medical Center	5	7.80					
Good Samaritan	4	9.50					
Hialeah Hospital	4	9.00					
Northshore Medical Center	22	9.23		9	3.867	.000	
Palm Beach Gardens	26	8.73					
Palmetto General	9	9.00					
St. Mary's Medical Center	41	8.90					
West Boca Medical Center	6	10.83					
Intention to Leave (N = 226)							
Coral Gables	45	5.98					
Delray Medical Center	68	10.03					
Florida Medical Center	4	13.25					
Good Samaritan	4	8.75					
Hialeah Hospital	4	8.00					
Northshore Medical Center	21	11.52					
Palm Beach Gardens	26	9.58					
Palmetto General	7	11.00					
St. Mary's Medical Center	41	9.68					
West Boca Medical Center	6	4.50					
				9 ^a	23.383 ^a	.001 ^a	
Coral Gables > Delray Medical Center			-4.05				
Coral Gables > Florida Medical Center			-7.27				
Coral Gables > Good Samaritan			-2.77				
Coral Gables > Hialeah Hospital			-2.02				
Coral Gables > Northshore Medical			-5.54				
Coral Gables > Palm Beach Gardens			-3.60				
Coral Gables > Palmetto General			-5.02				
Coral Gables > St. Mary's Medical			-3.71				
Coral Gables > West Boca Medical			1.48				

^aNote. Robust Test of Equality Means -Welch

^bNote. Games-Howell procedure

Results of Hypotheses Testing

Research Hypothesis 1

H1: Perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction.

To test Hypothesis 1, multiple regression analyses using the hierarchical (forward) method were performed to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership and Organizational Commitment* (affective commitment, continuance commitment, and normative commitment) and the dependent variables *nurses' job satisfaction* (extrinsic reward, scheduling, family and work balance, co-workers, interaction opportunities, praise and recognition, and control and responsibility). The GTL, the three subscales of the *21-Item Three Component Organizational Commitment* scale and the seven subscales of the *Revised 31 item McCloskey/Mueller Satisfaction Scale* resulting from EFA were utilized.

There were eight separate hypotheses for Research Hypothesis 1. Each hypothesis tested a different explanatory relationship among perception of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) and aspects of nurses' job satisfaction: *satisfaction with extrinsic reward, satisfaction with scheduling, satisfaction with family and work balance, satisfaction with co-workers, satisfaction with interaction opportunities, satisfaction with praise and recognition, satisfaction with control and responsibility, and total job satisfaction*. The dependent variable was examined as follows: H1_a *satisfaction with extrinsic reward*, H1_b *satisfaction with scheduling*, H1_c

satisfaction with family and work balance, H1_d satisfaction with co-workers, H1_e satisfaction with interaction opportunities, H1_f satisfaction with praise and recognition, H1_g satisfaction with control and responsibility, and H1_h total job satisfaction.

The analysis of each individual hypothesis follows:

H_{1a} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *extrinsic reward*.

To test Hypothesis 1_a, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership* and *Organizational Commitment (affective commitment, continuance commitment, and normative commitment)* and the dependent variable, *satisfaction with extrinsic reward*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with extrinsic reward* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective, and normative*) and the *satisfaction with extrinsic reward* subscale. The results were as follows: *GTL* ($r = .325, p = .000$), *Affective Commitment* ($r = .475, p = .000$), and *Normative Commitment* ($r = .292, p = .000$). The results of Pearson *r* correlation between *Global Transformational Leadership scale*, and the *satisfaction with extrinsic reward* subscale along with *Affective Commitment, Continuance Commitment,*

and *Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with extrinsic reward* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale* are presented in Table 4-37.

Table 4-37

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Extrinsic Reward Subscale

Variables	Pearson <i>r</i>	<i>p</i> -value
GTL	.325	.000
Affective Commitment	.475	.000
Continuance Commitment	.051	.222
Normative Commitment	.292	.000

Global Transformational Leadership and the two significant subscales from the *Organizational Commitment* scale (affective, and normative) and *extrinsic reward* were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. Tolerance indicates how much of the variability of the identified independent variable is not explained by the other independent variables in the model. If this value is less than .10, multiple correlation with other variable is high. VIF is the inverse of Tolerance with values above 10 indicating multicollinearity (Pallant, 2007). For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no multicollinearity issues.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R²* increased from Model 1 (10.8%), to Model 2 (22.9%). Model 2 was the better explanatory model to explain *extrinsic reward*. The explanatory model found was:

$$\begin{aligned} \text{Extrinsic reward} = & 7.878 \text{ (constant)} + .030 \text{ (GTL)} + .132 \text{ (Affective Commitment)} \\ & + .022 \text{ (Normative Commitment)} + e \end{aligned}$$

Examination of individual predictors in Model 2 indicated one significant explanatory relationship between the three predictors and *extrinsic reward*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *extrinsic reward*. *Affective Commitment* was the most important predictor ($t = 5.083$, $p = .000$, $\beta = .416$) in the model. There was a significant positive relationship with *extrinsic reward*. Higher *affective commitment* scores indicated that employees are emotionally attached to the organization, and want to remain, which would correlate with higher *extrinsic reward*. The other predictors were not significant explanatory variables in the model.

According to the findings, Hypothesis 1_a was only partially supported. *Affective Commitment* was a significant positive explanatory variable of satisfaction with *extrinsic reward*. The hierarchical (forward) multiple regression results for H1_a are summarized in

Table 4-38.

Table 4-38

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leader, Organizational Commitment Subscales (Affective, Normative), and Extrinsic Reward

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>T</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Model 1	28.891	1	.00							
(Constant)				10.335	.749		13.792	.000	.112	.108
Global Transformational Leadership				.147	.027	.335	5.375	.000		
Model 2	23.713	3	.00						.239	.229
(Constant)				7.878	.963		8.176	.000		
Total GTL				.030	.032	.069	.947	.345		
Affective Subscale				.132	.026	.416	5.083	.000		
Normative Subscale				.022	.032	.048	.706	.48		

H_{1b} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *scheduling*.

To test Hypothesis 1_b, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership and Organizational Commitment (affective commitment, continuance commitment, and normative commitment)* and the dependent variable, *satisfaction with scheduling*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with Scheduling* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale*, and between two of

the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective, and normative*) and the *satisfaction with scheduling* subscale. The results were as follows: *GTL* ($r = .391, p = .000$), *Affective Commitment* ($r = .450, p = .000$), and *Normative Commitment* ($r = .236, p = .000$). The results of Pearson r correlation between *Global Transformational Leadership scale*, and the *satisfaction with scheduling* subscale along with *Affective Commitment, Continuance Commitment, and Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with scheduling* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale* are presented in Table 4-39.

Table 4-39

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Scheduling Subscale

Variables	Pearson r	p -value
GTL	.391	.000
Affective Commitment	.450	.000
Normative Commitment	.236	.000
Continuance Commitment	-.048	.232

Global Transformational Leadership and two of the subscales from the *Organizational Commitment* scale (*affective, and normative*) and *scheduling* were entered into a hierarchical regression model (forward) from the strongest Pearson r correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. 2007). For the two models produced, the VIF ranged from 1.000 to

2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R²* increased from Model 1 (14.9%), to Model 2 (21.4%), indicating that organizational commitment accounted for 21.4% of the variation in *satisfaction with scheduling*. Model 2 was the better explanatory model to explain *satisfaction with scheduling*. The explanatory model found was:

$$\textit{scheduling} = 12.762(\text{constant}) + .089(\textit{GTL}) + .116 (\textit{Affective Commitment}) + .000 (\textit{Normative Commitment}) + e$$

Examination of individual predictors in Model 2 indicated two significant explanatory relationships between the three predictors and *satisfaction with scheduling*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *satisfaction with scheduling*. *Affective Commitment* was the most important predictor ($t = 4.064$, $p = .000$, $\beta = .336$) in the model. There was a significant positive relationship with *scheduling* indicating that as employees are attached to the organization, that would correlate with satisfaction with their work schedules.

Global Transformational Leadership ($t = 2.564$, $p = .011$, $\beta = .188$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with scheduling* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with satisfaction with their work schedules. *Normative Commitment* was not significant in its contribution to the model.

According to the findings, Hypothesis 1_b was only partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *scheduling*. The hierarchical (forward) multiple regression results for H1_b are summarized in Table 4-40.

Table 4-40

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leader, Organizational Commitment Subscales (Affective, Normative, Continuance), and Scheduling

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	<i>Adjusted R</i> ²
Model 1	41.221	1	.000						.153	.149
(Constant)				14.442	.795		18.169	.000		
Global Transformational Leadership				.186	.029	.391	6.420	.000		
Model 2	21.862	3	.000						.224	.214
(Constant)				12.762	1.056		12.086	.000		
Total GTL				.089	.035	.188	2.564	.011		
Affective Subscale				.116	.029	.336	4.064	.000		
Normative Subscale				.000	.035	-.001	-.012	.990		

H_{1c} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *family and work balance*.

To test Hypothesis_{1c}, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership* and *Organizational Commitment (affective commitment,*

continuance commitment, and normative commitment) and the dependent variable, *family and work balance*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with Family and Work Balance* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective, and normative*) and the *satisfaction with family and work balance* subscale. The results were as follows: *GTL* ($r = .234, p = .000$), *Affective Commitment* ($r = .403, p = .000$), and *Normative Commitment* ($r = .314, p = .000$). The results of Pearson *r* correlation between *Global Transformational Leadership scale*, and the *satisfaction with scheduling* subscale along with *Affective Commitment, Continuance Commitment, and Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with family and work balance* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale* are presented in Table 4-41.

Table 4-41

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Family and Work Balance Subscale

Variables	Pearson <i>r</i>	<i>p</i> -value
GTL	.234	.000
Affective Commitment	.403	.000
Normative Commitment	.314	.000
Continuance Commitment	-.058	.188

Global Transformational Leadership and two of the subscales from the *Organizational Commitment* scale (affective, and normative) and *family and work balance* were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R*² increased from Model 1 (5.1%), to Model 2 (16.5%), indicating that organizational commitment accounted for 16.5% of the variation in *satisfaction with family and work balance*. Model 2 was the better explanatory model to explain *satisfaction with family and work balance*. The explanatory model found was:

$$\text{family and work balance} = 4.826(\text{constant}) - .003(\text{GTL}) + .077 (\text{Affective Commitment}) + .046 (\text{Normative Commitment}) + e$$

Examination of individual predictors in Model 2 indicated one significant explanatory relationship between the three predictors and *satisfaction with family and work balance*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *satisfaction with family and work balance*. *Affective Commitment* was the most important predictor ($t = 3.933, p = .000, \beta = .335$) in the model. There was a significant positive relationship with *family and work balance* indicating that as employees are attached to the organization, there would be a correlation with satisfaction with their ability to balance work and family. *Normative Commitment* and *Global Transformational Leadership* were not significant in their contribution to the model.

According to the findings, Hypothesis 1_C was only partially supported. *Affective Commitment* was a significant positive explanatory variable of satisfaction with *family and work balance*. The hierarchical (forward) multiple regression results for H1_C are summarized in Table 4-42.

Table 4-42

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leader, Organizational Commitment Subscales (Affective, and Normative), and Family and Work Balance

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Model 1	13.301	1	.000						.055	.051
(Constant)				7.042	.560		12.578	.000		
Global Transformational Leadership				.074	.020	.234	3.647	.000		
Model 2	16.171	3	.000						.176	.165
(Constant)				4.826	.726		6.650	.000		
Total GTL				-.003	.024	-.010	-.128	.898		
Affective Subscale				.077	.020	.335	3.933	.000		
Normative Subscale				.046	.024	.138	1.933	.054		

H_{1d} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *co-workers*.

To test Hypothesis 1_d, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership and Organizational Commitment (affective commitment, continuance commitment, and normative commitment)* and the dependent variable, *satisfaction with co-workers*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with co-workers* subscale of *Revised 31 item McCloskey/Mueller Satisfaction Scale*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale

(*affective, and normative*) and the *satisfaction with co-workers* subscale. The results were as follows: *GTL* ($r = .379, p = .000$), *Affective Commitment* ($r = .434, p = .000$), and *Normative Commitment* ($r = .310, p = .000$). The results of Pearson r correlation between *Global Transformational Leadership scale*, and the *satisfaction with co-workers* subscale along with *Affective Commitment*, *Continuance Commitment*, and *Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with co-workers* subscale of *Revised 31 item MMSS* are presented in Table 4-43.

Table 4-43

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Co-Workers Subscale

Variables	Pearson r	p -value
GTL	.379	.000
Affective Commitment	.434	.000
Normative Commitment	.310	.000
Continuance Commitment	-.028	.333

Global Transformational Leadership and two of the subscales from the *Organizational Commitment* scale (*affective, and normative*) and *scheduling* were entered into a hierarchical regression model (forward) from the strongest Pearson r correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the

tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R²* increased from Model 1 (14.0%), to Model 2 (20.9%), indicating that organizational commitment accounted for almost 21% of the variation in *satisfaction with co-workers*. Model 2 was the better explanatory model to explain *satisfaction with co-workers*. The explanatory model found was:

$$\text{co-workers} = 7.115(\text{constant}) + .055(\text{GTL}) + .055 (\text{Affective Commitment}) + .036(\text{Normative Commitment}) + e$$

Examination of individual predictors in Model 2 indicated two significant explanatory relationships between the three predictors and *satisfaction with co-workers*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *satisfaction with co-workers*. *Affective Commitment* was the most important predictor ($t = 3.120$, $p = .002$, $\beta = .259$) in the model. There was a significant positive relationship with *co-workers* indicating that as employees are attached to the organization, that would correlate with satisfaction with their co-workers.

Global Transformational Leadership ($t = 2.554$, $p = .011$, $\beta = .188$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with co-workers* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with satisfaction with co-workers. *Normative Commitment* was not significant in its contribution to the model.

According to the findings, Hypothesis 1_d was only partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *co-workers*. The hierarchical (forward) multiple regression results for H1_d are summarized in Table 4-44.

Table 4-44

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Co-Workers

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Model 1	38.375	1	.000						.144	.140
(Constant)				8.757	.493		17.767	.000		
Global Transformational Leadership				.111	.018	.379	6.195	.000		
Model 2	21.212	3	.000						.219	.209
(Constant)				7.115	.654		10.886	.000		
Total GTL				.055	.022	.188	2.554	.011		
Affective Subscale				.055	.018	.259	3.120	.002		
Normative Subscale				.036	.022	.115	1.651	.100		

H_{1e} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *interaction opportunities*.

To test Hypothesis 1_e, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership* and *Organizational Commitment* (affective commitment, continuance commitment, and normative commitment) and the dependent variable, *satisfaction with interaction opportunities*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with interaction* subscale of *Revised 31 item MMSS*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective, and normative*) and the *satisfaction with interaction opportunities* subscale. The results were as follows: *GTL* ($r = .460, p = .000$), *Affective Commitment* ($r = .499, p = .000$), and *Normative Commitment* ($r = .313, p = .000$). The results of Pearson *r* correlation between *Global Transformational Leadership* scale, and the *satisfaction with interaction opportunities* subscale along with *Affective Commitment, Continuance Commitment, and Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with interaction opportunities* subscale of *Revised 31 item MMSS* are presented in Table 4-45.

Table 4-45

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Interaction Opportunities Subscale

Variables	Pearson <i>r</i>	<i>p</i> -value
GTL	.460	.000
Affective Commitment	.499	.000
Normative Commitment	.313	.000
Continuance Commitment	-.045	.246

Global Transformational Leadership and two of the subscales from the *Organizational Commitment* scale (*affective, and normative*) and *interaction*

opportunities were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R*² increased from Model 1 (20.8%), to Model 2 (28.3%), indicating that organizational commitment accounted for almost 29% of the variation in *satisfaction with interaction opportunities*. Model 2 was the better explanatory model to explain *satisfaction with interaction opportunities*. The explanatory model found was:

$$\textit{interaction opportunities} = 10.195(\text{constant}) + .119(\textit{GTL}) + .106 (\textit{Affective Commitment}) + .036(\textit{Normative Commitment}) + e$$

Examination of individual predictors in Model 2 indicated two significant explanatory relationships between the three predictors and *satisfaction with interaction opportunities*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *satisfaction with interaction opportunities*. *Affective Commitment* was the most important predictor ($t = 3.897$, $p = .000$, $\beta = .308$) in the model. There was a significant positive relationship with *interaction opportunities* indicating that as employees are attached to the organization, that would correlate with

satisfaction with the nurses' ability to interact socially and professionally with members of the nursing discipline, co-workers, and also other disciplines.

Global Transformational Leadership ($t = 3.607, p = .000, \beta = .253$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with interaction opportunities* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher levels of opportunities to interact and even a desire by the nurses to interact. *Normative Commitment* was not significant in its contribution to the model.

According to the findings, Hypothesis 1_e was only partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *interaction opportunities*. The hierarchical (forward) multiple regression results for H1_e are summarized in Table 4-46.

Table 4-46

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leader, Organizational Commitment Subscales (Affective, Normative), and Interaction Opportunities

Variable	F	df	p	B	SE	β	t	p	R ²	Adjusted R ²
Model 1	61.529	1	.000						.212	.208
(Constant)				12.586	.763		16.505	.000		
Global Transformational Leadership				.218	.028	.460	7.844	.000		
Model 2	31.261	3	.000						.292	.283
(Constant)				10.195	1.003		10.162	.000		
Total GTL				.119	.033	.253	3.607	.000		
Affective Subscale				.106	.027	.308	3.897	.000		
Normative Subscale				.036	.033	.072	1.091	.276		

H_{1f} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *praise and recognition*.

To test Hypothesis 1_f, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership and Organizational Commitment* (affective commitment, continuance commitment, and normative commitment) and the dependent variable, *satisfaction with praise and recognition*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and the *satisfaction with praise and recognition* subscale of *Revised 31 item MMSS*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective, and normative*) and the *satisfaction with praise and recognition* subscale. The results were as follows: *GTL* ($r = .678, p = .000$), *Affective Commitment* ($r = .671, p = .000$), and *Normative Commitment* ($r = .449, p = .000$). The results of Pearson *r* correlation between *Global Transformational Leadership scale*, and the *satisfaction with praise and recognition* subscale along with *Affective Commitment, Continuance Commitment, and Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with praise and recognition* subscale of *Revised 31 item MMSS* are presented in Table 4-47.

Table 4-47

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Praise and Recognition Subscale

Variables	Pearson <i>r</i>	<i>p</i> -value
GTL	.678	.000
Affective Commitment	.671	.000
Normative Commitment	.449	.000
Continuance Commitment	-.096	.072

Global Transformational Leadership and two of the subscales from the *Organizational Commitment* scale (*affective*, and *normative*) and *praise and recognition* were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R*² increased from Model 1 (45.8%), to Model 2 (57.6%), indicating that organizational commitment accounted for almost 58% of the variation in *satisfaction with praise and recognition*. Model 2 was the better explanatory model to explain *satisfaction with praise and recognition*. The explanatory model found was:

$$\text{praise and recognition} = .974(\text{constant}) + .456(\text{GTL}) + .255 (\text{Affective Commitment}) + .155(\text{Normative Commitment}) + e$$

Examination of individual predictors in Model 2 indicated three significant explanatory relationships among the predictors and *satisfaction with praise and recognition*. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining *satisfaction with praise and recognition*. *Global Transformational Leadership* was the most important predictor ($t = 8.061, p = .000, \beta = .434$) in the model. There was a significant positive relationship with *praise and recognition* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher levels of praise and recognition.

Affective Commitment ($t = 5.512, p = .000, \beta = .335$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with praise and recognition* indicating that as employees are attached to the organization, that would correlate with the nurses' satisfaction with praise and recognition that is received.

Normative Commitment ($t = 2.737, p = .007, \beta = .139$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with praise and recognition* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with the praise and recognition that is received.

According to the findings, Hypothesis 1_f was partially supported. *Affective Commitment, Normative Commitment, and Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *praise and recognition*.

The hierarchical (forward) multiple regression results for H1_e are summarized in Table 4-48.

Table 4-48

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative), and Praise and Recognition

Variable	F	df	p	B	SE	β	t	p	R²	Adjusted R²
Model 1	195.096	1	.000						.460	.458
(Constant)				8.344	1.402		5.950	.000		
Global Transformational Leadership				.713	.051	.678	13.968	.000		
Model 2	105.185	3	.000						.582	.576
(Constant)				.974	1.714		.568	.000		
Total GTL				.456	.057	.434	8.061	.000		
Affective Subscale				.255	.046	.335	5.512	.000		
Normative Subscale				.155	.057	.139	2.737	.007		

H_{1g} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with *control and responsibility*.

To test Hypothesis 1_g, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership* and *Organizational Commitment* (affective commitment, continuance commitment, and normative commitment) and the dependent variable, *satisfaction with control and responsibility*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a

significant positive correlation between the GTL and the *satisfaction with control and responsibility* subscale of *Revised 31 item MMSS*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment* scale (*affective*, and *normative*) and the *satisfaction with control and responsibility* subscale. There was a significant inverse relationship between *satisfaction with control and responsibility* and the *Continuance Commitment* subscale. The results were as follows: *GTL* ($r = .425, p = .000$), *Affective Commitment* ($r = .437, p = .000$), *Normative Commitment* ($r = .327, p = .000$), and *Continuance Commitment* ($r = -.120, p = .034$). The results of Pearson r correlation between *Global Transformational Leadership* scale, and the *satisfaction with control and responsibility* subscale along with *Affective Commitment*, *Continuance Commitment*, and *Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, and the *satisfaction with control and responsibility* subscale of *Revised 31 item MMSS* are presented in Table 4-49.

Table 4-49

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Control and Responsibility Subscale

Variables	Pearson r	p -value
GTL	.425	.000
Affective Commitment	.437	.000
Normative Commitment	.327	.000
Continuance Commitment	-.120	.034

Global Transformational Leadership and the three subscales from the *Organizational Commitment* scale (*affective*, *normative*, and *continuance*) and *control*

and responsibility were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000. These results were well within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R*² increased from Model 1 (17.7%), to Model 2 (25.1%), indicating that organizational commitment accounted for 25% of the variation in *satisfaction with control and responsibility*. Model 2 was the better explanatory model to explain *satisfaction with control and responsibility*.

The explanatory model found was:

$$\begin{aligned} \text{control and responsibility} = & 4.857(\text{constant}) + .081(\text{GTL}) + .051 (\text{Affective} \\ & \text{Commitment}) + .061(\text{Normative Commitment}) - .047 (\text{Continuance Commitment}) \\ & + e \end{aligned}$$

Examination of individual predictors in Model 2 indicated four significant explanatory relationships among the predictors and *satisfaction with control and responsibility*. The standardized beta coefficient (β) for each of the four predictors indicated its relative importance in explaining *satisfaction with control and responsibility*. *Global Transformational Leadership* was the most important predictor ($t = 3.316$, $p = .001$, $\beta = .239$) in the model. There was a significant positive relationship with *control and responsibility* indicating that as nurses perceive *transformational*

leadership traits in their leader that would correlate with higher levels of satisfaction with control and responsibility, meaning that nurses reported higher satisfaction with autonomy in their professional practice.

Affective Commitment ($t = 2.553, p = .011, \beta = .206$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with control and responsibility* indicating that as employees are attached to the organization, that would correlate with the nurses' *satisfaction with control and responsibility* as they define and participate in professional practice activities.

Normative Commitment ($t = 2.479, p = .014, \beta = .171$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with control and responsibility* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with *control and responsibility* as they define and participate in professional practice activities.

Continuance Commitment ($t = -2.408, p = .017, \beta = -.141$) was next in importance as a predictor of the model. *Continuance commitment* describes having knowledge of the costs that are associated with the employee leaving the organization. Employees with continuance commitment remain with an organization because they need to do so. The inverse β value of *Continuance Commitment* had a significant negative relationship with *satisfaction with control and responsibility*. This indicates that as nurses remain in the organization because they have to do so, they would report lower *satisfaction with control and responsibility*, they would be less likely to participate in professional practice activities.

According to the findings, Hypothesis 1_g was supported. *Affective Commitment*, *Normative Commitment*, and *Global Transformational Leadership* were significant positive explanatory variables of *satisfaction with control and responsibility*. *Continuance Commitment* was a significant negative explanatory variable of *satisfaction with control and responsibility*. The hierarchical (forward) multiple regression results for H1_g are summarized in Table 4-50.

Table 4-50

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, Normative, and Continuance), and Control and Responsibility

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Model 1	50.347	1	.000						.180	.177
(Constant)				5.821	.558		10.427	.000		
Global Transformational Leadership				.144	.020	.425	7.096	.000		
Model 2	20.281	4	.000						.264	.251
(Constant)				4.857	.836		5.808	.000		
Total GTL				.081	.024	.239	3.316	.001		
Affective Subscale				.051	.020	.206	2.553	.011		
Normative Subscale				.061	.025	.171	2.479	.014		
Continuance Subscale				-.047	.019	-.141	-2.408	.017		

H_{1h} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' *job satisfaction* (Total Score).

To test Hypothesis 1_h, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of*

Transformational Leadership and Organizational Commitment (affective commitment, continuance commitment, and normative commitment) and the dependent variable, *total job satisfaction*.

Pearson *r* correlation analyses were conducted to determine the order of entry of the independent variables into the regression model. Pearson *r* correlations showed a significant positive correlation between the GTL and Total *Job Satisfaction* as measured by the *Revised 31 item MMSS*, and between two of the three subscales of the *21-Item Three Component Organizational Commitment scale* (*affective, and normative*) and *Job Satisfaction*. The results were as follows: *GTL* ($r = .598, p = .000$), *Affective Commitment* ($r = .664, p = .000$), *Continuance Commitment* ($r = -.069, p = .148$), and *Normative Commitment* ($r = .437, p = .000$). The results of Pearson *r* correlation between *Global Transformational Leadership scale*, and the *Job Satisfaction* along with *Affective Commitment, Continuance Commitment, and Normative Commitment* subscales of the *Revised 21-Item Three Component Organizational Commitment scale*, and *Job Satisfaction (Revised 31 item MMSS)* are presented in Table 4-51.

Table 4-51

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, and Job Satisfaction

Variables	Pearson <i>r</i>	<i>p</i>-value
GTL	.598	.000
Affective Commitment	.664	.000
Normative Commitment	.437	.000
Continuance Commitment	-.069	.148

Global Transformational Leadership and two of the three subscales from the *Organizational Commitment* scale (affective, and normative) and *Job Satisfaction* (Total Score) were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the two models produced, the VIF ranged from 1.000 to 2.001, and the tolerance ranged from .500 to 1.000, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R*² increased from Model 1 (35.5%), to Model 2 (50.7%), indicating that organizational commitment accounted for more than 50% of the variation in *job satisfaction*. Model 2 was therefore the better explanatory model to explain *job satisfaction*. The explanatory model found was:

$$\begin{aligned} \text{Job satisfaction} = & 47.618 \text{ (constant)} + .835(\text{GTL}) + .791 \text{ (Affective Commitment)} \\ & + .346(\text{Normative Commitment}) + e \end{aligned}$$

Examination of individual predictors in Model 2 indicated three significant explanatory relationships among the predictors and *job satisfaction*. The standardized beta coefficient (β) for each of the four predictors indicated its relative importance in explaining *satisfaction with control and responsibility*. *Affective Commitment* ($t = 6.255$, $p = .000$, $\beta = .410$) was the most important predictor in the model. It had a significant positive relationship with total *job satisfaction* indicating that as employees

are attached to the organization, that would correlate with the nurses' total satisfaction with their job.

Global Transformational Leadership ($t = 5.396, p = .000, \beta = .313$) was next in importance as a predictor of the model. There was a significant positive relationship with total *job satisfaction* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher reported levels of total job satisfaction.

Normative Commitment ($t = 2.241, p = .026, \beta = .123$) was next in importance as a predictor of the model. It too had a significant positive relationship with total *job satisfaction* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with their job and the factors that create satisfaction with the job.

According to the findings, Hypothesis 1_h was partially supported. *Affective Commitment, Normative Commitment, and Global Transformational Leadership* were significant positive explanatory variables of total *job satisfaction*. The hierarchical (forward) multiple regression results for H1_h are summarized in Table 4-52.

Table 4-52

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, and Normative), and Job Satisfaction (Total Score)

Variable	F	df	p	B	SE	β	t	p	R²	Adjusted R²
Model 1	127.377	1	.000						.357	.355
(Constant)				67.326	3.877		17.365	.000		
Global Transformational Leadership				1.592	.141	.598	11.286	.000		
Model 2	79.795	3	.000						.513	.507
(Constant)				47.618	4.685		10.163	.000		
Total GTL				.835	.155	.313	5.396	.000		
Affective Subscale				.791	.126	.410	6.255	.000		
Normative Subscale				.346	.154	.123	2.241	.026		

Research Hypothesis 2

H2: Perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.

To test Hypothesis 2, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between *transformational leadership*, *organizational commitment (affective, normative, and continuance)*, *job satisfaction* and the dependent variable, *Intention to Leave*. The GTL, the three subscales of the *Revised 21-Item Three Component Organizational Commitment* scale, the *Revised 31-item MMSS* and the *3-Item Intention to Leave* scale resulting from EFA were utilized.

First, Pearson *r* correlation analyses were conducted to determine the order in which to enter the independent variables into the regression model. Pearson *r* correlations showed a negative significant correlation between the *GTL*, *Organizational*

Commitment (affective, and normative), Job Satisfaction and Intention to Leave. The results were as follows: *GTL* ($r = -.533, p = .000$), *Affective Commitment* ($r = -.654, p = .000$), *Normative Commitment* ($r = -.418, p = .000$), *Continuance Commitment* ($r = -.057, p = .198$), and *Job Satisfaction* ($r = -.624, p = .000$). The results of Pearson r correlation between *Global Transformational Leadership scale, Organizational Commitment (affective, normative, and continuance), Job Satisfaction and Intention to Leave* are presented in Table 4-53.

Table 4-53

Pearson r Correlation for the GTL, Organizational Commitment Subscales, Affective Commitment, Continuance Commitment, Normative Commitment, Job Satisfaction, and Intention to Leave

Variables	Pearson r	p-value
GTL	-.533	.000
Affective Commitment	-.654	.000
Normative Commitment	-.418	.000
Continuance Commitment	-.057	.198
Job Satisfaction	-.624	.000

Global Transformational Leadership, two of the three subscales from the *Organizational Commitment* scale (affective, and normative), *Job Satisfaction*, and *Intention to Leave* were entered into a hierarchical regression model (forward) from the strongest Pearson r correlation to the weakest (for the two organizational commitment subscales). Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. 2007). For the two models produced, the VIF ranged from 1.000 to 2.184, and the tolerance ranged from .458 to 1.000, which are within the recommended guidelines, indicating no issues with multicollinearity.

Two models emerged from the hierarchical regression. Each model had significant F values (Model 1, $p = .000$; Model 2, $p = .000$). The *Adjusted R²* increased from Model 1 (28.1%), to Model 2 (50.7%), indicating that *organizational commitment*, and *job satisfaction* accounted for more than 50% of the variation in *intention to leave*. Model 2 was therefore the better explanatory model to explain *intention to leave*. The explanatory model found was:

$$\begin{aligned} \textit{intention to leave} = & 29.476 \text{ (constant)} - .117 \text{ (GTL)} - .184 \text{ (Affective Commitment)} \\ & - .068 \text{ (Normative Commitment)} - .076 \text{ (Job Satisfaction)} + e \end{aligned}$$

Examination of individual predictors in Model 2 indicated three significant explanatory relationships among the predictors and intention to leave. The standardized beta coefficient (β) for each of the three predictors indicated its relative importance in explaining intention to leave. *Affective Commitment* ($t = -4.935$, $p = .000$, $\beta = -.342$) was the most important predictor in the model. It had a significant inverse relationship with total *intention to leave* indicating that as employees are attached to the organization, that would correlate with the lower nurses' *Intention to Leave* the organization.

Job Satisfaction ($t = -4.198$, $p = .000$, $\beta = -.277$) was next in importance as a predictor of the model. There was a significant inverse relationship with *intention to leave*. Higher perceptions of Job Satisfaction resulted in lower nurses' *Intention to Leave* the organization.

Global Transformational Leadership ($t = -2.527$, $p = .012$, $\beta = -.154$) was next in importance as a predictor of the model. There was significant inverse relationship with

intention to leave indicating that as nurses perceive *transformational leadership* traits in their leader, that would correlate with lower *intention to leave* the organization.

Normative Commitment was not a significant predictor in the model.

According to the findings, Hypothesis 2 was partially supported. *Affective Commitment, Job Satisfaction, and Global Transformational Leadership* were significant negative explanatory variables of *intention to leave*. The hierarchical (forward) multiple regression results for H2 are summarized in Table 4-54.

Table 4-54

Hierarchical (Forward) Multiple Regression Analysis of Global Transformational Leadership, Organizational Commitment Subscales (Affective, and Normative), Job Satisfaction, and Intention to Leave

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	<i>Adjusted R</i> ²
Model 1	88.616	1	.000						.284	.281
(Constant)				20.021	1.205		16.614	.000		
Global Transformational Leadership				-.407	.043	-.533	-9.414	.000		
Model 2	58.507	4	.000						.515	.507
(Constant)				-29.476	1.595		18.481	.000		
Total GTL				-.117	.046	-.154	-2.527	.012		
Affective Subscale				-.184	.037	-.342	-4.935	.000		
Normative Subscale				-.068	.043	-.087	-1.588	.114		
Job Satisfaction				-.076	.018	-.277	-4.198	.000		

Research Hypothesis 3

H3: Organizational commitment mediates the relationship between transformational leadership and nurses' intention to leave.

To test Hypothesis 3, multiple mediated regression analysis was used to examine

whether organizational commitment mediates the relationship between transformational leadership and nurses' intentions to leave. A mediator exists when the effect of the independent variable on the dependent variable is influenced by a mediator (Fields, 2006). For Hypothesis 3, there are two variables, transformational leadership and nurses' intention to leave. The mediating variable for Hypothesis 3 is *organizational commitment*. The Sobel test was used to test whether *Organizational Commitment (affective, normative, and continuance)* mediates the effect of *transformational leadership* on nurses' *intention to leave*. To test for mediation was a four step process using multiple regression analyses and then performing the Sobel Test. However, Preacher and Hayes (2004) created macros for SPSS that provide a test of the indirect effect using the Sobel Test. The macros provide the output needed to assess mediation using the Sobel Test. Each subscale of *organizational commitment (affective, normative, and continuance)* was tested as a separate mediator of the relationship between *transformational leadership* and nurses' *intention to leave*.

Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.638, p = .000, \beta = -.414$). Step two was to test the effect of *transformational leadership* on the mediator (*affective commitment*). The result indicated a significant positive relationship ($t = 10.622, p = .000, \beta = -.824$). Step three tested the effect of *affective commitment* on nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -8.783, p = .000, \beta = -.281$). Finally, the Sobel test suggests

mediation ($z = -6.75, p = .000$) indicating that *affective commitment* mediates the relationship between *transformational leadership* and nurses' *intention to leave*.

The results of the multiple mediated regression analyses with Sobel test of *affective commitment, transformational leadership, and nurses' intention to leave* in SPSS are shown in Table 4-55.

Table 4-55

Multiple Mediated Regression with Sobel Test of Affective Commitment, Transformational Leadership and Nurses' Intention to Leave

Variables	β	SE	<i>t</i>	<i>p</i>
Transformational Leadership and Intention to Leave	-.414	.043	-9.638	.000
Transformational Leadership and Affective Commitment	.824	.078	10.622	.000
Affective Commitment and Intention to Leave	-.281	.032	-8.783	.000
Sobel Test				
Affective Commitment, Transformational Leadership and Intention to Leave	-.231	.034	-6.751 (z test)	.000

Normative Commitment was tested as a mediator of the relationship between *transformational leadership* and nurses' *intention to leave*. Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.414, p = .000, \beta = -.407$). Step two was to test the effect of *transformational leadership* on the mediator (*normative commitment*). The result indicated a significant positive relationship ($t = 4.260, p = .000, \beta = .268$). Step three tested the effect of *normative commitment* on

nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -5.284, p = .000, \beta = -.230$). Finally, the Sobel test suggests mediation ($z = -3.281, p = .001$) indicating that *normative commitment* mediates the relationship between *transformational leadership* and nurses' *intention to leave*. The results of the multiple mediated regression analyses with Sobel test of *normative commitment, transformational leadership*, and nurses' *intention to leave* in SPSS are shown in Table 4-56.

Table 4-56

Multiple Mediated Regression with Sobel Test of Normative Commitment, Transformational Leadership and Nurses Intention to Leave

Variables	β	SE	t	p
Transformational Leadership and Intention to Leave	-.407	.043	-9.414	.000
Transformational Leadership and Normative Commitment	.268	.063	4.260	.000
Normative Commitment and Intention to Leave	-.230	.044	-5.284	.000
Sobel Test				
Normative Commitment, Transformational Leadership and Intention to Leave	-.062	.019	-3.281 (z test)	.001

Continuance Commitment was tested as a mediator of the relationship between *transformational leadership* and nurses' *intention to leave*. Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.638, p = .000, \beta = -.414$). Step two was to test the effect of *transformational leadership* on the mediator (*continuance commitment*). There was no significant or trend relationship noted ($t = -$

.075, $p = .940$, $\beta = .005$). Step three tested the effect of *continuance commitment* on nurses' *intention to leave*. There was no significant or trend relationship noted ($t = -1.368$, $p = .173$, $\beta = -.056$). With the results of steps one and two, the conditions were not met to perform the Sobel test.

According to the findings, Hypothesis 3 was partially supported. *Organizational Commitment (Affective and Normative Commitment)* mediates the relationship between *Transformational Leadership* and nurses' *intention to leave*.

Research Hypothesis 4

H4: Job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave.

To test Hypothesis 4, multiple mediated regression analysis was used to examine whether *job satisfaction* mediates the relationship between *transformational leadership* and nurses' *intention to leave*. For Hypothesis 4, there are two variables, *transformational leadership* and nurses' *intention to leave*. The mediating variable for Hypothesis 4 is *job satisfaction* (total). The Sobel test was used to test whether *job satisfaction* mediates the effect of *transformational leadership* on nurses' *intention to leave*. To test for mediation was a four step process using multiple regression analyses and then performing the Sobel Test. However, Preacher and Hayes (2004) created macros for SPSS that provide a test of the indirect effect using the Sobel Test. The macros provide the output needed to assess mediation using the Sobel Test.

Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* (t

= -9.638, $p = .000$, $\beta = -.414$). Step two was to test the effect of *transformational leadership* on the mediator (*job satisfaction*). The result indicated a significant positive relationship ($t = 10.751$, $p = .000$, $\beta = 1.619$). Step three tested the effect of *job satisfaction* on nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -7.727$, $p = .000$, $\beta = -.131$). Finally, the Sobel test suggests mediation ($z = -6.257$, $p = .000$) indicating that *job satisfaction* mediates the relationship between *transformational leadership* and nurses' *intention to leave*. According to the findings, Hypothesis 4 was supported. *Job Satisfaction* mediates the relationship between *transformational leadership* and nurses' *intention to leave*. The results of the multiple mediated regression analyses with Sobel test of *job satisfaction*, *transformational leadership*, and nurses' *intention to leave* in SPSS are shown in Table 4-57

Table 4-57

Multiple Mediated Regression with Sobel Test of Job Satisfaction, Transformational Leadership and Nurses Intention to Leave

Variables	β	SE	t	p
Transformational Leadership and Intention to Leave	-.414	.043	-9.638	.000
Transformational Leadership and Job Satisfaction	1.619	.151	10.751	.000
Job Satisfaction and Intention to Leave	-.131	.017	-7.727	.000
Sobel Test				
Job Satisfaction, Transformational Leadership and Intention to Leave	-.212	.034	-6.257 (z-test)	.000

Research Hypothesis 5

H5: Demographic and work profile characteristics, perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction.

To test Hypothesis 5, *eta (h)* correlation, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between nurses' demographic characteristics, work profile characteristics, Perceptions of Transformational Leadership and Organizational Commitment (affective commitment, continuance commitment, and normative commitment) and the dependent variable, nurses' *Job Satisfaction*.

Eta correlation analyses were used to determine the correlation between categorical variables of employee demographics, work profiles, with the continuous or dependent variable, *Job Satisfaction*. Categorical demographic variables of *gender*, *marital status*, *race*, *language* showed no significant *eta* correlation with *Job Satisfaction* and were therefore, not included in the Pearson *r* or the regression analyses. *Age*, *highest nursing education level*, and *highest degree level*, showed no significant correlation (Pearson *r*) with *Job Satisfaction* and were not included in the regression analyses. *Hourly wage* ($r = .197, p = .004$) showed significant Pearson *r* and were included in the regression analyses. Non-categorical work profiles variables of *length of employment in current job*, and *length of time as a registered nurse*, showed no significant correlation (Pearson *r*) with *Job Satisfaction* and were not included in the regression analyses. *Length of employment with Tenet* ($r = .194, p = .003$) showed significant Pearson *r* and were included in the regression analyses. Work profile categorical variables of *nursing unit*, and *shift worked* showed no significant *eta* correlation with total *Job Satisfaction* and were not included in the Pearson *r* or the

regression analyses. *Hospital* showed a significant *eta* correlation. The results of *eta* correlations using the means procedure in SPSS are shown in Table 4-58.

Table 4-58

Eta Correlations of Demographic Characteristics, Work Profiles, and Job Satisfaction

Categorical Variables	Eta (<i>h</i>)	Eta Squared (<i>h</i> ²)	<i>F</i>	<i>p</i>
Demographic Characteristics				
Gender	.520	.270	.765	.903
Marital Status	.616	.379	1.271	.107
Race	.530	.281	.815	.840
Language	.531	.282	.818	.835
Work Profile				
Nursing Unit	.543	.295	.868	.751
Shift Worked	.543	.294	.868	.752
Hospital	.638	.408	1.431	.032

The results of Pearson *r* correlations among Non-categorical *Employee Demographic Characteristics*, Non-categorical *Work Profiles Characteristics*, and total *Job Satisfaction* are presented in Table 4-59.

Table 4-59

Pearson r Correlation of Non-Categorical Demographic Characteristics, Non-Categorical Work Profile Characteristics, and Job Satisfaction

Variables	Pearson <i>r</i>	<i>p</i> -value
3-Item Turnover Intention Scale		
Demographic Characteristics		
Age	.115	.084
Highest Nursing Education Level	-.029	.664
Highest Degree Level	-.113	.086
Hourly Wage	.197	.004
Work Profile Characteristics		
Length of employment in current job	.127	.057
Length of time as a registered nurse	.059	.377
Length of employment with Tenet	.194	.003

Following the results from *eta* and Person *r* correlations, ten dummy variables were created for *Hospital: Coral Gables, DMC, FMC, Good Sam, Hialeah, NSMC, PBGMC, Palmetto, SMMC, and WBMC*. Six dummy variables were created for *Hourly wage: hrlywage1, hrlywage2, hrlywage3, hrlywage4, hrlywage5, and hrlywage6*. Five dummy variables were created for *Length of Employment with Tenet: employtenet1, employtenet2, employtenet3, employtenet4, employtenet5*. The dummy variables were included in the Pearson *r* correlation analyses. Pearson *r* correlations resulted in a significant positive correlation with the GTL and between two of the *Organizational Commitment* scale (*affective*, and *normative*) and *Job Satisfaction*. There was a significant positive correlation between the dummy variable *Coral Gables* and *Job Satisfaction*. The results are as follows: *GTL* ($r = .598, p = .000$), *Affective Commitment* ($r = .664, p = .000$), *Normative Commitment* ($r = .437, p = .000$), *Coral Gables* ($r = .443, p = .000$). There was a positive trend relationship with West Boca Medical Center ($r = .091, p = .084$). There was a significant inverse correlation with the dummy variables, *St. Mary's Medical Center* ($r = -.119, p = .036$), and *Palm Beach Gardens Medical Center* ($r = -.245, p = .000$), and *Job Satisfaction*. There was a significant inverse correlation with the dummy variables, *Hourly wage 2* (\$20.01-\$27) and *Job Satisfaction* ($r = -.163, p = .009$). There was a significant positive relationship with the dummy variable, *Hourly wage 4* (\$37- \$43) and *Job Satisfaction* ($r = .171, p = .006$). There was a significant inverse correlation with the dummy variables, *Employtenet1* (≤ 2 years) and *Job Satisfaction* ($r = -.111, p = .048$). There was a significant positive

correlation with the dummy variables, *Employtenet5* (> 14.1 years) and *Job Satisfaction* ($r = .148, p = .013$).

The results of the Pearson r correlation among *Demographic Profiles*, *Work Profiles*, the *Global Transformational Leadership* scale, *Organizational Commitment* (*affective*, and *normative*), and *Job Satisfaction* are presented in Table 4-60.

Table 4-60

Pearson r Correlation among Demographic Profiles, Work Profiles, Global Transformational Leadership, Organizational Commitment scale (Affective, and Normative), and Job Satisfaction

Variables	Pearson r	p -value
Job Satisfaction		
Global Transformational Leadership	.598	.000
Affective Commitment	.664	.000
Normative Commitment	.437	.000
Coral Gables	.443	.000
DMC	-.049	.227
FMC	-.078	.118
Good Sam	-.007	.460
Hialeah	.025	.351
NSMC	-.076	.125
PBGMC	-.245	.000
Palmetto	-.069	.149
SMMC	-.119	.036
WBMC	.091	.084
Job Satisfaction		
Hourly Wage 2 (\$20.01- \$27)	-.163	.009
Hourly Wage 3 (\$28- \$36)	-.015	.412
Hourly Wage 4 (\$37-\$43)	.171	.006
Hourly Wage 5 (\$44-\$51)	.003	.484
Hourly Wage 6 (> = \$52)	.039	.287
Employment with Tenet 1 (< 2 years)	-.111	.048
Employment with Tenet 2 (2- 6 years)	-.089	.092
Employment with Tenet 3 (6.1-10 years)	-.027	.344
Employment with Tenet 4 (10.1-14 years)	.085	.101
Employment with Tenet 5 (> 14.1 years)	.148	.013

Global Transformational Leadership, two of the three subscales from the *Organizational Commitment* scale (affective, and normative), *Coral Gables*, *PBGMC*, *SMMC*, *WBMC* (trend relationship), *hourly wage2*, *hourly wage4*, *employment with Tenet1*, *employment with Tenet5* and *Job Satisfaction* were entered into a hierarchical regression model (forward) from the strongest Pearson *r* correlation to the weakest. Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the nine models produced, the VIF ranged from 1.000 to 2.299, and the tolerance ranged from .435 to 1.000, which are within the recommended guidelines, indicating no issues with multicollinearity.

Nine different models were produced from the hierarchical regression. Each of the nine models had a significant F value ($p = .000$). The *Adjusted R²* increased from Model 1 (43.9%), to Model 2 (49.8%), to Model 3 (52.5%), to Model 4 (53.5%), to Model 5 (54.2%) to Model 6 (56.2%). The *Adjusted R²* for Model 7 was 56.0%, Model 8 was 55.8, and Model 9 was 56.7%. Model 6 ($R^2 = 57.6$) had seven explanatory variables: *Affective Commitment*, *Global Transformational Leadership*, *Coral Gables*, *Normative Commitment*, *Palm Beach Gardens*, *Hourly Wage4* (\$37-\$43), and *Hourly Wage2* (\$20.01-\$27). Model 6 was the best explanatory model to explain *Job Satisfaction*. The best explanatory model found was:

$$\begin{aligned} \text{Job Satisfaction} = & 51.024 \text{ (constant)} + .627 \text{ (Affective Commitment)} + .798 \text{ (GTL)} \\ & + 9.886 \text{ (Coral Gables)} + .360 \text{ (Normative Commitment)} - 4.485 \text{ (PBGMC)} + \\ & 7.263 \text{ (Hourly Wage4)} - .334 \text{ (Hourly Wage2)} + e \end{aligned}$$

Examination of individual predictors in Model 6 indicated five significant explanatory relationships among the predictors and job satisfaction. The standardized beta coefficient (β) for each of the five predictors indicated its relative importance in explaining job satisfaction. *Affective Commitment* ($t = 4.840, p = .000, \beta = .627$) was the most important predictor in the model. It had a significant positive relationship with total *job satisfaction* indicating that as employees are attached to the organization, that would correlate with the higher reported nurses' job satisfaction.

Global Transformational Leadership ($t = 4.927, p = .000, \beta = .798$) was next in importance as a predictor of the model. There was significant positive relationship with *job satisfaction* indicating that as nurses perceive *transformational leadership* traits in their leader, it would correlate with higher levels of satisfaction with the job.

Coral Gables ($t = 3.628, p = .000, \beta = 9.886$) was next in importance as a predictor of the model. There was a significant positive relationship with *Job Satisfaction*. The positive β value of *Coral Gables* indicates that nurses working at Coral Gables Hospital were positively related to higher *Job Satisfaction* than the other hospitals.

Normative Commitment ($t = 2.362, p = .019, \beta = .360$) was next in importance as a predictor of the model. There was a significant positive relationship with total *job satisfaction* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with their job and the factors that create satisfaction with the job.

Lastly, *Hourly Wage*4 ($t = 3.088, p = .002, \beta = 7.263$) was the next in importance as a predictor of the model. It had a significant positive relationship with total *Job Satisfaction*, indicating that nurses who earned an hourly wage that was between \$37 and \$43 reported higher total *Job Satisfaction* scores. According to the findings, Hypothesis 5 was partially supported. *Demographic Work Profile Characteristics (Hourly Wage)*, *Work Profile Characteristics (Hospital)*, *Transformational Leadership*, and *Organizational Commitment (affective, and normative)* were significant explanatory variables of nurses' *Job Satisfaction*. The hierarchical (forward) multiple regression results for H5 are summarized in Table 4-61.

Table 4-61

Hierarchical (Forward) Multiple Regression Analysis of Demographic Characteristics, Work Profiles, Transformational Leadership, Organizational Commitment (Affective, and Normative), and Job Satisfaction

Variable	F	df	p	B	SE	β	t	p	R ²	Adjusted R ²
Model 1	166.034	1	.000						.442	.439
(Constant)				62.437	3.790		16.473	.000		
Affective Commitment				1.283	.100	.664	12.885	.000		
Model 2	105.552	2	.000						.503	.498
(Constant)				53.875	3.965		13.588	.000		
Affective Commitment				.922	.118	.478	7.807	.000		
Global Transformational Leadership				.825	.163	.310	5.061	.000		
Model 3	78.665	3	.000						.532	.525
(Constant)				58.007	4.025		14.412	.000		
Affective Commitment				.827	.118	.428	7.014	.000		
Global Transformational Leadership				.732	.161	.275	4.557	.000		
Coral Gables				10.124	2.820	.186	3.590	.000		

Table 4-61 Continued

Variable	F	df	p	B	SE	β	t	p	R²	Adjusted R²
Model 4	61.751	4	.000						.544	.535
(Constant)				51.380	4.854		10.584	.000		
Affective Commitment				.683	.131	.354	5.194	.000		
Global Transformational Leadership				.740	.159	.278	4.658	.000		
Coral Gables				10.438	2.792	.192	3.738	.000		
Normative Commitment				.374	.157	.133	2.385	.018		
Model 5	50.945	5	.000						.553	.542
(Constant)				53.554	4.938		10.845	.000		
Affective Commitment				.696	.131	.361	5.329	.000		
Global Transformational Leadership				.675	.161	.253	4.192	.000		
Coral Gables				9.890	2.785	.182	3.551	.000		
Normative Commitment				.370	.156	.131	2.375	.018		
Model 6	39.609	6	.000						.576	.562
(Constant)				51.024	4.971		10.265	.000		
Affective Commitment				.627	.130	.325	4.840	.000		
Global Transformational Leadership				.798	.162	.300	4.927	.000		
Coral Gables				9.886	2.725	.182	3.628	.000		
Normative Commitment				.360	.153	.128	2.362	.019		
PBGMC				-4.485	3.228	-.069	-1.389	.166		
Hourly Wage4				7.263	2.352	.156	3.088	.002		
Hourly Wage2				-.334	2.394	-.007	-.140	.889		
Model 7	34.553	8	.000						.577	.560
(Constant)				51.217	4.997		10.249	.000		
Affective Commitment				.620	.131	.321	4.735	.000		
Global Transformational Leadership				.805	.163	.302	4.940	.000		
Coral Gables				10.064	2.756	.185	3.651	.000		
Normative Commitment				.349	.155	.124	2.251	.025		
PBGMC				-4.490	3.234	-.069	-1.388	.167		

Table 4-61 Continued

Variable	<i>F</i>	<i>df</i>	<i>P</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Hourly Wage4				7.017	2.414	.151	2.907	.004		
Hourly Wage2				-.102	2.449	-.002	-.042	.967		
Employment with Tenet5				1.278	2.722	.024	.470	.639		
Model 8	30.638	9	.000						.577	.558
(Constant)				51.716	5.092		10.156	.000		
Affective Commitment Global				.615	.131	.319	4.683	.000		
Transformational Leadership Coral Gables				.806	.163	.303	4.938	.000		
Normative Commitment PBGMC				9.761	2.819	.180	3.463	.001		
Hourly Wage4				.346	.155	.123	2.230	.027		
Hourly Wage2				-4.815	3.296	-.074	-1.461	.146		
Employment with Tenet5				7.262	2.461	.156	2.950	.004		
SMMC				-.081	2.453	-.002	-.033	.974		
				1.130	2.740	.021	.412	.680		
				-1.462	2.735	-.026	-.535	.594		
Model 9	26.168	11	.000						.590	.567
(Constant)				49.836	5.101		9.769	.000		
Affective Commitment Global				.617	.133	.320	4.657	.000		
Transformational Leadership Coral Gables				.822	.162	.309	5.076	.000		
Normative Commitment PBGMC				10.021	2.840	.184	3.528	.001		
Hourly Wage4				.351	.154	.125	2.287	.023		
Hourly Wage2				-6.125	3.327	-.094	-1.841	.067		
Employment with Tenet5				7.970	2.454	.171	3.249	.001		
SMMC				-1.761	2.568	-.038	-.686	.494		
Employment with Tenet1				1.896	2.731	.036	.694	.488		
WBMC				-2.043	2.739	-.037	-.746	.457		
				6.445	2.658	.128	2.424	.016		
				3.760	5.326	.033	.706	.481		

Research Hypothesis 6

H6: Demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.

To test Hypothesis 6, *eta (h)* correlation, Pearson *r* correlations and multiple regression analyses using the hierarchical (forward) method were conducted to determine whether there was a significant explanatory (correlational) relationship between nurses' *Demographic Characteristics, Work Profile Characteristics, Perceptions of Transformational Leadership* and *Organizational Commitment (affective commitment, continuance commitment, and normative commitment), Job Satisfaction*, and the dependent variable, nurses' *Intention to leave*.

Eta correlation analyses were used to determine the correlation between categorical variables of employee demographics, work profiles, with the continuous or dependent variable, *Intention to Leave*. Categorical demographic variables of *gender, marital status, race, and language*, showed no significant *eta* correlation with *Intention to Leave* and were therefore, not included in the Pearson *r* or the regression analyses. *Age* and *hourly wage* showed no significant correlation (Pearson *r*) and were not included in the regression analyses. *Highest nursing education level* ($r = .118, p = .038$), and *highest degree level* ($r = .178, p = .004$) showed significant Pearson *r* correlations and were included in the regression analyses.

Non-categorical work profile variables of *length of employment in current job, length of time as a registered nurse, length of employment with Tenet*, showed no significant Pearson *r* correlations and were therefore not included in the regression

analyses. Work profile categorical variables of *nursing unit*, *shift worked*, and *Hospital* showed no significant *eta* correlation with *Intention to Leave* and were, therefore, not included in the Pearson *r* and the regression analyses. The results of *eta* correlations using the means procedure in SPSS are shown in Table 4-62.

Table 4-62

Eta Correlations of Demographic Characteristics, Work Profiles, and Intention to Leave

Categorical Variables	Eta (<i>h</i>)	Eta Squared (<i>h</i>²)	<i>F</i>	<i>p</i>
Demographic Characteristics				
Gender	.251	.063	.819	.670
Marital Status	.252	.064	.833	.654
Race	.336	.113	1.557	.078
Language	.218	.047	.609	.883
Work Profile				
Nursing Unit	.324	.105	1.418	.131
Shift Worked	.345	.119	1.612	.063
Hospital	.309	.095	1.288	.202

The results of Pearson *r* correlations among Non-categorical *Employee Demographic Characteristics*, Non-categorical *Work Profiles Characteristics*, and *Intention to Leave* are presented in Table 4-63.

Table 4-63

Pearson r Correlation of Non-Categorical Demographic Characteristics, Non-Categorical Work Profile Characteristics, and Intention to Leave

Variables	Pearson <i>r</i>	<i>p</i> -value
3-Item Turnover Intention Scale		
Demographic Characteristics		
Age	.005	.469
Highest Nursing Education Level	.118	.038
Highest Degree Level	.178	.004
Hourly Wage	.053	.224
Work Profile Characteristics		
Length of employment in current job	-.022	.371
Length of time as a registered nurse	.048	.236
Length of employment with Tenet	-.082	.111

Following the results from *eta* and Pearson *r* correlations, four dummy variables were created for *Highest Nursing Education Level* (*ASN, Nursing Bachelor, Nursing Master, and Nursing Doctorate*) and four dummy variables for *highest degree level* (*Regular Associate, Regular Bachelor, Regular Master, and Regular Doctorate*). The dummy variables, except for *nursing doctorate* (low sample size) were included in the Pearson *r* correlation analyses. Pearson *r* correlations resulted in a significant inverse correlation with the *GTL* ($r = -.541, p = .000$), two subscales of the *Organizational Commitment* scale, *Affective Commitment* ($r = -.661, p = .000$) and *Normative Commitment* ($r = -.418, p = .000$), and *Intention to Leave*. Pearson *r* correlation resulted in a significant inverse correlation with *Total Job Satisfaction* ($r = -.630, p = .000$). Furthermore, seven subscales of the *MMSS* had a significant inverse correlation with *Intention to Leave*. The results are as follows: *satisfaction with extrinsic reward* ($r = -.440, p = .000$), *satisfaction with scheduling* ($r = -.459, p = .000$), *satisfaction with family*

and work balance ($r = -.319, p = .000$), satisfaction with co-workers ($r = -.452, p = .000$), satisfaction with interaction opportunities ($r = -.476, p = .000$), satisfaction with praise and recognition ($r = -.621, p = .000$), satisfaction with control and responsibility ($r = -.443, p = .000$).

The dummy variable, *Regular Masters* ($r = .129, p = .025$), had a significant positive relationship with *Intention to Leave*. The results of Pearson r correlation among Employee Demographic Characteristics, Work Profiles Characteristics, the Global Transformational Leadership Scale, the Three Component Organizational Commitment scale, the MMSS, and the *Intention to Leave* scale are presented in Table 4-64.

Table 4-64

Pearson r Correlation among Employee Demographic Characteristics, Work Profile Characteristics, the Global Transformational Leadership Scale, the Three Component Organizational Commitment Scale, the MMSS, and the Intention to Leave Scale

Variables	Pearson r	p -value
3-Item Intention to Leave Scale		
GTL	-.541	.000
ACS	-.661	.000
CCS	-.074	.134
NCS	-.418	.000
Extrinsic Reward	-.440	.000
Scheduling Satisfaction	-.459	.000
Family and Work Life Balance	-.319	.000
Co-Workers	-.452	.000
Interaction Opportunities	-.476	.000
Praise and Recognition	-.621	.000
Control and Responsibility	-.443	.000
ASN	-.101	.065
BSN	.060	.186
MSN	.085	.101
Regular Associate	-.131	.025
Regular Bachelors	.039	.279
Regular Masters	.129	.026
Regular Doctorate	.090	.089

The *GTL*, two significant subscales from the *Three Component Organizational Commitment scale* (*affective, and normative*), seven subscales from the *MMSS* (*extrinsic reward, scheduling, family and work balance, co-workers, interaction opportunities, praise and recognition, control and responsibility*) were entered into a hierarchical forward linear regression model. *Regular Associate* and *Regular Masters* were also entered into the regression model, totaling 12 predictors in the model. The variables were entered based on order of significance and from strongest Pearson *r* to weakest for subscales of the same measure. Collinearity was examined by assessing Tolerance values and Variance Inflation Factor (VIF) values. For the nine models produced, the VIF ranged from 1.000 to 3.667, and the tolerance ranged from .273 to 1.000, which are within the recommended guidelines, indicating no issues with multicollinearity.

Nine different models were produced from the hierarchical regression. Each of the nine models had a significant F value ($p = .000$). The *Adjusted R²* increased from Model 1 (43.4%), to Model 2 (48.9%), to Model 3 (49.3%). Model 4 had an *Adjusted R²* of 49.2% which increased for Model 5 (49.9%), to Model 6 (50.2%). Models 7 and 8 had *Adjusted R²* of 50%, and Model 9 had an *Adjusted R²* of 49.9%. Model 6 ($R^2 = 51.5$) had six explanatory variables: *Affective Commitment, Praise and Recognition, Global Transformational Leadership, Interaction Opportunities, Scheduling, Co-workers*. Model 6 was the best explanatory model to explain *Intention to Leave*. The best explanatory model found was:

$$\begin{aligned} \textit{Intention to Leave} = & 27.445 \text{ (constant)} - .205 \text{ (Affective Commitment)} - .129 \\ & \text{(Praise and Recognition)} - .081 \text{ (GTL)} + .031 \text{ (Interaction Opportunities)} - .161 \\ & \text{(Scheduling)} - .224 \text{ (Co-Workers)} + e \end{aligned}$$

Examination of individual predictors in Model 6 indicated two significant explanatory relationships, and two trend relationships among the predictors and *intention to leave*. The standardized beta coefficient (β) for the predictor indicated its relative importance in explaining intention to leave. *Affective Commitment* ($t = -5.852, p = .000, \beta = -.391$) was the most important predictor in the model. It had a significant inverse relationship with *intention to leave* indicating that as nurses are attached to the organization (higher *affective commitment* scores), that would be associated with lower *intention to leave*.

Praise and Recognition ($t = -2.077, p = .039, \beta = -.188$) was next in importance as a predictor of the model. It had a significant inverse relationship with *intention to leave* indicating that as a nurse perceives receiving a high level of praise and recognition, it would correlate with lower scores of *intention to leave*.

Global Transformational Leadership ($t = -1.675, p = .095, \beta = -.112$) showed an inverse trend relationship with *intention to leave* indicating that as nurses perceive *transformational leadership* traits in their leader, it could be associated with lower levels of *intention to leave*. *Satisfaction with scheduling* ($t = -1.743, p = .083, \beta = -.106$) also showed an inverse trend relationship with *intention to leave* indicating that as nurses were satisfied with their schedules, it could be associated with lower levels of *intention to leave*. According to the findings, Hypothesis 6 was partially supported. *Organizational*

Commitment (affective), Job Satisfaction (praise and recognition) were significant negative explanatory variables of nurses' *Intention to Leave*. The hierarchical (forward) multiple regression results for H6 are summarized in Table 4-65.

Table 4-65

Hierarchical (Forward) Multiple Regression Analysis of Demographic Characteristics, Work Profiles, Transformational Leadership, Organizational Commitment (Affective, and Normative), Job Satisfaction, and Intention to Leave

Variable	F	df	p	B	SE	β	t	p	R²	Adjusted R²
Model 1	172.993	1	.000						.437	.434
(Constant)				21.813	1.005		21.702	.000		
Affective Commitment				-.347	.026	-.661	-13.153	.000		
Model 2	108.386	2	.000						.494	.489
(Constant)				23.695	1.026		23.092	.000		
Affective Commitment				-.234	.034	-.445	-6.904	.000		
Praise and Recognition				-.222	.044	-.323	-5.009	.000		
Model 3	73.657	3	.000						.500	.493
(Constant)				24.198	1.069		22.644	.000		
Affective Commitment				-.218	.035	-.415	-6.227	.000		
Praise and Recognition				-.185	.050	-.268	-3.710	.000		
Global Transformational Leadership				-.079	.049	-.109	-1.618	.107		
Model 4	55.261	4	.000						.501	.492
(Constant)				24.944	1.478		16.881	.000		
Affective Commitment				-.217	.035	-.413	-6.184	.000		
Praise and Recognition				-.159	.061	-.230	-2.588	.010		
Global Transformational Leadership				-.081	.049	-.112	-1.665	.097		
Interaction Opportunities				-.078	.106	-.051	-.732	.465		
Model 5	45.682	5	.000						.511	.499
(Constant)				26.488	1.650		16.052	.000		
Affective Commitment				-.208	.035	-.396	-5.916	.000		

Table 4-65 Continued

Variable	F	df	p	B	SE	β	t	p	R²	Adjusted R²
Praise and Recognition				-.147	.061	-.213	-2.401	.017		
Global				-.079	.049	-.109	-1.621	.106		
Transformational Leadership										
Interaction				-.005	.111	-.003	-.048	.962		
Opportunities										
Scheduling				-.186	.091	-.122	-2.044	.042		
Model 6	38.631	6	.000						.515	.502
(Constant)				27.445	1.770		15.507	.000		
Affective				-.205	.035	-.391	-5.852	.000		
Commitment										
Praise and Recognition				-.129	.062	-.188	-2.077	.039		
Global				-.081	.049	-.112	-1.675	.095		
Transformational Leadership										
Interaction				.031	.114	.020	.274	.784		
Opportunities										
Scheduling				-.161	.092	-.106	-1.743	.083		
Co-Workers				-.224	.153	-.091	-1.470	.143		
Model 7	33.027	7	.000						.516	.500
(Constant)				27.550	1.786		15.422	.000		
Affective				-.206	.035	-.392	-5.858	.000		
Commitment										
Praise and Recognition				-.117	.067	-.170	-1.734	.084		
Global				-.082	.049	-.114	-1.695	.091		
Transformational Leadership										
Interaction				.039	.115	.026	.340	.734		
Opportunities										
Scheduling				-.159	.093	-.104	-1.711	.089		
Co-Workers				-.217	.154	-.088	-1.409	.160		
Control and Responsibility				-.069	.144	-.032	-.478	.633		
Model 8	29.001	8	.000						.518	.500
(Constant)				27.807	1.807		15.388	.000		
Affective				-.199	.036	-.379	-5.548	.000		
Commitment										
Praise and Recognition				-.111	.068	-.161	-1.633	.104		
Global				-.086	.049	-.119	-1.767	.079		
Transformational Leadership										

Table 4- 65 Continued

Variable	<i>F</i>	<i>df</i>	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	Adjusted <i>R</i> ²
Interaction Opportunities Scheduling Co-Workers Control and Responsibility Extrinsic Reward				.058 -.148 -.188 -.080 -.096	.117 .094 .157 .144 .101	.038 -.097 -.076 -.038 -.058	.497 -1.578 -1.198 -.559 -.954	.620 .116 .232 .577 .341		
Model 9	19.625	12	.000						.526	.499
(Constant)				28.484	2.042		13.946	.000		
Affective Commitment Praise and Recognition Global Transformational Leadership Interaction Opportunities Scheduling Co-Workers Control and Responsibility Extrinsic Reward Normative Commitment Family and Work Balance Regular Associate Regular Masters				-.179 -.103 -.088 .047 -.173 -.182 -.071 -.115 -.053 .090 -.100 1.264	.039 .071 .051 .118 .095 .159 .149 .103 .044 .137 .588 .979	-.341 -.150 -.121 .031 -.114 -.074 -.033 -.070 -.069 .039 -.009 .066	-4.587 -1.448 -1.729 .400 -1.832 -1.139 -.475 -1.125 -1.196 .659 -.170 1.292	.000 .149 .085 .690 .068 .256 .635 .262 .233 .511 .865 .198		

Chapter IV presented a description of the final data producing sample, the psychometric analyses of the *Global Transformational Leadership* scale, the *Three Component Organizational Commitment* scale, the *McCloskey/Mueller Satisfaction Scale*, and the *Intention to Leave* scale. All data analyses were rechecked and verified for accuracy. The results from answering the research questions and hypotheses testing were also presented. Chapter V presents a summary and discusses the interpretations of

findings, limitations, conclusions, practical implications, and recommendations for future studies on perception of transformational leadership, organizational commitment, job satisfaction, and intention to leave.

CHAPTER V

Discussion

Chapter V presents a discussion of the results of the study which examined the relationship among perceptions of transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave. There are numerous empirical studies that look at varying combination of the above variables, such as the relationship between transformational leadership and job satisfaction, or the relationship between job satisfaction and intention to leave. However, this is the first study that examined the relationship among all the variables specific to non-supervisory registered nurses. Chapter V presents a summary and interpretations of the findings and the practical implications, conclusions, limitations, and recommendations for future study.

Summary and Interpretations

Data Producing Sample and the Target Population of Registered Nurses

The data collection process was performed by an on-line survey sent via an e-mail link, using Survey Monkey. The accessible population was 2,409 registered nurses employed by Tenet South Florida Hospitals, representing 100% of the target population. There were 409 participants who entered Survey Monkey and 409 actual surveys were completed, a response rate of 17% of the self-selected sample. Of the 409 surveys completed there were 264 "usable" surveys. Representation by the hospitals of the final data-producing sample of full time RNs did not closely represent the distribution by

hospital of the target population. This impacts the support of external validity, affecting the ability of the study findings to be generalized.

Psychometric Evaluation of Measures

In this study, the *Global Transformational Leadership* scale was used to measure perceptions of *Transformational Leadership*. The seven item scale used a five point frequency rating scale with higher scores being associated with more transformational leadership behaviors. Varimax rotation was used to establish construct validity of the *Global Transformational Leadership* scale. Exploratory factor analysis (EFA) resulted in one factor emerging indicating the GTL as a unidimensional scale. Lastly, internal consistency reliability analysis was calculated by using Cronbach's alpha. The total scale of the overall Cronbach's Alpha reported for this study was .978.

The internal consistency reliability in this study was consistent with two studies. In a study of subordinates who assessed leader behavior among branch managers in a large Australian financial organization, Carless, et al. (2000) reported Cronbach's alpha reliability for the GTL of .93. Munir, and Nielsen (2009) examined the longitudinal relationship between transformational leadership behaviors and employees' sleep quality among Danish healthcare workers with the use of the *Global Transformational Leadership Scale*. The alpha coefficients for the GTL reported by Munir, and Nielsen (2009), was .90 at time 1, and 0.94 at time 2.

Organizational Commitment was measured by Meyer and Allens's (1991) *Three-Component Organizational Commitment scale* which measured the variables of *affective commitment*, *continuance commitment*, and *normative commitment*. Twenty-four items

assessed the three subscales using a seven point semantic differential scale. Higher scores indicated stronger commitment. Three subscales of organizational commitment, *affective*, *continuance*, and *normative* were analyzed. In this study, varimax rotation was used to establish construct validity of the *Three-Component Organizational Commitment scale*. This resulted in three factors: *affective*, *continuance*, and *normative*. Exploratory factor analysis (EFA) procedures were conducted on the 24 items *Three-Component Organizational Commitment scale*. The result was the revised 21-items *Three-Component Organizational Commitment scale* which was used for the analyses: *affective* (8 items), *continuance* (6 items), and *normative* (7 items). Finally, the internal consistency reliability was calculated on the 21-items *Three-Component Organizational Commitment scale* using Cronbach's alpha and were as follows: *affective commitment* ($\alpha = .906$), *continuance commitment* ($\alpha = .805$), and *normative commitment* ($\alpha = .769$). With satisfactory factor and reliability analysis, the 21-items *Three-Component Organizational Commitment scale* was used to answer research questions and test the hypotheses using regression analysis.

The internal consistency reliability in this study was consistent with two studies. Xu and Bassham's (2010) study on presidential assistants in U.S. higher education, reported Cronbach's alpha as an estimate of internal consistency reliability for the *Three Component Organizational Commitment scale* as follows: *affective* ($\alpha = .848$), *continuance commitment* ($\alpha = .746$), and *normative commitment* ($\alpha = .658$).

Lee et al. (2001) in the study on nurses and industrial hygiene technicians in South Korea reported Cronbach's alpha as an estimate of internal consistency reliability.

The study used the six-items version of the *Three Component Organizational Commitment* scale that was translated from English to Korean. The results reported for the study were as follows: *affective* ($\alpha = .86$), *continuance commitment* ($\alpha = .61$), and *normative commitment* ($\alpha = .74$).

Job satisfaction was measured by the 31 item *McCloskey/Mueller Satisfaction Scale (MMSS)*, which specifically measures job satisfaction in hospital nurses. Thirty-three items assessed the eight subscales, with a five point satisfaction rating scale. Eight scales of job satisfaction, *extrinsic reward*, *scheduling*, *family and work life balance*, *co-workers*, *interaction opportunities*, *professional opportunities*, *praise and recognition*, and *control and responsibility*, were used in the analyses. Higher scores indicated higher levels of job satisfaction. To establish construct validity of the *MMSS*, varimax rotation and exploratory factor analysis (EFA) procedures were conducted in this study. These resulted in seven factors: *extrinsic reward* (4 items), *scheduling* (5 items), *family and work life balance* (3 items), *co-workers* (3 items), *interaction opportunities* (5 items), *praise and recognition* (8 items), and *control and responsibility* (3 items). For the 31-item *MMSS*, the internal consistency reliability was calculated using Cronbach's alpha. The overall Cronbach's Alpha reported for this study was .94. Based on exploratory factor analysis there were seven subscales of the *MMSS*: a four-item *extrinsic reward* subscale ($\alpha = .81$), a five-item *scheduling* subscale ($\alpha = .79$), a three-item *family and work life balance* subscale ($\alpha = .67$), a three-item *co-worker* subscale ($\alpha = .68$), a five-time *interaction opportunities* subscale ($\alpha = .87$), an eight-item *praise and recognition* subscale ($\alpha = .930$), and a three-item *control and responsibility* subscale ($\alpha = .83$).

The internal consistency reliability in this study was consistent with two studies. Torangeau et al (2006) in their study of 8,456 nurses found seven factors with internal consistency reliabilities for the subscales ranging from .31 to .84. Roberts et al (2004) in the study of new graduate RNs found internal consistency reliability estimates that ranged from .69 to .87, when the subscales were scored for importance.

Intention to Leave was measured by three questions developed by Meyer, Allen, and Smith (1993). Each item was measured on a seven point semantic differential scale. The items measured how frequently employees thought about leaving their current employer, how likely it was that they would search for a job in another organization, and how likely it was that they would actually leave the organization within the next year. Higher scores are associated with the employee's greater intentions to leave the organization. For the three-item *Intention to Leave* scale the internal consistency reliability was calculated using Cronbach's alpha. The overall Cronbach's alpha reported for the study was .915. With satisfactory factor and reliability analyses, the *Intention to Leave* scale was used to test hypotheses and to answer the research questions. The internal consistency reliability estimates for this study was consistent with Kickul's (2001) study of employees in a small business. Cronbach alpha as a measure of internal consistency reliability for the study was reported at 0.87. A summary of the psychometric evaluation of measures are presented in Table 5-1.

Table 5-1

Summary of Psychometric Evaluation of Measures Using EFA and Coefficient Alpha

Scale	Reliability α	Validity			Analysis
		Construct Validity			
		<u>Exploratory Factor Analysis</u>			
		Factors	Loadings	Variance Explained	
7 Item Global Transformational Leadership Scale (Total score range 7-35)	.978	1	.913 to .957	88.394%	Very good reliability. Construct validity confirmed. Unidimensional scale. Total scale used in comparative and regression analysis.
Revised 21 Item Three Component Organizational Commitment Scale		3		55.758%	Good reliability. Construct validity confirmed. multidimensional scale. Each total subscale used in comparative and regression analysis.
Factor 1: Affective Commitment 8 Items (Score range 8-56)	.906		.572 to .865		
Factor 2: Continuance Commitment 6 Items (Score range 6-42)	.805		.618 to .749		
Factor 3: Normative Commitment 7 Items (Score range 7-49)	.769		.417 to .801		
Revised 31 Item MMSS (Total score range 31-155)	.94	7		69.308%	Very good reliability. Construct validity confirmed. Multidimensional scale. Total scale and subscales used in comparative and regression analysis.
Factor 1: Praise and Recognition 8 Items (Score range 8- 40)	.93		.527 to .798		

Table 5-1 Continued

Scale	Reliability <i>α</i>	Validity			Analysis
		Construct Validity			
		<u>Exploratory Factor Analysis</u>			
		Factors	Loadings	Variance Explained	
Factor 2: Interaction Opportunities 5 Items (Score range 5- 25)	.87		484 to .763		
Factor 3: Scheduling 5 Items Score range 5-25)	.79		.413 to .799		
Factor 4: Extrinsic Reward 4 Items (Score range 4- 20)	.81		.487 to .824		
Factor 5: Control and Responsibility 3 Items (Score range 3-15)	.83		.485 to .832		
Factor 6: Co-Workers 3 Items (Score range 3-15)	.68		.622 to .669		
Factor 7: Balance of Family and Work 3 Items (Score range 3-15)	.67		.538 to .788		
Intention to Leave scale 3 Items (Total score range 3-21)	.915	1	.917 to .929	85.489%	Very good reliability. Construct validity confirmed unidimensional scale. Total scale used in comparative and regression analysis.

Research Questions

Research Question 1 - Descriptive Analysis

Descriptive analysis of employee demographic characteristics. A researcher developed demographic characteristics questionnaire, asked questions about age, gender, marital status, race, language, highest nursing education, highest degree level, and hourly wage. Of the 264 respondents, the age groups were evenly distributed ranging from 15% (*56 years and above*) to 19.2% (*less than 28 years*). The registered nurses who completed the survey were overwhelmingly *female* at 87.1% and 12.9% *male*. The majority of the respondents were *married* (55.7%). Within the race category, *Whites* (72.7%) accounted for the majority of the respondents. *Black or African American* represented 17.4%, while *Asian* represented 8%. There was 1 respondent who selected *American Indian or Alaskan Native* representing .4% of the sample in the race category and 4 respondents (1.5%) selected *Native Hawaiian/Other Pacific Islander*. *English* was the predominant primary language spoken (81.8%), while *Spanish* represented 11.7% , and *Creole* represented 2.7% of the sample. 3.8% of the sample identified “*Other*” as the primary language spoken. In the category of *Highest Nursing Education*, the categories of *Associate* (46.2%) and *Bachelor in Nursing* (47.3%) were evenly distributed. The majority of respondents (50.8%) identified the *Bachelors* degree and the *Associate* degree (38.6%) as the *Highest Degree Level*. In the category of *Hourly Wage*, the majority of the respondents were in the \$28-\$36 category (40.2%) and the \$20.01-\$27 category (24.6%).

These findings are similar to the 2008 national demographic findings of the Department of Health and Human Services where 50% of registered nurses reported having a *Bachelor* degree, while 36.1% earned an *Associate* degree. Average annual earnings for a registered nurse working full time, was \$66,973, which is equivalent to an hourly wage of \$32.19. This finding is similar to the category where the majority of respondents in this study fell. The Department of Health and Human Services (2008) also found similar findings in the area of race where nurses from minority racial groups represent only 16.8% of all nurses. Buerhaus, Staiger and Auerbach (2009) reported the average age of the nurse of 44 years, which is consistent with the average age of this sample at 41.67 years. Other demographic findings were similar to the literature reviewed.

Descriptive analysis of employee work profile characteristics. A researcher developed *work profile characteristics* questionnaire, asked respondents about *length of employment in current job, length of time as a registered nurse, length of employment with Tenet, nursing unit, shift worked, and hospital*. The majority of registered nurses (41%) have being *employed in the current job* between *2 to 5 years*, while most of the respondents have been registered nurses for either *2 to 9 years* (33.7%) or *10 to 17 years* (21%). 44.4% of the nurses have been *employed with Tenet* for *2 to 7 years*, while 19.6% were more tenured and fell in the *8 to 14 years* category. In the *nursing unit* category, the majority of the respondents primarily worked in either *critical care* (36.1%) or *medical surgical* (24.3%). *7A-7P* was the primary *shift worked* by 49.8% of the nurses, while 33.7% worked the *7P-7A* shift. In terms of the *hospital* category, the majority of the

registered nurses were from *Delray Medical Center* (31%) and from *Coral Gables Medical Center* (17.6%). The work profile characteristics were consistent with the findings of Sorensen et al. (2009), which assessed RNs. In this study the nurses primarily worked day shifts (44.8%)

Descriptive analysis of perceptions of transformational leadership.

Registered nurses' perceptions of transformational leadership were assessed by the *Global Transformational Leadership Scale (GTL)*. After exploratory factor analysis, the result was the seven item scale. Each item was rated on a five point frequency rating scale rating from 1 to 5. Higher scores were associated with increased perception of transformational leadership behaviors in the leader. The mean total *GTL* score was 26.26 indicating an overall perception of high transformational leadership behaviors.

The highest *GTL* score was 3.90 for *GTL 2*, with average item scores ranging from 3.70 to 3.90. Findings were consistent with Carless' (2000) study which evaluated *GTL* as a measure of transformational leadership. Carless (2000) reported that higher scores were interpreted as the manager using transformational leadership behaviors extensively, while lower score indicated the rare or infrequent use of transformational leadership behaviors. For this study, which examined perceptions of transformational leadership behavior by 1,440 subordinates of 695 managers, the mean *GTL* score was 25 (Carless, 2000).

Descriptive analysis of perceptions of organizational commitment.

Organizational Commitment was measured by the *Three Component Organizational Commitment scale (Revised)*. After exploratory factor analysis, the result was a revised

21 item scale. The items were rated on a seven point semantic differential scale. Items were organized into three subscales which were analyzed: *affective commitment*, *continuance commitment*, and *normative commitment*. For each of the three subscales, higher scores indicated stronger level of commitment.

The highest *affective commitment* item mean score was 5.01, with a subscale mean score of 36.52 (score range 8-56). The highest *continuance commitment* item mean score was 4.59 with an average subscale mean score of 24.26 (score range 6-42). The highest *normative commitment* item mean score was 4.85 with an average subscale mean score of 31.14 (score range 7-49). This is consistent with Tayyeb and Riaz' (2004) study which found higher mean scores within the *affective commitment* subscale. In the Labatmediene et al. (2007) study, mean scores for *affective commitment* ranged from 3.23 to 4.68; means scores for *continuance commitment* ranged from 3.30 to 4.96; and for *normative commitment* ranged from 3.58 to 5.70.

Descriptive analysis of perceptions of job satisfaction. Job satisfaction was measured by the *McCloskey/Mueller Satisfaction Scale*, which specifically measures job satisfaction in hospital nurses. After exploratory factor analysis, the result was a revised 31 item scale with seven subscales. Each item was measured on a five-point satisfaction rating scale. Seven subscales were analyzed: *extrinsic reward*, *scheduling*, *family and work balance*, *co-worker*, *interaction opportunities*, *praise and recognition*, and *control and responsibility*. Higher scores indicate higher levels of satisfaction. Average item scores for the MMSS ranged from 2.72 to 4.12, with a total mean score of 109.29 (score range 31-155).

The highest mean item score was 4.12 for the *scheduling* subscale which had an average subscale score of 19.34 out of a score range of 5-25. The lowest average item score was 2.22 for the *family and work balance* subscale which had an average subscale score of 9.00 out of a score range of 3-15. The remaining subscale mean scores were as follows: *extrinsic reward* has a mean score of 14.20 (score range 4-20); *co-worker* has a mean score of 11.69 (score range 3-15); *interaction opportunities* has a mean score of 18.32 (score range 5-25); *praise and recognition* has a mean score of 27.13 (score range 8-40); and *control and responsibility* has a mean score of 9.62 out of a possible score range of 3 to 15. The total mean score are consistent with findings in the study conducted by Sorensen et al. (2009), where total mean score for the MMSS was 104.60.

Descriptive analysis of intention to leave. *Intention to leave* was measured by three questions comprising the *Intention to Leave* scale. Each item was measured on a seven point semantic differential scale ranging from 1 to 7 with higher scores interpreted as the employees' greater intentions to leave the organization. The lowest average *intention to leave* score was item INTENTLEAVE3: "I am likely to actually leave the organization with the next year," at 2.80. The highest average *intention to leave* score was INTENTLEAVE1, "I frequently think about leaving my current employer," at 3.17. Average scores ranged from 2.80 to 3.17.

Research Question 2 – Comparisons of Nurses' Perception According to Differences in Employee Demographic Characteristics

Research Question 2 examined the differences in nurses' perception of transformational leadership, organizational commitment, job satisfaction, and intention to

leave according to the demographic characteristics of *age, gender, marital status, race, language, highest nursing education, highest degree level, and hourly wage*. The seven-item *Global Transformational Leadership Scale*, the 21-item *Revised Three-Component Organizational Commitment scale*, the 31-item *McCloskey/Mueller Satisfaction Scale* and the three-item *Intention to Leave scale* were used. To examine the differences according to demographic characteristics, independent t-tests and multiple ANOVA with post hoc comparisons were performed.

Differences according to age. *Organizational Commitment*, specifically, *continuance commitment*, and *normative commitment* were significantly highest for nurses in the *51 to 55* age group. These findings were not consistent with Cohen (1993) whose research found that the relationship between organizational commitment and age was strongest for the youngest group (less than 30 years old) of employees. The author explained that younger employees may be more committed because they are cognizant of the fact that with less experience they have less available job opportunities. In contrast, Labatmediene et al. (2007) found a positive relationship between *age* and *organizational commitment* ($p < 0.01$).

Differences according to gender. Although the differences were not significant, males perceived higher transformational leadership than females. Males also reported higher job satisfaction than females. Females reported significantly higher continuance commitment than males. This is consistent with Ferreira (2007) whose research found that continuance commitment was significantly higher among female nurses ($t = -3.45; p < .05$). Continuance commitment, according to the author, refers to a conscience of the

costs of leaving the organization. Female nurses, therefore, remain in the organization because they consider all the aspects associated with leaving, while their male counterparts do not. In contrast, males reported higher levels of *affective commitment* in Vanaki and Vagharseyyedin's (2009) study of Iranian nurses. This information may be useful in understanding how to appeal to male and female nurses.

Differences according to marital status. Related to *organizational commitment*, the *married* group reported significantly higher levels of *affective commitment*. The *married* group also reported significantly higher levels of total *job satisfaction*. While the married group reported higher levels of job satisfaction in the study conducted by Coban (2010), the differences were not statistically significant.

Differences according to race. Related to organizational commitment, there was a significant effect of race on *affective commitment*, where nurses in the *Asian* group reported significantly higher levels of affective commitment. While there are studies that examine differences in organizational commitment among racial groups, the literature is exclusive of differences with *Asian* being a distinct group (Cunningham, & Sagas, 2004). Therefore, interpretations according to the literature reviewed cannot be made. As a cultural difference, Asian nurses may be more apt to be more attached to an organization because they want to be attached, remaining committed to the job role and the organization. In fact, Asian cultures focus on loyalty, obedience and obligation to the organization, which would in turn impact organizational commitment (Yao, & Wang, 2008).

Differences according to language. Registered nurses who identified *Spanish* as the primary language spoken reported significantly higher *perception of transformational leadership*. The *Spanish* group also reported significantly higher levels of *organizational commitment*, specifically, *affective commitment*. There was also a significant difference in total *job satisfaction* where the Spanish group reported significantly higher levels. These are consistent with findings of Mallol, Holtom, and Lee (2007) who reported significantly higher levels of job satisfaction and organizational commitment among *Spanish* speaking workers. The researchers indicate that the *Spanish* speaking employees were predominantly from the Hispanic culture which is a high collectivism culture which enhances the importance of organizational commitment, particularly in those cases where the actual organization is viewed as an in-group.

Differences according to highest nursing education level. Nurses in the *Associate (or Diploma)* group reported significantly higher levels of *organizational commitment* in the areas of *continuance commitment* and *normative commitment*. These are consistent with findings of Vanaki and Vagharseyyedin (2009) which showed that the *Diploma* nurses reported significantly higher levels of *organizational commitment*. The study, however, was specific to affective commitment, and did not include normative, or continuance commitment. The authors note that nurses with a higher degree were less committed to an organization. This could be due to the fact that the latter have more perceived job opportunities and job alternatives.

Differences according to highest degree level. Although not significantly different, a trend relationship was indicated in *perception of transformational leadership*

where the *Associate* degree group reported the highest perception of transformational leadership. In terms of intention to leave, the *Doctorate* level reported significantly higher *intention to leave*. These findings are consistent with the findings of McCarthy, Tyrrell, and Lehane (2007), where nurses with a higher degree reported higher levels of intention to leave. This could also be due to the fact that nurses with higher degrees have more perceived job opportunities and job alternatives.

Differences according to hourly wage. Hourly wage had an effect on organizational commitment. The \$28 to \$36 and the \$37 to \$43 *hourly wage* group reported significantly higher *affective commitment*. The \$37 to \$43 *hourly wage* also reported significant higher levels of total *job satisfaction*. In addition, nurses in the \$44 to \$51 *hourly wage* group reported significantly higher *intention to leave*. This is consistent with the findings of Cohen (2006) who found that senior nurses may feel that they are not valued based on their experience. Consequently, for them to progress in their career and to increase their salaries, they have to change positions, which may involve leaving direct patient care.

Research Question 3 – Comparisons of Nurses’ Perception According to Differences in Work Profile Characteristics

Research Question 3 examined the differences in nurses’ perception of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to the work profile characteristics of *length of employment in current job*, *length of time as a registered nurse*, *length of employment with Tenet*, *primary nursing unit*, *shift worked*, and *hospital*. The seven-item *Global Transformational Leadership*

Scale, the 21-item *Revised Three-Component Organizational Commitment scale*, the 31-item *McCloskey/Mueller Satisfaction Scale* and the three-item *Intention to Leave scale* were used. To examine the differences according to work profile characteristics, multiple ANOVA with post hoc comparisons were performed.

Differences according to length of employment in current job. *Length of employment in current job* had an effect on *organizational commitment*, in the components of *affective commitment* and on *continuance commitment*. Registered nurses with *7 to 10 years* of employment in the current job reported significantly higher *affective commitment*. Nurses employed in their current job for *ten or more years* reported significantly higher *continuance commitment*. This is not consistent with findings by Labatmediene et al. (2007) where there was no significant relationship between organizational tenure and organizational commitment. The authors rejected the hypothesis that employees who work for an organization longer are more committed.

Differences according to length of time as a registered nurse. *Length of time as a registered nurse* had a significant effect on *organizational commitment*. Registered nurses in the *greater than 27 years* group reported significantly higher *continuance commitment*. Cohen (1993) indicates that in later career stages, nurses consider other variables such as investments and the possibility of lack of opportunity elsewhere. Consequently these factors may impact the individual's attachment to the organization. *Length of time as a registered nurse* also had a significant effect on total *job satisfaction*. The *6.1 to 11 years* as a registered nurse group reported significantly higher total job satisfaction. This is consistent with the findings of Rodwell et al. (2009) where there was

a positive relationship between tenure as a nurse (9 years or less, 10 to 14 years, and 15 to 19 years) and job satisfaction.

Differences according to length of employment with Tenet. There was a significant effect of *length of employment with Tenet* on *organizational commitment* in all three components, *affective commitment*, *continuance commitment*, and *normative commitment*. Registered nurses who were employed with Tenet for 17.1 years and above reported significantly higher *affective commitment*, *continuance commitment*, and *normative commitment*. This is consistent with Cohen (1993) findings that in later career stages, nurses consider other variables such as investments and the possibility of lack of opportunity elsewhere. Consequently these factors may impact their attachment to the organization.

Differences according to primary nursing unit. There was a significant effect of *primary nursing unit* on perception of transformational leadership ($p = .029$), where nurses in the *Telemetry* unit reported significantly higher *perception of transformational leadership* ($M = 30.02$). There was a significant effect of *primary nursing unit* on *organizational commitment* in all three components, *affective commitment* ($p = .001$), *continuance commitment* ($p = .019$), and *normative commitment* ($p = .006$). Nurses in the *Telemetry* unit reported significantly higher *affective commitment* ($M = 41.29$). There was also a significant effect of *primary nursing unit* on *intention to leave* where nurses in the *Critical Care* unit reported significantly higher *intention to leave* ($M = 9.96$, $p = .035$). The literature reviewed did not specifically examine *primary nursing unit* and the variables analyzed in this study.

Differences according to shift worked. Of all the variables examined, *shift worked* had a significant effect on only *normative commitment*, where nurses who worked the *7am to 3pm shift* reported significantly higher *normative commitment* (M = 34.43). This finding is partially consistent with Books and Swailes' (2002) study which found that permanent night shift nurses reported significantly lower levels of commitment.

Differences according to hospital. Registered nurses in the *Coral Gables* group reported significantly higher *perception of transformational leadership* (M = 32.07). *Hospital* also has a significant effect on *organizational commitment* ($p = .000$). Coral Gables' nurses reported significantly higher *affective commitment* (M = 44.93). St Mary's nurses reported significantly higher *continuance commitment* (M = 28.98). There was also a significant effect of *hospital* on total *job satisfaction* ($p = .000$), with *Coral Gables* reporting significantly higher *job satisfaction* (M = 128.00). Finally, there was a significant effect of *hospital* on *intention to leave* ($p = .001$) with nurses at Northshore Medical Center reporting higher *intention to leave* (M = 11.52). While there was no literature that specifically examined the relationship between each hospital and each of the variables, there is ample research that links a positive work environment (which can be applied to the hospital setting) and the variables examined in this study. Nielsen et al. (2008) found evidence of a partial link between *transformational leadership* style and employee *job satisfaction*. This link explains the fact that transformational leadership behaviors create a working environment where the followers are involved in their job. The transformational leader, in turn impacts the working conditions (Nielsen, et al.,

2008). In terms of *organizational commitment*, Vanaki and Vagharseyyedin (2009) in their research found a significant positive correlation between working conditions and nurses' reported *affective commitment*. A summary of Research Questions 1, 2, and 3, in addition to results relating to the consistency of the literature reviewed are presented in Table 5-2.

Table 5-2

Summary of Research Questions and Results

Research Questions	Results	Literature	Consistent with Literature
RQ1 What are the demographic characteristics, work profiles, perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave of nurses?	<i>Demographics Characteristics</i>		
	Mean age 41.61	Buerhaus, Staiger, & Auerbach (2009);	Yes
	Males 12.9%; Females 87.1%	Department of Health and Human Services (2008);	Yes
	Married (55.7%)	Roth & Coleman (2008);	Yes
	Whites, 72.7%		Yes
	Associate 46.2%; Bachelor in Nursing 47.3%		Yes
	<i>Work Profile Characteristics</i>		
	Time as RN, 2 to 9 years 33.7%; 10 to 17 years, 21%	Sorensen et al. (2009)	Yes
	Time with Tenet 2 to 7 years, 44.4%; 8 to 14 years, 19.6%		No
	Primary shift worked 7A-7P, 49.8%; 7P-7A, 33.7%		Yes
<i>Perception of Transformational Leadership</i>			
26.36 Mean score	Carless (2000)	Yes	
<i>Organizational Commitment</i>			
Affective, Mean score 36.52	Labatmediene et al. (2007)	Yes	
Normative, Mean score 31.14	Tayye, & Riaz (2004);	Yes	
Continuance, Mean score 24.26		Yes	
<i>Job Satisfaction</i>			
MMSS, Item Score Range 2.72 to 4.12; Total Mean Score 109.29	Sorensen et al. (2009)	Yes	
<i>Intention to Leave</i>			
Average Score Range 2.80 to 3.17		No empirical literature found	

Table 5-2 Continued

Research Questions	Results	Literature	Consistent with Literature
RQ2 Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according their demographic characteristics?	Age 51 to 55 age group reported highest <i>continuance commitment</i> and <i>normative commitment</i>	Labatmediene et al. (2007)	Yes
	Gender Females reported higher <i>continuance commitment</i>	Ferreira (2007)	Yes
	Marital Status <i>Married</i> group reported higher <i>affective commitment</i> and <i>job satisfaction</i>	Coban (2010)	Yes
	Race Asian group reported higher <i>affective commitment</i>	Cunningham & Sagas, (2004)	No
	Language <i>Spanish</i> group report higher <i>perception of transformational leadership</i> and <i>affective commitment</i>	Mallol, Holtom, & Lee (2007)	Yes
	Highest Nursing Education Level <i>Associate (or Diploma)</i> group report higher organizational commitment (<i>continuance</i> and <i>normative</i>)	Vanaki, & Vagharseyyedin (2009)	Yes
	Highest Degree Level <i>Doctorate</i> level reported higher <i>intention to leave</i>	McCarthy, Tyrrell, & Leahne (2007)	Yes
	Hourly Wage \$44 to \$52 hourly wage group report higher <i>intention to leave</i>	Cohen (2006)	Yes

Table 5-2 Continued

Research Questions	Results	Literature	Consistent with Literature
<p>RQ3 Are there differences in nurses' perceptions of transformational leadership, organizational commitment, job satisfaction, and intention to leave according to work profiles?</p>	<p><i>Length of employment in current job</i> 7 to 10 years had higher <i>affective commitment</i> 10 or more years had higher <i>continuance commitment</i></p>	<p>Labatmediene et al. (2007)</p>	No
	<p><i>Length of Time as a registered nurse</i> Greater than 27 years group reported higher <i>continuance commitment</i> 6.1 to 11 years reported higher <i>total job satisfaction</i></p>	<p>Cohen (1993); Rodwell et al. (2009)</p>	Yes
	<p><i>Length of Employment with Tenet</i> 17.1 years and above reported higher <i>affective, continuance, and normative commitment</i></p>	<p>Cohen (1993)</p>	Yes
	<p><i>Primary Nursing Unit</i> Telemetry unit nurses reported higher <i>affective commitment</i> Critical care nurses reported higher <i>intention to leave</i></p>		No
	<p><i>Shift Worked</i> 7am to 3pm reported higher <i>normative commitment</i></p>	<p>Brooks, & Swales (2002)</p>	No
	<p><i>Hospital</i> Coral Gables nurses reported higher <i>affective commitment</i> and higher <i>job satisfaction</i> Northshore nurses reported higher <i>intention to leave</i></p>		No

Summary and Interpretations of Hypotheses Testing

Summary Results of Hypotheses Testing

Hierarchical (forward) multiple regression analyses were used to test the hypotheses, and to find the best explanatory models for the respective hypotheses. For categorical explanatory variables and dependent variables, eta correlations were conducted. Categorical variables with significant and trend relationships to the dependent variables were converted to dummy variables (Hypotheses 5 and 6). These were then analyzed with other explanatory continuous variables and dependent variables, using Pearson r . Based on the order of the strongest significant Pearson r correlations, to the weakest with respective dependent variables, the explanatory variables were entered into the hierarchical (forward) regression model. For each hypothesis, after identifying the significant models, the model with the best goodness-of-fit was selected. The decision is based on the significant model with one of the highest adjusted R^2 values along with a high R^2 . The range of R^2 values identified the percentage of variance in the dependent variable that could be explained by the explanatory variables in the model. Error (e) was the percentage of the dependent variable that was not explained by the variables. The analysis of each hypothesis follows:

Hypothesis 1: Perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction. To test Hypothesis 1, multiple regression analyses using the hierarchical (forward) method were performed to determine whether there was a significant explanatory (correlational) relationship between *Perceptions of Transformational Leadership and Organizational*

Commitment (affective commitment, continuance commitment, and normative commitment) and the dependent variables *nurses' job satisfaction* (extrinsic reward, scheduling, family and work balance, co-workers, interaction opportunities, praise and recognition, and control and responsibility). The GTL, the three subscales of the *21-Item Three Component Organizational Commitment* scale and the seven subscales of the *Revised 31 item McCloskey/Mueller Satisfaction Scale* resulting from EFA were utilized.

There were eight separate sub-hypotheses for Research Hypothesis 1. Each hypothesis tested a different explanatory relationship among perception of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) and aspects of nurses' job satisfaction (H1_a = *satisfaction with extrinsic reward*, H1_b = *satisfaction with scheduling*, H1_c = *satisfaction with family and work balance*, H1_d = *satisfaction with co-workers*, H1_e = *satisfaction with interaction opportunities*, H1_f = *satisfaction with praise and recognition*, H1_g = *satisfaction with control and responsibility*, and H1_h = *total job satisfaction*). All sub hypotheses were partially supported. The analysis of each individual hypothesis follows:

Hypothesis 1_a: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with extrinsic reward. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *extrinsic reward*, with three explanatory variables: *Global Transformational Leadership, Affective Commitment, and Normative Commitment.*

Affective Commitment was the most important predictor ($t = 5.083, p = .000, \beta = .416$) in the model. There was a significant positive relationship with *extrinsic reward*. Higher *affective commitment* scores indicated that employees are emotionally attached to the organization, and want to remain, which would correlate with higher *extrinsic reward*. The other predictors were not significant explanatory variables in the model.

According to the findings, Hypothesis 1_a was partially supported. *Affective Commitment* was a significant positive explanatory variable of satisfaction with *extrinsic reward*. The explanatory model explained a range of 10.8% to 22.9% of the variation in *extrinsic reward*. The empirical literature reviewed did not analyze *organizational commitment* using the three component model of *affective commitment, continuance commitment, and normative commitment* and *Job Satisfaction* using the *McCloskey/Mueller Satisfaction Scale*. However, Jahangir and Shokrpour (2009) found that affective commitment was positively related to job satisfaction.

Hypothesis 1_b: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with scheduling. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *scheduling*, with three explanatory variables: *Global Transformational Leadership, Affective Commitment, and Normative Commitment*.

Affective Commitment was the most important predictor ($t = 4.064, p = .000, \beta = .336$) in the model. There was a significant positive relationship with *scheduling*

indicating that as employees are attached to the organization, that would correlate with satisfaction with their work schedules.

Global Transformational Leadership ($t = 2.564, p = .011, \beta = .188$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with scheduling* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with satisfaction with their work schedules. *Normative Commitment* was not significant in its contribution to the model.

According to the findings, Hypothesis 1_b was partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *scheduling*. The explanatory model explained a range of 14.9% to 21.4% of the variation in satisfaction with *scheduling*. The empirical literature reviewed did not examine the constructs of this study.

Hypothesis 1_c: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with family and work balance. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *family and work balance*, with three explanatory variables: *Global Transformational Leadership*, *Affective Commitment*, and *Normative Commitment*.

Affective Commitment was the most important predictor ($t = 3.933, p = .000, \beta = .335$) in the model. There was a significant positive relationship with *family and work balance* indicating that as employees are attached to the organization, there would be a

correlation with satisfaction with their ability to balance work and family. According to the findings, Hypothesis 1_C was partially supported. *Affective Commitment* was a significant positive explanatory variable of satisfaction with *family and work balance*. The explanatory model explained a range of 5.1% to 16.5% of the variation in *satisfaction with family and work balance*. The empirical literature reviewed did not examine the constructs of this study.

Hypothesis 1_d: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with co-workers. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *satisfaction with co-workers*, with three explanatory variables: *Global Transformational Leadership*, *Affective Commitment*, and *Normative Commitment*.

Affective Commitment was the most important predictor ($t = 3.120, p = .002, \beta = .259$) in the model. There was a significant positive relationship with *co-workers* indicating that as employees are attached to the organization, that would correlate with satisfaction with their co-workers.

Global Transformational Leadership ($t = 2.554, p = .011, \beta = .188$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with co-workers* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with satisfaction with co-workers.

According to the findings, Hypothesis 1_d was partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *co-workers*. The explanatory model explained a range of 14.0 to 20.9%, of the variation in *satisfaction with co-workers*. The empirical literature reviewed did not examine the constructs of this study.

Hypothesis 1_e: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with interaction opportunities. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *satisfaction with interaction opportunities* with three explanatory variables: *Global Transformational Leadership*, *Affective Commitment*, and *Normative Commitment*.

Affective Commitment was the most important predictor ($t = 3.897, p = .000, \beta = .308$) in the model. There was a significant positive relationship with *interaction opportunities* indicating that as employees are attached to the organization, that would correlate with satisfaction with the nurses' ability to interact socially and professionally with members of the nursing discipline, co-workers, and also other disciplines.

Global Transformational Leadership ($t = 3.607, p = .000, \beta = .253$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with interaction opportunities* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher levels of opportunities to interact and even a desire by the nurses to interact.

According to the findings, Hypothesis 1_e was partially supported. *Affective Commitment* and *Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *interaction opportunities*. The explanatory model explained a range of 20.8% to 28.3% of the variation in *satisfaction with interaction opportunities*. The empirical literature reviewed did not examine the constructs of this study.

Hypothesis 1_f: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with praise and recognition. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *satisfaction with praise and recognition*, with three explanatory variables: *Global Transformational Leadership*, *Affective Commitment*, and *Normative Commitment*.

Global Transformational Leadership was the most important predictor ($t = 8.061$, $p = .000$, $\beta = .434$) in the model. There was a significant positive relationship with *praise and recognition* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher levels of praise and recognition.

Affective Commitment ($t = 5.512$, $p = .000$, $\beta = .335$) was next in importance as a predictor of the model. It too had a significant positive relationship with *satisfaction with praise and recognition* indicating that as employees are attached to the organization, that would correlate with the nurses' satisfaction with praise and recognition that is received.

Normative Commitment ($t = 2.737, p = .007, \beta = .139$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with praise and recognition* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with the praise and recognition that is received.

According to the findings, Hypothesis 1_f was partially supported. *Affective Commitment, Normative Commitment, and Global Transformational Leadership* were significant positive explanatory variables of satisfaction with *praise and recognition*. The explanatory model explained a range of 45.8%, to 57.6% of the variation in *satisfaction with praise and recognition*. This was partially supported by Nguni et al. (2006) where the research revealed that the transformational leader has individualized consideration as a trait, thereby, providing the followers with coaching mentoring and support, which involves respect, consideration, and appreciation.

Hypothesis 1_g: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with control and responsibility. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *satisfaction with control and responsibility* with four explanatory variables: *Global Transformational Leadership, Affective Commitment, Normative Commitment, and Continuance Commitment*.

Global Transformational Leadership was the most important predictor ($t = 3.316, p = .001, \beta = .239$) in the model. There was a significant positive relationship with

control and responsibility indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher levels of satisfaction with control and responsibility, meaning that nurse reported higher satisfaction with autonomy in their professional practice.

Affective Commitment ($t = 2.553, p = .011, \beta = .206$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with control and responsibility*, indicating that as employees are attached to the organization, that would correlate with the nurses' *satisfaction with control and responsibility* as they define and participate in professional practice activities.

Normative Commitment ($t = 2.479, p = .014, \beta = .171$) was next in importance as a predictor of the model. It had a significant positive relationship with *satisfaction with control and responsibility* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with *control and responsibility* as they define and participate in professional practice activities.

Continuance Commitment ($t = -2.408, p = .017, \beta = -.141$) was next in importance as a predictor of the model. *Continuance commitment* describes having knowledge of the costs that are associated with the employee leaving the organization. Employees with continuance commitment remain with an organization because they need to do so. The inverse β value of *Continuance Commitment* had a significant negative relationship with *satisfaction with control and responsibility*. This indicates that as nurses remain in the organization because they have to do so, they would report lower *satisfaction with*

control and responsibility, they would be less likely to participate in professional practice activities.

According to the findings, Hypothesis 1_g was supported. *Affective Commitment*, *Normative Commitment*, and *Global Transformational Leadership* were significant positive explanatory variables of *satisfaction with control and responsibility*. *Continuance Commitment* was a significant negative explanatory variable of *satisfaction with control and responsibility*. The explanatory model explained a range of 17.7% to 25.1% of the variation in *satisfaction with control and responsibility*. The empirical literature reviewed did not examine the constructs of this study.

Hypothesis 1_h: Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' job satisfaction (Total Score). Two models emerged from the hierarchical regression. Model 2 was therefore the better explanatory model to explain *job satisfaction* with three explanatory variables: *Global Transformational Leadership*, *Affective Commitment*, and *Normative Commitment*.

Affective Commitment ($t = 6.255$, $p = .000$, $\beta = .410$) was the most important predictor in the model. It had a significant positive relationship with total *job satisfaction* indicating that as employees are attached to the organization, that would correlate with the nurses' total satisfaction with their job.

Global Transformational Leadership ($t = 5.396$, $p = .000$, $\beta = .313$) was next in importance as a predictor of the model. There was a significant positive relationship with

total *job satisfaction* indicating that as nurses perceive *transformational leadership* traits in their leader that would correlate with higher reported levels of total job satisfaction.

Normative Commitment ($t = 2.241, p = .026, \beta = .123$) was next in importance as a predictor of the model. It too had a significant positive relationship with total *job satisfaction* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with their job and the factors that create satisfaction with the job

According to the findings, Hypothesis 1_h was partially supported. *Affective Commitment, Normative Commitment, and Global Transformational Leadership* were significant positive explanatory variables of total *job satisfaction*. The explanatory model explained a range of 35.5% to 50.7% of the variation in *job satisfaction*. This is consistent with empirical findings. Walumbwa et al. (2004) found that there is a positive relationship amongst *transformational leadership, organizational commitment* (specifically *affective commitment*), and *job satisfaction*. Al-Hussami (2009) also reported a strong correlation between nurses' *organizational commitment* and *job satisfaction*.

Hypothesis 2: Perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave. Two models emerged from the hierarchical regression. Model 2 was the better explanatory model to explain *intention to leave* with four explanatory variables: *Global Transformational Leadership, Affective Commitment, Normative Commitment, and Job Satisfaction*.

Affective Commitment ($t = -4.935, p = .000, \beta = -.342$) was the most important predictor in the model. It had a significant inverse relationship with total *intention to leave* indicating that as employees are attached to the organization, that would correlate with the lower nurses' *Intention to Leave* the organization.

Job Satisfaction ($t = -4.198, p = .000, \beta = -.277$) was next in importance as a predictor of the model. There was a significant inverse relationship with *intention to leave*. Higher perceptions of Job Satisfaction resulted in lower nurses' *Intention to Leave* the organization.

Global Transformational Leadership ($t = -2.527, p = .012, \beta = -.154$) was next in importance as a predictor of the model. There was significant inverse relationship with *intention to leave* indicating that as nurses perceive *transformational leadership* traits in their leader, that would correlate with lower *intention to leave* the organization.

According to the findings, Hypothesis 2 was partially supported. *Affective Commitment, Job Satisfaction, and Global Transformational Leadership* were significant negative explanatory variables of *intention to leave*. The explanatory model explained a range of 28.1% to 50.7% of the variation in *intention to leave*. Findings were partially consistent with previous research by Lee and Liu (2007) and Bibby (2008) which found that *Job Satisfaction, and Organizational Commitment* are negatively related to *Intent to Leave*.

Hypothesis 3: Organizational commitment mediates the relationship between transformational leadership and nurses' intention to leave. Multiple regression analyses and the Sobel Test were used to test for mediation is a four step process. Step

one was to test the total effect of *transformational leadership* on nurses' *intention to leave*. The result indicated a significant inverse relationship between the two variables ($t = -9.638, p = .000, \beta = -.414$). Step two was the test the effect of *transformational leadership* on *affective commitment*. The result indicated a significant positive relationship ($t = 10.622, p = .000, \beta = .824$). Step three tested the effect of *affective commitment* on nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -8.783, p = .000, \beta = -.281$). Finally, the Sobel Test suggests mediation ($z = -6.75, p = .000$) indicating that *affective commitment* mediates the relationship between *transformational leadership* and nurses' *intention to leave*.

Normative Commitment was tested as a mediator of the relationship between *transformational leadership* and nurses' *intention to leave*. Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.414, p = .000, \beta = -.407$). Step two was to test the effect of *transformational leadership* on the mediator (*normative commitment*). The result indicated a significant positive relationship ($t = 4.260, p = .000, \beta = .268$). Step three tested the effect of *normative commitment* on nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -5.284, p = .000, \beta = -.230$). Finally, the Sobel Test suggests mediation ($z = -3.281, p = .001$) indicating that *normative commitment* mediates the relationship between *transformational leadership* and nurses' *intention to leave*.

Continuance Commitment was tested as a mediator of the relationship between *transformational leadership* and nurses' *intention to leave*. Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave* using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.638, p = .000, \beta = -.414$). Step two was to test the effect of *transformational leadership* on the mediator (*continuance commitment*). There was no significant or trend relationship noted ($t = -.075, p = .940, \beta = .005$). Step three tested the effect of *continuance commitment* on nurses' *intention to leave*. There was no significant or trend relationship noted ($t = -1.368, p = .173, \beta = -.056$). With the results of steps one and two, the conditions were not met to perform the Sobel test.

According to the findings, Hypothesis 3 was partially supported. *Organizational Commitment (Affective and Normative Commitment)* mediates the relationship between *Transformational Leadership* and nurses' *intention to leave*. Findings were partially consistent with previous research. Boyle et al. (1999) found that the leadership characteristics of the manager were significant and had a direct link with the nurses' *intent to stay*, while Labatmediene et al. (2007) found a significant relationship between *organizational commitment* and *intention to leave* the organization.

Hypothesis 4: Job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave. Multiple regression analyses and the Sobel Test were used to test for mediation is a four step process. Step one was to test the total effect of *transformational leadership* on nurses' *intention to leave*

using multiple regression analyses. The result indicated a significant inverse relationship between *transformational leadership* and nurses' *intention to leave* ($t = -9.638, p = .000, \beta = -.414$). Step two was to test the effect of *transformational leadership* on the mediator (*job satisfaction*). The result indicated a significant positive relationship ($t = 10.751, p = .000, \beta = 1.619$). Step three tested the effect of *job satisfaction* on nurses' *intention to leave*. The results indicated a significant inverse relationship ($t = -7.727, p = .000, \beta = -.131$). Finally, the Sobel Test suggests mediation ($z = -6.257, p = .000$) indicating that *job satisfaction* mediates the relationship between *transformational leadership* and nurses' *intention to leave*.

According to the findings, Hypothesis 4 was supported. *Job Satisfaction* mediates the relationship between *transformational leadership* and nurses' *intention to leave*. These findings are supported by Nguni et al. (2006), where the researchers found that job satisfaction was a mediator between transformational leadership and job outcomes, such as commitment to stay. Clugston's (2000) research showed a partially mediated model emerged indicating that organizational commitment mediated the relationship between job satisfaction and intent to leave. The link between job satisfaction and intent to leave is evident in the empirical research where job satisfaction is indicated as a strong predictor of intention to leave (Clugston, 2000; Ma, et al., 2009).

Hypothesis 5: Demographic and work profile characteristics, perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction. Nine different models were produced from the hierarchical regression analysis. Model 6 was the best explanatory

model to explain *Job Satisfaction*, with five significant explanatory variables: *Affective Commitment*, *Global Transformational Leadership*, *Coral Gables*, *Normative Commitment*, and *Hourly Wage*4 (\$37 to \$43).

Affective Commitment ($t = 4.840$, $p = .000$, $\beta = .627$) was the most important predictor in the model. It had a significant positive relationship with total *job satisfaction* indicating that as employees are attached to the organization, that would correlate with the higher reported nurses' job satisfaction.

Global Transformational Leadership ($t = 4.927$, $p = .000$, $\beta = .798$) was next in importance as a predictor of the model. There was significant positive relationship with *job satisfaction* indicating that as nurses perceive *transformational leadership* traits in their leader, it would correlate with higher levels of satisfaction with the job.

Coral Gables ($t = 3.628$, $p = .000$, $\beta = 9.886$) was next in importance as a predictor of the model. There was a significant positive relationship with *Job Satisfaction*. The positive β value of *Coral Gables* indicates that nurses working at *Coral Gables Hospital* were positively related to higher *Job Satisfaction* than the other hospitals.

Normative Commitment ($t = 2.362$, $p = .019$, $\beta = .360$) was next in importance as a predictor of the model. There was a significant positive relationship with total *job satisfaction* indicating that as employees feel a high level of obligation to continue within the organization, they would be satisfied with their job and the factors that create satisfaction with the job.

Lastly, *Hourly Wage4* ($t = 3.088, p = .002, \beta = 7.263$) was the next in importance as a predictor of the model. It had a significant positive relationship with total *Job Satisfaction*, indicating that nurses who earned an hourly wage that was between \$37 and \$43 reported higher total *Job Satisfaction* scores. According to the findings, Hypothesis 5 was partially supported. *Demographic Characteristics (Hourly Wage)*, *Work Profile Characteristics (Hospital)*, *Transformational Leadership*, and *Organizational Commitment (affective, and normative)* were significant explanatory variables of nurses' *Job Satisfaction*. The explanatory model explained a range of 43.9% to 56.2% of the variation in nurses' *Job Satisfaction*. Cortese et al. (2010) found that supportive management had a significant direct relationship with job satisfaction. However, Nielsen et al. (2008) found no direct relationship between transformational leadership and job satisfaction, but found that transformational leadership was associated with a number of working conditions (profile) which may work to improve work outcomes.

Hypothesis 6: Demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave. Nine different models were produced from the hierarchical regression analysis. Model 6 was the best explanatory model to explain *Intention to Leave*. The model had two significant explanatory relationships and two trend relationships among the predictors and *intention to leave*.

Affective Commitment ($t = -5.852, p = .000, \beta = -.391$) was the most important predictor in the model. It had a significant inverse relationship with *intention to leave*

indicating that as nurses are attached to the organization (higher *affective commitment* scores), that would be associated with lower *intention to leave*.

Praise and Recognition ($t = -2.077, p = .039, \beta = -.188$) was next in importance as a predictor of the model. It had a significant inverse relationship with *intention to leave* indicating that as a nurse perceives receiving a high level of praise and recognition, it would correlate with lower scores of *intention to leave*.

Global Transformational Leadership ($t = -1.675, p = .095, \beta = -.112$) showed an inverse trend relationship with *intention to leave* indicating that as nurses perceive *transformational leadership* traits in their leader, it could be associated with lower levels of *intention to leave*. *Satisfaction with scheduling* ($t = -1.743, p = .083, \beta = -.106$) also showed an inverse trend relationship with *intention to leave* indicating that as nurses were satisfied with their schedules, it could be associated with lower levels of *intention to leave*.

According to the findings, Hypothesis 6 was partially supported. *Organizational Commitment (affective)* and *Job Satisfaction (praise and recognition)* were significant negative explanatory variables of nurses' *Intention to Leave*. The explanatory model explained a range of 43.4% to 50.2% of the variation in nurses' *Job Satisfaction*. This is consistent with findings by McCarthy et al. (2007) where one of the most statistically significant predictor of intent to leave was job satisfaction ($p < 0.0001$). Ma et al (2009) also reported that nurses who intended to stay reported statistically higher job satisfaction than nurses who intended to leave. Job satisfaction was the most significant in predicting nurses' intention to leave. There is evidence in the literature of the inverse relationship

between organizational commitment and intention to leave nursing and the organization (Chang, et al., 2006; Labatmediene, et al., 2007). The results of testing the research hypotheses and linkages to the literature are summarized in Table 5-3.

Table 5-3

Summary of Hypotheses Testing and Results

Research Hypotheses	Variance Explained	Literature	Hypotheses Testing Results And Explanatory Variables in Model Selected
H1 Perceptions of transformational leadership and organizational commitment are significant explanatory variables of nurses' job satisfaction.			
H _{1a} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>extrinsic reward</i> .	10.8% to 22.9%	Partially Supported Jahangir, & Shokrpour (2009)	Partially Supported <i>Affective Commitment</i> was a significant positive explanatory variable of satisfaction with <i>extrinsic reward</i>
H _{1b} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>scheduling</i> .	14.9% to 21.4%	No empirical research found specific to the construct of scheduling satisfaction	Partially Supported <i>Affective Commitment</i> and <i>Transformational Leadership</i> were significant positive explanatory variables of satisfaction with <i>scheduling</i>
H _{1c} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>family and work balance</i> .	5.1% to 16.5%	No empirical research found specific to the constructs	Partially Supported <i>Affective Commitment</i> was a significant positive explanatory variable of satisfaction with <i>family and work balance</i>
H _{1d} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>co-workers</i> .	14.0% to 20.9%	No empirical research found specific to the constructs	Partially Supported <i>Affective Commitment</i> and <i>Transformational Leadership</i> were significant positive explanatory variables of satisfaction with <i>co-workers</i>
H _{1e} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>interaction opportunities</i> .	20.8% to 28.3%	No empirical research found specific to the constructs	Partially Supported <i>Affective Commitment</i> and <i>Transformational Leadership</i> were significant positive explanatory variables of satisfaction with <i>interaction opportunities</i>

Table 5-3 Continued

Research Hypotheses	Variance Explained	Literature	Hypotheses Testing Results And Explanatory Variables in Model Selected
<p>H_{1f} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>praise and recognition</i>.</p>	45.8% to 57.6%	<p>Partially Supported Nguni et al. (2006)</p>	<p>Partially Supported <i>Affective Commitment, Normative Commitment, and Transformational Leadership</i> were significant positive explanatory variables of satisfaction with <i>praise and recognition</i></p>
<p>H_{1g} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' satisfaction with <i>control and responsibility</i>.</p>	17.7% to 25.1%	<p>No empirical research found specific to the constructs</p>	<p>Partially Supported <i>Affective Commitment, Normative Commitment, and Transformational Leadership</i> were significant positive explanatory variables of satisfaction with <i>control and responsibility</i></p>
<p>H_{1h} Perceptions of transformational leadership and organizational commitment (affective commitment, continuance commitment, and normative commitment) are significant explanatory variables of nurses' <i>job satisfaction</i> (Total Score).</p>	35.5% to 50.7%	<p>Partially Supported Al-Hussami (2009); Nguni et al. (2006); Walumbwa et al. (2004)</p>	<p>Partially Supported <i>Affective Commitment, Normative Commitment, and Transformational Leadership</i> were significant positive explanatory variables of total <i>job satisfaction</i></p>
<p>H₂ Perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.</p>	28.1 to 50.7%	<p>Partially Supported Bibby, (2008); Lee, & Liu (2007)</p>	<p>Partially Supported <i>Affective Commitment, Job Satisfaction, and Transformational Leadership</i> were significant negative explanatory variables of <i>intention to leave</i></p>
<p>H₃ Organizational commitment mediates the relationship between transformational leadership and nurses' intention to leave.</p>		<p>Partially Supported Boyle (1999); Labatmediene et al. (2007)</p>	<p>Partially Supported <i>Organizational Commitment</i> (affective and normative) mediates the relationship between <i>Transformational Leadership</i> and nurses' <i>intention to leave</i></p>
<p>H₄ Job satisfaction mediates the relationship between transformational leadership and nurses' intention to leave.</p>		<p>Partially Supported Clugston, (2000); Ma et al. (2009); Nguni et al. (2006)</p>	<p>Supported <i>Job Satisfaction</i> mediates the relationship between <i>Transformational Leadership</i> and nurses' <i>intention to leave</i></p>

Table 5-3 Continued

Research Hypotheses	Variance Explained	Literature	Hypotheses Testing Results And Explanatory Variables in Model Selected
<p>H5 Demographic and work profile characteristics, perceptions of transformational leadership, and organizational commitment are significant explanatory variables of nurses' job satisfaction.</p>	43.9% to 56.2%	<p>Partially Supported Cortese et al. (2010); Nielsen et al (2008)</p>	<p>Partially Supported <i>Demographic Characteristics (Hourly Wage), Work Profile Characteristics (Hospital), Transformational Leadership, and Organizational Commitment (affective, and normative) were significant explanatory variables of nurses' Job Satisfaction</i></p>
<p>H6 Demographic and work profile characteristics, perceptions of transformational leadership, organizational commitment, and job satisfaction are significant explanatory variables of nurses' intention to leave.</p>	43.4% to 50.2%	<p>Partially Supported Chang et al. (2006) Labatmediene et al. (2007) Ma et al. (2009); McCarthy et al. (2007)</p>	<p>Partially Supported <i>Organizational Commitment (affective) and Job Satisfaction (praise and recognition) were significant negative explanatory variables of nurses' intention to leave</i></p>

Implications

Healthcare organizations may use the results of this study to design policies, strategies and workplace activities that are aimed at increasing perception of transformational leadership, increasing job satisfaction, and organizational commitment, thereby, decreasing the intention of registered nurses to leave the organization. The cost of nurses leaving an organization is significant. Studies report that replacing a medical-surgical nurse can cost \$92,442, while replacing a specialty nurse can increase the cost to \$145,000 (Atencio, et al., 2003). The leadership style of the nurse manager is impactful as organizational leaders struggle to prevent the exodus of nurses. Kleinman (2004)

contents that effective leadership style of nurse managers enhance nurse retention.

Further implications are outlined as follows:

1. Nurse leaders at all levels must recognize that demonstrating transformational leadership behaviors serve to energize the members of the nursing team and can be associated with low turnover. Effective nursing leadership should be an integral component of nursing retention strategies (Kleinman, 2004).
2. Create leadership development plans that focus on aspects of transformational leadership.
3. Nurse leaders should be cognizant of the issues that may impact the job satisfaction of staff nurses such as scheduling flexibility, and praise and recognition. Rewards and recognition programs should be formal and consistent.
4. Provide nurses with the opportunity to share in the practice and standards that impact their individual units and the entire organization. This serves to increase organizational commitment.
5. Nurse leaders should actively partner with human resources professionals to systematically re-recruit employed registered nurses to prevent intention to leave.
6. It is important that hospital administrators and nurse leaders recognize that multiple generations are now engaged in patient care. Leaders should become adept at issues that are important to each generation in order to decrease intention to leave.

7. As the nursing work force ages, to prevent turnover, nurse leaders and organizations must develop strategies that are aimed at retaining the aging nursing work force that consists of intellectual capital.
8. The engagement of the highly educated nurse is pivotal for improved patient care and outcomes. Healthcare organizations must develop strategies for decreasing intention to leave among highly educated nurses.
9. Salaries for registered nurses must remain competitive with consideration for tenure and experience.
10. As a large healthcare organization, Tenet Healthcare has the unique ability of being able to adopt retention strategies that can have far-reaching effects across the organization.
11. It is imperative that healthcare organizations adopt intentional, systematic strategies that address intention to leave, and turnover in their registered nurse workforce.

Conclusions

1. *Satisfaction with scheduling* and *satisfaction with co-workers* was highest among registered nurses in the 51 to 55 age group.
2. *Married* registered nurses reported significantly higher *job satisfaction*.
3. While the majority of the data producing sample was *White* (72.7%), *affective commitment* was significantly higher for *Asian* registered nurses.

4. Related to *organizational commitment*, registered nurses who identified *Spanish* as their primary language spoken, reported significantly higher *affective commitment*.
5. Registered nurses with a *doctorate* degree reported significantly higher *intention to leave* than the *Associate* level nurse or the *Bachelors* level nurse. Nurses with doctorate degrees would have opportunities available, or would be in pursuit of opportunities that were away from doing bedside patient care.
6. Nurses who were in their current job for *7 to 10 years* had higher *affective commitment*. These nurses were more emotionally attached to their organization. Nurses who were in the current job for *ten or more years* had significantly higher *continuance commitment*. These nurses remained in the organization based on the costs associated with leaving the organization. This would be especially impactful for nurses who were invested ten years or more in an organization. Those who were registered nurses for *greater than 27 years* also reported significantly higher *continuance commitment*.
7. The *hospital* also impacted organizational commitment of registered nurses with Tenet South Florida. Nurses at *Coral Gables* had higher *affective commitment* and significantly higher *job satisfaction*. The nurses at *Coral Gables* and *West Boca* had the lowest intention to leave.
8. Consistent with other research (Tourangeau, et al., 2006), while the MMSS remains a valid measure of nursing job satisfaction, the eight subscales could not be validated. As a result of this study's internal consistency reliability analysis,

results suggest that this instrument needs further development in subscales that had lower Cronbach's alpha.

9. *Affective Commitment, Normative Commitment, and perception of Transformational Leadership* are significant positive explanatory variables of total *Job Satisfaction* of registered nurses.
10. *Affective Commitment, Job Satisfaction, and perception of Transformational Leadership* are significant negative explanatory variables of *intention to leave*.
11. *Affective Commitment* and *Normative Commitment* mediate the relationship between *Transformational Leadership* and nurses' *intention to leave*.
12. *Job Satisfaction* mediates the relationship between *Transformational Leadership* and nurses' *intention to leave*.
13. The *Hourly Wage* of registered nurses, the *Hospital* environment, perception of *Transformational Leadership, Affective Commitment, and Normative Commitment* are significant explanatory variables of *Job Satisfaction* in registered nurses.

Limitations

While other studies have looked at individual variables that impact turnover and nurses' intention to leave, this study was one of the most comprehensive in examining if *organizational commitment* and *job satisfaction* mediates the relationship between perception of *transformational leadership* and nurses' *intention to leave*. The study limitations are as follows:

1. The non-experimental design of this study was weaker than an experimental design.

2. The sample size of 264 registered nurses does not represent the entire Tenet RN population, nor does it represent nurses from across the United States.
3. The sample size was not sufficient to generalize findings with confidence to the target population. It may also be difficult to generalize findings across other industries.
4. The researcher is the Chief Nursing Officer of one of the Hospitals included in the study. Threats to external validity included the risk of obtaining biased data from respondents who worked at the CNO's facility.
5. This research did not account for changes that occurred in Tenet and in individual hospitals during the data collection phase, such as, volume decreases, changes in organizational leadership, and changes in unit leadership.
6. The survey was launched during a time when there were economic issues in the United States such as lay-offs. Health care was not immune from the changes that were impacting the economy. The results of this survey could have been impacted by economic changes when nurses were not willing to leave their jobs.
7. The study only measured nurses' intention to leave and did not assess actual turnover.
8. The study did not examine intention to leave among supervisory nurses.
9. Although the instruments used were well established, two of the MMSS subscales had lower reliability than the generally accepted standard.

Recommendations for Future Study

1. While there is much in the literature on the individual variables, or a combination of the variables in the study, future studies are recommended that further explore the relationship among *Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* in registered nurses.
2. Future studies utilizing this study's model to analyze *Transformational Leadership*, *Organizational Commitment*, *Job Satisfaction*, and *Intention to Leave* in registered nurses should be conducted in order to compare the results of this study.
3. In today's healthcare environment, there are multiple generations and multiple settings for registered nurses. Consequently, the language of the *Three Component Model of Organizational Commitment* survey tool may appear dated. Further studies are needed that examine the psychometric properties of the Three Component Model of Organizational Commitment and its relevance in today's healthcare environment.
4. All of the subscales of the MMSS did not yield satisfactory measures of internal consistency reliabilities. Further study is needed to redevelop the items of the MMSS to improve factors related to internal consistency.
5. The study was specific to nurses in a for-profit hospital setting. Further studies are needed that examine if there are differences in intention to leave among nurses in a non-for-profit hospital setting.

6. There was a trend throughout this study where the hospitals in the Miami market perceived higher transformational leadership, reported higher organizational commitment and job satisfaction, while reporting lower intention to leave, than hospitals in the Broward and Palm Beach market. The Miami market hospitals were synonymous with hospitals where nurses identified Spanish as their primary language. Cultural and racial differences among nurses may play a role in intention to leave. Further studies are needed that examine the role of race and culture in nurses' intention to leave.
7. Further empirical evidence is needed that support strategies that effectively decrease intention to leave among nurses.
8. The study did not examine intention to leave among supervisory nurses. Further studies are needed that examine whether intention to leave among supervisory nurses is a significant explanatory variable in intention to leave in registered nurses.

This study was aimed at examining the relationship among perception of transformational leadership, organizational commitment, job satisfaction and intention to leave among registered nurses. Inclusion of job satisfaction and organizational commitment explained more variances in intention to leave. Findings also indicate that affective commitment plays a pivotal role in intention to leave among registered nurses.

Chapter V discussed the outcome of the analyses with answering of the research questions and testing of the hypotheses. Findings were interpreted based on review of the instrumentation and review of the literature. Implications and conclusions derived

from the interpretations were also discussed. The limitations of the study along with recommendations for future study were also addressed. The researcher's goal was to add to growing nursing empirical literature that focus on leadership, organizational commitment and intention to leave among nurses. This study may contribute to the body of scholarly knowledge on leadership styles, job satisfaction, organizational commitment and turnover.

REFERENCES

- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., Busse, R., Clarke, H.,
Giovannetti, P., Hunt, J., Rafferty, A., & Shamian, J. (2001). Nurses' reports in
hospital care in five countries. *Health Affairs, 20*(3), 43-53.
- Aiken, L. H., Clarke, S. P., Sloane, D. M., Sochalski, J. A., & Silber, J. H. (2002).
Hospital nurse staffing and patient mortality, nurse burnout, and job
dissatisfaction. *JAMA: Journal of the American Medical Association, 288*(16),
1987-1993.
- Al-Hussami, M. (2009). Predictors of nurses' commitment to health care organizations.
Australian Journal of Advanced Nursing, 26(4), 36-48.
- Allen, M. W. (1996). The relationship between communication, affect, job alternatives,
and voluntary turnover intentions. *The Southern Communication Journal, 61*(3),
198-209. Retrieved September 10, 2006, from ProQuest database.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective,
continuance and normative commitment to the organization. *Journal of
Occupational Psychology, 63*(1), 1-18.
- American Hospital Association. (2005). *Taking the pulse: The state of America's
hospitals*. Retrieved September 17, 2006, from
www.ahapolicyforum.org/ahapolicyforum/reports
- American Hospital Association. (2007). *The 2007 state of America's hospitals- Taking
the pulse*. Retrieved June 1, 2008 from
www.ahapolicyforum.org/ahapolicyforum/reports

- Arvidsson, M., Johansson, C. R., Ek, A., & Akselsson, R. (2007). Situational leadership in air traffic control. *Journal of Air Transportation*, 12(1) 67-86.
- Atencio, B. L., Cohen, J., & Gorenberg, B. (2003). Nursing retention: Is it worth it? *Nursing Economics*, 21(6), 262-268.
- Avery, G. C., & Ryan, J. (2002). Applying situational leadership in Australia [Electronic version]. *Journal of Management Development*, 21(3), 242-262.
- Avery, R. D., Abraham, L. M., Bouchard, T. J., & Segal, N. L. (1989). Job satisfaction: environmental and genetic components. *Journal of Applied Psychology*, 74(2) 187-192. Retrieved September 10, 2006, from ProQuest database.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462. Retrieved September 10, 2006, from ProQuest database.
- Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. *Journal of Organizational Behavior*, 25, 951-968. Retrieved September 10, 2006, from ProQuest database.
- Barak, M. E. M., Nissly, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research? A review and metanalysis. *The Social Service Review*, 75(4), 625-661.

- Barge, J. K., & Schlueter, D. W. (1991). Leadership as organizing: A critique of leadership instruments. *Management Communication Quarterly*, 4(4) 541-570. Retrieved September 10, 2006, from ProQuest database.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: The Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Multifactor Leadership Questionnaire: Form 6S*. Retrieved April 1, 2008, from <http://exed.wisc.edu/leadership/leading-coaching/Bass%20Multifactor%20Leadership%20Questionnaire.doc>
- Bass, B. M., & Avolio, B. J. (2000). *Multifactor Leadership Questionnaire, Sampler Set*. CA: Mind Garden. Retrieved January 16, 2007, from www.mindgarden.com/products/mlq.htm
- Bass, B. M., & Avolio, B. J. (2006). *Multifactor Leadership Questionnaire: The benchmark measure of transformational leadership*. Retrieved November 6, 2006, from www.mindgarden.com/products/mlq.htm
- Bass, B. M., Waldman, D. A. Avolio, B. J., & Bebb, M. (1987). Transformational leadership and the falling dominoes effect [Electronic version]. *Group and Organization Studies*, 12(1) 73-87.
- Bernard Hodes Group. (2005). *Health care survey shows trends in nurses recruiting*. Retrieved September 17, 2006, from www.hodes.com
- Bibby, C. L. (2008). Should I stay or should I leave? Perceptions of age discrimination, organizational justice, and employee attitudes on intentions to leave. *The Journal of Applied Management and Entrepreneurship*, 13(2), 63-85.

- Bluedorn, A. C. (1982). The theories of turnover: Causes, effects, and meanings. Pp. 75-128 in S.B. Bacharach (Ed.). *Research in the sociology of organizations*, Vol.1. Greenwich, CT: JAI Press.
- Boyle, D. K., Bott, M. J., Hansen, H. E., Woods, C. Q., & Taunto, R. L. (1999). Manager's leadership and critical care nurses' intent to stay. *American Journal of Critical Care*, 8(6), 361-371.
- Bratt, M.M., Broome, M., Kelber, S., & Lostocco, L. (2000). Influence of stress and nursing leadership on job satisfaction of Pediatric Intensive Care Unit nurses. *American Journal of Critical Care*, 9(5), 307-318.
- Brooks, I., & Swailes, S. (2002). Analysis of the relationship between nurses influences over flexible working and commitment to nursing. *Journal of Advanced Nursing*, 38(2), 117-126.
- Brown, L. M., & Posner, B. Z. (2001). Exploring the relationship between learning and leadership. *Leadership and Organization Development Journal*, 22(6), 274-280. Retrieved February 8, 2008, from ProQuest database.
- Buerhaus, P. I., Staiger, D. O., & Auerbach, D. I. (2009). *The future of the nursing workforce in the United States: Data, trends and implications*. Sudbury, MA: Jones and Bartlett.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row Publishers.
- Carless, S. A., Wearing, A. J., & Mann, L. (2000). A short measure of transformational leadership. *Journal of Business and Psychology*, 14(3), 389-405.

- Castle, N.G., Engberg, J., Anderson, R., & Men, A. (2007). Job satisfaction of nurses aides in nursing homes: Intent to leave and turnover. *The Gerontologist, 47*(2), 193-204. Retrieved February 8, 2008, from ProQuest database.
- Chang, C. S., Du, P. L., & Huang, I. C. (2006). Nurses' perceptions of severe acute respiratory syndrome: relationship between commitment and intention to leave nursing. *Journal of Advanced Nursing, 54*(2), 171-179.
- Chen, H. C., Beck, S. L., & Amos, L. K. (2005). Leadership styles and nursing faculty job satisfaction in Taiwan. *Journal of Nursing Scholarship, 37*(4), 374-380. Retrieved September 10, 2006, from ProQuest database.
- Chen, J.C., & Silverthorne, C. (2005). Leadership effectiveness, leadership style and employee readiness. *Leadership and Organizational Development, 26*(3), 280-288.
- Chu, C. I., Hsu, H.M., Price, J.L., & Lee, J. Y. (2003). Job satisfaction of hospital nurses: An empirical test of a causal model in Taiwan. *International Nursing Review, 50*(2), 176-182.
- Clugston, M. (2000). The mediating effects of multidimensional commitment on job satisfaction and intent to leave. *Journal of Organizational Behavior, 21*(4), 477-486.
- Coban, B. (2010). An evaluation of the job satisfaction levels of Turkish provincial football referees. *Social Behavior and Personality, 38*(9), 1153-1166.

- Cohen, A. (1993). Age and tenure in relation to Organizational Commitment: A meta-analysis. *Basic and Applied Social Psychology, 14*(2), 143-159. Retrieved September 10, 2008, from ProQuest database.
- Cohen, J. (1968). Multiple regression as a general data-analytic system. *Psychological Bulletin, 70*(6), 426-443. Retrieved September 10, 2008, from ProQuest database.
- Cohen, J. D. (2006). The aging nursing workforce: How to retain experienced nurses. *Journal of Healthcare Management, 51*(4), 233-245.
- Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review, 12*(4), 637-647. Retrieved September 10, 2006, from ProQuest database.
- Conger, J. A., & Kanungo, R. N. (1994). Charismatic leadership in organizations: Perceived behavioral attributes and their measurement. *Journal of Organizational Behavior, 15*(5), 439-452. Retrieved September 10, 2006, from ProQuest database.
- Conger, J. A., Kanungo, R. N., Menon, S. T., & Mathur, P. (1997). Measuring charisma: Dimensionality and validity of the Conger-Kanungo Scale of charismatic leadership. *Revue Canadienne des Science de l'Administration, 14*(3) 290-302. Retrieved September 10, 2006, from ProQuest database.
- Conger, J. A., Kanungo, R. N., & Menon, S. T. (2000). Charismatic leadership and follower effects. *Journal of Organizational Behavior, 21*(7), 747-767. Retrieved September 10, 2006, from ProQuest database.

- Cortese, C. G., Colombo, L., & Ghislieri, C. (2010). Determinants of nurses' job satisfaction: The role of work-family conflict, job demand, emotional charge and social support. *Journal of Nursing Management, 18*, 35-43.
- Cunningham, G. B., & Sagas, M. (2004). The effect of group diversity on organizational commitment. *International Sports Journal, 8*(1), 124-131.
- Den Hartog, D. N., Van Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology, 70*, 19-34. Retrieved September 10, 2006, from ProQuest database.
- Department of Health and Human Services (2008). *The Registered Nurse population: Findings from the 2008 national sample survey of Registered Nurses*. Retrieved September 17, 2010, from <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/>
- Elenkov, D. S., Judge, W., & Wright, P. (2005). Strategic leadership and executive innovation influence: An international multi-cluster comparative study. *Strategic Management Journal, 26*(7). 665-682. Retrieved April 10, 2008, from ProQuest database.
- Enger, J. M. (2004). [Review of the Leadership Practices Inventory]. In J.C. Conoley & J.C. Impara (Eds.), *The fourteenth mental measurements yearbook*. Retrieved March 1, 2008, from Mental Yearbook database.
- Felfe, J., Tartler, K., & Liepmann, D. (2004). Advanced research in the field of transformational leadership. *German Journal of Human Resource Research, 18*(3), 262-288. Retrieved September 6, 2006, from ProQuest database.

- Ferreira, M. M. F. (2007). Nurses organizational commitment: The discriminating power of gender. *Nursing Administration Quarterly*, 31(1), 61-67. Retrieved April 10, 2008, from ProQuest database.
- Field, A. (2006). *Discovering statistics using SPSS*. (2nd ed.). Thousand Oaks, CA; Sage Publications, Inc.
- Fields, D. L., & Herold, D. M. (1997). Using the Leadership Practices Inventory to measure transformational and transactional leadership. *Educational and Psychological Measurement*, 57(4), 569-580. Retrieved April 10, 2008, from ProQuest database.
- Futrell, C. M. (1979). Measurement of salespeoples' job satisfaction: Convergent and discriminant validity of corresponding INDSALES and job descriptive index scales. *Journal of Marketing Research*, 16(4), 594-597. Retrieved March 1, 2008, from ProQuest database.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction*. MA: Allyn and Bacon.
- Gardner, W. L., & Cleavenger, D. (1998). The impression management strategies associated with transformational leadership at the world-class level. *Management Communication Quarterly*, 12(1), 3-41. Retrieved September 9, 2006, from ProQuest database.
- Gay, L. R., & Airasian, P. (2000). *Educational research: Competencies for analysis and application* (6th ed.). Upper saddle River, NJ: Prentice-Hall, Inc.

- Gellis, Z. D. (2001). Social work perceptions of transformational and transactional leadership in healthcare. *Social Work Research, 25*(1), 17-25. Retrieved September 10, 2006, from ProQuest database.
- Goodson, J. R., McGee, G. W., & Cashman, J. F. (1989). Situational leadership theory. *Group and Organization Studies, 14*(4), 446-461. Retrieved September 9, 2006, from ProQuest database.
- Graeff, C. L. (1983). The situational leadership theory: A critical view. *Academy of Management Review, 8*(2), 285-291.
- Graeff, C. L. (1997). Evolution of the situational leadership theory: A critical review. *Leadership Quarterly, 8*(2), 153-170. Retrieved May 31, 2009, from ProQuest database.
- Green, S. B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioral Research, 26*(3), 499-510.
- Greene, J. F. (1980). *Executive summary for the LEAD Self Manual*. Retrieved March 31, 2008 from http://www.sitlead.com.au/LEAD_ExecSum.pdf
- Hammer, V. R., & Craig, G. P. (2008). The experiences of inactive nurses returned to nursing after completing a refresher course. *The Journal of Continuing Education in Nursing, 39*(8), 358-367. Retrieved July 15, 2008, from ProQuest database.
- Harris, K. J., Kacmar, K. M., & Witt, L. A. (2005). An examination of the curvilinear relationship between leader-member exchange and intent to turnover. *Journal of Organizational Behavior, 26*, 363-378.

- Hart, S. E. (2005). Hospital ethical climates and registered nurses' turnover intentions. *Journal of Nursing Scholarship, 37*(2), 173-177. Retrieved June 9, 2008, from ProQuest database.
- Harwell, M. R. (2004). [Review of the Job Descriptive Index and The Job in General Scales]. In J.C. Conoley & J.C. Impara (Eds.). *The fifteenth mental measurements yearbook*. Retrieved September 9, 2006, from Mental Yearbook database.
- Health Resources and Services Administration (2006). *What is behind HRSA's projected supply demand, and shortage of registered nurses?* Retrieved June 1, 2008 from <http://bhpr.hrsa.gov/healthworkforce/reports>
- Hersey, P., Angelini, A. L., & Carakushansky, S. (1982). The impact of situational leadership and classroom structure on learning effectiveness. *Group and Organization Studies, 7*(2), 216-224. Retrieved June 9, 2008, from ProQuest database.
- Hersey, P., Blanchard, K. H., & Natemeyer, W. E. (1979). Situational leadership, perception, and the impact of power. *Group and Organization Studies, 4*(4), 418-428. Retrieved June 9, 2008, from ProQuest database.
- Hsu, J., Hsu, J. C., Huang, S. Y., Leong, L., & Li, A. M. (2003). Are leadership styles linked to turnover intention: An examination in Mainland China? *Journal of American Academy of Business, Cambridge, 3*(2), 37-43. Retrieved June 9, 2008, from ProQuest database.

- Hwang, I. S., & Kuo, J. H. (2006). Effects of job satisfaction and perceived alternative employment opportunities and turnover intention: An examination of public sector organizations. *Journal of American Academy of Business*, 8(2), 254-259.
- Ireh, M., & Bailey, J. (1999). A study of superintendents' change leadership styles using the situational leadership model. *American Secondary Education*, 27(4), 22-32. Retrieved June 9, 2008, from ProQuest database.
- Ironson, G. H., Smith, P.C., Brannick, M. T., Gibson, W. M., & Paul, K. B. (1989). Construction of a Job in General Scale: A comparison of global, composite, and specific measures. *Journal of Applied Psychology*, 74(2) 193-200. Retrieved February 14, 2008, from ProQuest database.
- Jackson, C. J., & Corr, P. J. (2002). Global job satisfaction and facet description: The moderating role of facet importance. *European Journal of Psychological Assessment*, 18(1), 1-8. Retrieved February 14, 2008, from ProQuest database.
- Jahangir, F., & Shokrpour, N. (2009). Three components of organizational commitment and job satisfaction of hospital nurses in Iran. *The Health Care Manager*, 28(4), 375-380.
- Jenkins, J. M. (1993). Self-monitoring and turnover: The impact of personality on intent to leave. *Journal of Organizational Behavior*, 14, 83-91. Retrieved September 6, 2006, from ProQuest database.
- Johnson, J. C., McClure, D. J., & Schneider, K. C. (1999). Job satisfaction of logistics managers: Female versus male perspectives. *Transportation Journal*, 39(1), 5-19. Retrieved March 3, 2008, from ProQuest database.

- Kane, T. D., & Tremble, T. R. (2000). Transformational leadership effects at different levels of the Army. *Military Psychology, 12*(2), 137-160. Retrieved September 9, 2006, from ProQuest database.
- Kest, R. T. (2006). Principles of leadership: Leadership management. *Futurics, 30*(1), 52-71. Retrieved September 9, 2006, from ProQuest database.
- Kickul, J. (2001). Promises made, promises broken: An exploration of employee attraction and retention practices in small business. *Journal of Small Business Management, 39*(4), 320-335. Retrieved January 18, 2008, from ProQuest database.
- Kleinman, C. (2004). Leadership: A key strategy in staff nurse retention. *The Journal of Continuing Education in Nursing, 35*(3), 128-132. Retrieved September 9, 2006, from ProQuest database.
- Kleinman, C. (2004). The relationship between managerial leadership behaviors and staff nurse retention [Electronic version]. *Hospital Topics, 82*(4), 2-9.
- Kovner, C., Brewer, C., Wu, Y., Cheng, Y., & Suzuki, M (2006). Factors associated with work satisfaction of registered nurses. *Journal of Nursing Scholarship, 38*(1), 71-79. Retrieved January 18, 2008, from ProQuest database.
- Krackhardt, D., McKenna, J., Porter, L. W., & Steers, R. M. (1981). Supervisory behavior and employee turnover: A field experiment. *Academy of Management Journal, 24*(2), 249-259. Retrieved January 18, 2008, from ProQuest database.
- Labatmediene, L., Endriulaitiene, A., & Gustainiene, L. (2007). Individual correlates of organizational commitment and intention to leave the organization. *Baltic*

- Journal of Management*, 2(2), 196-212. Retrieved September 18, 2008, from ProQuest database.
- Lee, B. H., & Jamil, M. (2003). An empirical study of organizational commitment: A multi-level approach. *The Journal of Behavioral and Applied Management*, 4(3), p.176-187. Retrieved December 5, 2006, from http://ibam.com/pubs/jbam/articles/vol4/article4_10.htm
- Lee, H. W., & Liu, C. H. (2007). An examination of factors affecting repatriates' turnover intentions. *International Journal of Manpower*, 28(2), 122-134.
- Lee, K., Allen, N. J., Meyer, J. P., & Rhee, K. Y. (2001). The Three-Component Model of Organizational Commitment: An application to South Korea. *Applied Psychology: An International Review*, 50(4), 596-614.
- Lee, K.S., & Goa, T. (2005). Studying organizational commitment with the OCQ in the Korean retail context: Its dimensionality and relationships with satisfaction and work outcomes. *International Review of Retail, Distribution and Consumer Research*, 15(4), 375-399.
- Lee, T. W., & Mowday, R. T. (1987). Voluntarily leaving an organization: an empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal*, 30(4), 721-743. Retrieved September 9, 2006, from ProQuest database.
- Locke, E. A. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*, 4(4), 309-336.

- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. *Organizational Behavior and Human Performance*, 5(5), 484-500.
- Locke, E. A., (1976). The nature and causes of job satisfaction. Pp. 1297-1349 in M. D. Dunette (Ed.), *Handbook of industrial and organizational psychology*, Chicago: Rand McNally.
- Lum, L., Kervin, J., Clark, K., Reid, F., & Sirola, W. (1998). Explaining nursing turnover intent: Job satisfaction, pay satisfaction, or organizational commitment? *Journal of Organizational Behavior*, 19(3), 305-320.
- Ma, J. C., Lee, P. H., Yang, Y. C., & Chang, W. Y. (2009). Predicting factors related to nurses' intention to leave, job satisfaction, and perception of quality of care in acute hospitals. *Nursing Economics*, 27(3), 178-184.
- Madhu, B., & Krishnan, V. R. (2005). Impact of transformational leadership and Karma-Yoga in organizational citizenship behavior. *Prestige Journal of Management Research*, 9(1), 1-20. Retrieved April 1, 2008, from www.rkvenkat.org/madha.pdf
- Mallol, C. M., Holtom, B. C., & Lee, T. W. (2007). Job embeddedness in a culturally diverse environment. *Journal of Business and Psychology*, 22(1), 35-44.
- McCarthy, G., Tyrrell, M. P., & Lahane, E. (2007). Intention to leave or stay in nursing. *Journal of Nursing Management*, 15(3), 248-255.
- McCoy, C. H., & Nradley, C. A. (2005). African-American counselor educators' job satisfaction and perceptions of departmental racial climate. *Counselor Education*

and Supervision, 45(1), 2-14. Retrieved February 14, 2008, from ProQuest database.

McFarlin, D. B., Coster, E. A., Rice, R. W., & Cooper, A. T. (1995). Facet importance and job satisfaction: Another look at the range-of-affect hypothesis. *Basic and Applied Social Psychology*, 16(4), 489-502. Retrieved February 14, 2008, from ProQuest database.

Medley, F., & Larochelle, D. R. (1995). Transformational leadership and job satisfaction [Electronic version]. *Nursing Management*, 26(9), 64JJ-64NN.

Meyer, J. P., & Allen, N. J. (1991). A three component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89. Retrieved September 9, 2006, from ProQuest database.

Meyer, J. P., & Allen, N. J., & Smith, C. A. (1991). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551. Retrieved September 9, 2007, from ProQuest database.

Meyer, J. P., & Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86(3), 493-522. Retrieved January 26, 2008, from ProQuest database.

- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology, 63*(4), 408-414.
- Morrison, R. S., Jones, L., & Fuller, B. (1997). The relation between leadership style and empowerment in job satisfaction of nurses. *Journal of Nursing Administration, 27*(5), 27-34.
- Mowday, R. T., Koberg, C. S., & McArthur, A. W. (1984). The psychology of the withdrawal process: A cross-validation test of Mobley's intermediate linkages model of turnover in two samples. *Academy of Management Journal, 27*(1), 79-94.
- Mueller, C. W., & McCloskey, J. C. (1990). Nurses' job satisfaction. *Nursing Research, 39*(2), 113-117.
- Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing, 5*(2), 159-168. Retrieved September 26, 2008, from ProQuest database.
- Munir, F., & Nielsen, K. (2009). Does self-efficacy mediate the relationship between transformational leadership behaviours and healthcare workers' sleep quality? A longitudinal study. *Journal of Advanced Nursing, 65*(9), 1833-1843.
- Nedd, N. (2006). Perceptions of empowerment and intent to stay. *Nursing Economics, 24*(1), 13-19.

- Needleman, J., Buerhaus, P. I., Mattke, S., Stewart, M., & Zelevinsky, K., (2002). Nurse-staffing levels and the quality of care in hospitals. *New England Journal of Medicine*, 346(22), 1715-1722.
- Nevidjon, B., & Erickson, J. I. (2001). The nursing shortage: Solutions for short and long-term. *Online Journal of Issues in Nursing*, 6, 1-17. Retrieved September 6, 2006, from http://www.nursingworld.org/ojin/topic14/tpc14_4.htm
- Nguni, S., Slegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17(2), 145-177.
- Nielsen, K., Yarker, J., Brenner, S. O., Randall, R., & Borg, V. (2008). The importance of transformational leadership style for the well-being of employees working with older people. *Journal of Advanced Nursing*, 63(5), 465-475.
- Nogueras, D. J. (2006). Occupational commitment, education, and experience as a predictor of intent to leave the nursing profession. *Nursing Economics*, 24(2), 86-93. Retrieved January 16, 2008, from ProQuest database.
- Norris, W. R., & Vecchio, R. P. (1992). Situational leadership theory: A replication [Electronic version]. *Group and Organization Management*, 17(3), 331-342.
- Ozyurt, A., Hayran, O., & Sur, H. (2006). Predictors of burnout and job satisfaction among Turkish physicians. *Quarterly Journal of Medicine*, 99(3), 161-169. Retrieved January 16, 2008, from ProQuest database.

- Pallant, J. (2007). *SPSS Survival Manual*. (3rd ed.). Berkshire, England: Open University Press.
- Pare G., & Tremblay, M. (2000). *The measurement of antecedents of turnover intentions among IT professionals*. Retrieved February 6, 2008, from <https://depot.erudit.org/retrieve/292/2000s-33.pdf>
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59(5), 603-609. Retrieved January 16, 2008, from ProQuest database.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717-731. Retrieved January 16, 2008, from ProQuest database.
- Price, J. L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, 22(7), 600-624.
- Price, J. L., & Mueller, C. W. (1981a). *Professional turnover: The case of nurses*. New York, NY: SP Medical and Scientific Books.
- Price, J. L., & Mueller, C. W. (1981b). A causal model of turnover for nurses. *Academy of Management Journal*, 24(3), 543-565.
- PricewaterhouseCooper Health Research Institute (2007). *What works: Healing the healthcare staffing shortage*. Retrieved May 29, 2008, from www.pwc.com

- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of Management Review*, *10*(3), 465-476. Retrieved January 16, 2008, from ProQuest database.
- Roberts, B. J., Jones, C., & Lynn, M. (2004). Job satisfaction of new baccalaureate nurses. *Journal of Nursing Administration*, *34*(9), 428-435.
- Rodwell, J., Noblet, A., Demir, D., & Steane, P. (2009). Supervisors are central to work characteristics affecting nurse outcomes. *Journal of Nursing Scholarship*, *41*(3), 310-319.
- Roth, J. E., & Coleman, C. L. (2008). Perceived and real barriers for men entering nursing: Implications for gender diversity. *Journal of Cultural Diversity*, *15*(3), 148-152.
- Samad, S. (2006). Predicting turnover intentions: The case of Malaysian government doctors. *Journal of American Academy of Business, Cambridge*, *8*(2), 113-119.
- Sampson, W. R. (2000). *Measures of leadership development: Leadership Effective and Adaptability Description (LEAD): Paul Hersey and Kenneth Blanchard*. Retrieved October 14, 2007, from <http://www.uwec.edu/Sampsow/Measures/Leadership-LEAD.htm>.
- Shirey, M. R. (2006). Authentic leaders creating healthy work environments for nursing practice. *American Journal of Critical Care*, *15*(3), 256-267. Retrieved September 6, 2006, from ProQuest database.
- Silverthorne, C. (2000). Situational leadership theory in Taiwan: A different culture perspective. *Leadership and Organizations Development Journal*, *21*(1), 68-74.

- Silverthorne, C., & Wang, T. H. (2001). Situational leadership style as a predictor of success and productivity among Taiwanese business organizations. *The Journal of Psychology, 135*(4), 399-412.
- Sorensen, E. E., Seebeck, E. D., Scherb, C. A., Specht, J. P., & Loes, J. L. (2009). The relationship between RN job satisfaction and accountability. *Western Journal of Nursing Research, 31*(7), 872-888.
- Spinelli, R. J (2006). The applicability of Bass' model of transformational, transactional, and laissez-faire leadership in the hospital administrative environment. *Hospital Topics, 84*(2), 11-18. Retrieved February 14, 2008, from ProQuest database.
- Steers, R. M., & Mowdy, R. T. (1981). Employee turnover and the post-decision accommodation process. Pp. 235-281 in L.L. Cummings & B.M. Staw (Eds.). *Research in organizational behavior, Vol.3*. Greenwich, CT: JAI.
- Stumpf, S. A., & Hartman, K. (1984). Individual exploration to organizational commitment or withdrawal [Electronic version]. *Academy of Management Journal, 27*(2), 308-329.
- Sumner, M., Bock., & Giamartino, G. (2006). Exploring the linkage between the characteristics of IT project leaders and project success. *Information Systems Management, 23*(4), 43-49. Retrieved February 10, 2008, from ProQuest database.
- Tambe, A., & Krishnan, V. R. (2000). Leadership in Decision-making [Electronic version]. *Indian Management, 39*(5), 69-79. Retrieved April 1, 2008, from www.rkvenkat.org/anaradha.pdf

- Tayyeb, S., & Riaz, M. N. (2004). Validation of the three-component model of organizational commitment in Pakistan. *Pakistan Journal of Psychological Research, 19*(3), 123-149. Retrieved February 14, 2008, from ProQuest database.
- Tepper, B. J., & Percy, P. M. (1994). Structural validity of the Multifactor Leadership Questionnaire. *Educational and Psychological Measurement, 54*(3) 734-744.
- Tett, R. P., & Meyer J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*(2), 259-293. Retrieved February 10, 2008, from ProQuest database.
- Tourangeau, A. E., & Cranley, L. A. (2006). Nurse intention to remain employed: Understanding and strengthening determinants. *Journal of Advanced Nursing, 55*(4), 497-509.
- Tourangeau, A. E., Hall, L. M., Doran, D. M., & Petch, T. (2006). Measurement of nurse job satisfaction using the McCloskey/Mueller Satisfaction Scale. *Nursing Research, 55*(2), 128-136.
- Trehan, K. (2007). Psychodynamic and critical perspectives on leadership development. *Advances in Developing Human Resources, 9*(1), 72-82. Retrieved February 10, 2008, from ProQuest database.
- Upenieks, V. (2003). Nurse leaders' perceptions of what compromises successful leadership in today's acute care inpatient environment. *Nursing Administration Quarterly, 27*(2), 140-152.

- Vanaki, Z., & Vagharseyyedin, S. A. (2009). Organizational commitment, work environment conditions, and life satisfaction among Iranian nurses. *Nursing and Health Sciences, 11*, 404-409.
- Van Breukelen, W., Van Der VList, R., & Steensma, H. (2004). Voluntary employee turnover: Combining variables from the “traditional” turnover literature with the theory of planned behavior. *Journal of Organizational Behavior, 25*, 893-914. Retrieved September 7, 2006, from ProQuest database.
- Van Sane, N., Sluiter, J. K., Verbeek, A. M., & Frings-Dresen, M. H. W. (2003). Reliability and validity of instruments measuring job satisfaction-a systemic review. *Occupational Medicine, 53*(3), 191-200. Retrieved September 7, 2006, from ProQuest database.
- VanVoorhis. R. W., & Levinson, E. M. (2006). Job satisfaction among school psychologists: A meta-analysis. *School Psychology Quarterly, 21*(1), 7-90. Retrieved February 10, 2008, from ProQuest database.
- Walter, J. E., Caldwell, S. D., & Marchall, J. (1980). Evidence for the validity of the Situational Leadership Theory. *Educational Leadership, 37*(8), 618-621. Retrieved March 31, 2008, from ProQuest database.
- Walumba, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and U.S. financial firms. *Human Resource Development Quarterly, 16*(2), 235-256. Retrieved September 7, 2007, from ProQuest database.

- Walumba, F. O., Orwa, B., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of Occupational and Organizational Psychology, 77*, 515-530. Retrieved September 7, 2007, from ProQuest database.
- Way, M., & MacNeil, M. (2006). Organizational characteristics and their effect on health. *Nursing Economics, 24*(2), 67-76.
- Wu, C., & Yao, G. (2006). Do we need to weight item satisfaction by item importance? A perspective from Locke's range of affect hypothesis. *Social Indicators Research, 79*, 485-502.
- Xu, L., & Bassham, L. S. (2010). Reexamination of factor structure and psychometric properties of the Three-Component Model of Organizational Commitment. *North American Journal of Psychology, 10*(2), 297-312. Retrieved October 13, 2010, from ProQuest database.
- Xu, Y., & Chanyeong, K. (2005). Characteristics of internationally educated nurses in the United States. *Nursing Economics, 23*(5), 233-238. Retrieved September 7, 2006, from ProQuest database.
- Yao, X., & Wang, L. (2008). Socially oriented values and reciprocity norm predict organizational commitment. *Asian Journal of Social Psychology, 11*(3), 247-252.
- Yeager, S. J. (1981). Dimensionality of the job descriptive index. *Academy of Management Journal, 24*(1), 205-212). Retrieved March 1, 2008, from ProQuest database.

Zorn, T. E., & Violanti, M. T. (1993). Measuring leadership style: A review of leadership style instruments for classroom use. *Communication Education*, 42(1), 70-78.

BIBLIOGRAPHY

- Deluga, R. J. (1988). Relationship of transformational and transactional leadership with employee influencing strategies. *Group and Organizational Studies*, 13(4), 456-467. Retrieved September 6, 2006, from ProQuest database.
- Harris, K. J., Kacmar, K. M., & Witt, L. A. (2005). An examination of the curvilinear relationship between leader-member exchange and intent to turnover [Electronic version]. *Journal of Organizational Behavior*, 26, 363-378.
- Mottaz, C. J. (1988). Work satisfaction among hospital nurses. *Hospital and Health Services Administration*, 33(1) 57-74. Retrieved September 6, 2006, from ProQuest database.
- Yammarino, F. J., & Dubinsky, A. J. (1994). Transformational leadership theory: Using levels of analysis to determine boundary conditions. *Personnel Psychology*, 47(4), 787-816. Retrieved September 6, 2006, from ProQuest database.

Appendix A

Filter Questions and Survey Instrument

Filter Questions

The following filter question will be posted on the first screen when participants access the survey on Survey monkey. In the event that the participant answers “no” to any of the questions, the participant will be existed from the survey at which point. The participant will be thanked for agreeing to participate.

1. Are you employed full-time in a non-supervisory role?
2. Are you a Registered Nurse?
3. Have you completed the 90 days orientation?

Part 1: Demographic Characteristics

Instructions: Please fill in the blanks or select the response that best describes you by checking one item for each category

1. **Age in years:** _____
2. **Gender:**
 - a. Male
 - b. Female
3. **Marital Status:**
 1. Married
 2. Single, Never Married
 3. Divorced or Separated
 4. Widow or Widower
4. **Race** (Select the **primary** race you consider yourself to be):
 - 1 White
 - 2 Black or African American
 - 3 American Indian or Alaska Native
 - 4 Asian
 - 5 Native Hawaiian or Pacific Islander
5. **Language** (Select the **primary** language that you speak):
 1. English
 2. Spanish
 3. Creole
 4. Other
6. **Highest Nursing Education Level:**
 1. Associate (or Diploma) in Nursing
 2. Bachelor in Nursing
 3. Masters in Nursing
 4. Doctoral Degree in Nursing
7. **Highest Degree Level:**
 - 1 Associate
 - 2 Bachelor
 - 3 Master
 - 4 Doctorate (PhD, DNSc, Ed.D. or the like)
8. **Hourly Wage:** _____

Part 2: Work Profile

Instructions: Please fill in the blanks or select the response that best describes you by checking one item for each category.

1. Length of employment in current job (in years): _____
2. Length of time as a registered nurse (in years): _____
3. Length of employment with Tenet (in years): _____
4. **Nursing Unit** (Select the **primary** unit where you work):
 - a. Critical Care (all Intensive Care Units)
 - b. Medical-Surgical
 - c. Telemetry
 - d. Surgical (Operating room, endoscopy lab, special procedures, recovery room)
 - e. Ambulatory Care
 - f. Emergency Department
 - g. Psychiatry
 - h. Women's Services (labor and Delivery, pre and post partum)
 - i. Pediatrics
5. **Shift Worked** (Select the **primary** shift that you work).
 1. 7A-7P
 2. 7A-3P
 3. 3P-11P
 4. 7P-7A
 5. 11P-7A
6. **Hospital** (Select the **primary** hospital where you work):
 - a. Coral Gables
 - b. Delray Medical Center
 - c. Florida Medical Center
 - d. Good Samaritan
 - e. Hialeah Hospital
 - f. North Shore Medical Center
 - g. Palm Beach Gardens
 - h. Palmetto General
 - i. St. Mary's Medical
 - j. West Boca Medical

Part 3: Transformational Leadership

INSTRUCTIONS: Please show the extent to which your nurse manager engages in each of the following behaviors. Respond to each statement by selecting one of the following options based on the typical behavior displayed by your manager: Rarely, or never, seldom or once in a while, occasionally or sometimes, fairly often or usually; and very frequently, if not always

		Rarely, or Never	Seldom or once in a while	Occasionally, Sometimes	Fairly Often, usually	Very Frequently, if not always
		1	2	3	4	5
1	Communicates a clear and positive vision of the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Treats staff as individuals, supports and encourages their development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Gives encouragement and recognition of staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Fosters trust, involvement and cooperation among team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Encourages thinking about problems in new ways and questions assumptions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Is clear about his/her values and practices what he/she preaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Instills pride and respect in others and inspires me by being highly competent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note. The Global Transformational Leadership Scale is from “A short measure of

transformational leadership,” by S. A. Carless, A. J. Wearing, and L. Mann, 2000,

Journal of Business and Psychology, 14(3), p. 389-405. Used with permission of the

First author.

Part 4: Organization Commitment

INSTRUCTIONS: Listed below is a series of statements that represent feelings that individuals might have about the organization for which they work. With respect to your own feelings about the particular organization for which you are now working, please indicate the degree of your agreement or disagreement with each statement by selecting a number from 1 to 7. The following statements relate to your feelings about perceived organizational commitment. Choosing a 7 means you strongly agree with the statement and choosing 1 means you strongly disagree.

		Strongly Agree	Agree	Slightly agree	Undecided	Slightly disagree	Disagree	Strongly Disagree
		7	6	5	4	3	2	1
1	I would be very happy to spend the rest of my career with this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I enjoy discussing my organization with people outside it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I really feel as if this organization's problems are my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	I think that I could easily become as attached to another organization as I am to this one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	I do not feel like 'part of the family' at my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	I do not feel 'emotionally attached' to this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	This organization has a great deal of personal meaning for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	I do not feel a strong sense of belonging to my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	I am not afraid of what might happen if I quit my job without having another one lined up.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	It would be very hard for me to leave my organization right now, even if I wanted to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Too much in my life would be disrupted if I decided I	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Strongly Agree	Agree	Slightly agree	Undecided	Slightly disagree	Disagree	Strongly Disagree
		7	6	5	4	3	2	1
	wanted to leave my organization now.							
12	It wouldn't be too costly for me to leave my organization now.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Right now, staying with my organization is a matter of necessity as much as desire.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	I feel that I have too few options to consider leaving this organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	One of the few serious consequences of leaving this organization would be scarcity of available alternatives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	I think that people these days move from company to company too often.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	I do not believe that a person must always be loyal to his or her organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Jumping from organization to organization does not seem at all unethical to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore feel a sense of moral obligation to remain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	If I got another offer for a better job elsewhere I would not feel it was right to leave my organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	I was taught to believe in the value of remaining loyal to one organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Strongly Agree	Agree	Slightly agree	Undecided	Slightly disagree	Disagree	Strongly Disagree
		7	6	5	4	3	2	1
23	Things were better in the days when people stayed with one organization for most of their careers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note. The Organizational Commitment survey is from “The measurement and antecedents of affective, continuance and normative commitment to the organization,”

by N. J. Allen and J. P. Meyer 1990, *Journal of Occupational Psychology*, 63, p. 6-7.

Copyright 2004 by University of Western Ontario. Used with permission of the Second Author and the University of Western Ontario.

Part 5: Job Satisfaction

INSTRUCTIONS: The following statements relate to your feelings about how satisfied you are with selected items of your current job as a registered nurse. Choosing a 5 means you are very satisfied and choosing 1 means you are very dissatisfied. You may choose any number between 1 and 5 that shows how strong your feelings are. There is no right or wrong answer. Please choose the number that best shows reflects your feelings about how satisfied you are with aspects of your current job.

		Very Satisfied	Moderately Satisfied	Neither satisfied, or dissatisfied	Moderately dissatisfied	Very Dissatisfied
		5	4	3	2	1
1	How satisfied are you with your salary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	How satisfied are you with your vacation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	How satisfied are you with your benefits package (insurance retirement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	How satisfied are you with your hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	How satisfied are you with flexible in scheduling your hours?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	How satisfied are you with the opportunity to work straight days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	How satisfied are you with opportunity for part-time work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	How satisfied are you with week-ends off per month?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	How satisfied are you with flexibility in scheduling your week-ends off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	How satisfied are you with compensation for working week-ends?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Very Satisfied	Moderately Satisfied	Neither satisfied, or dissatisfied	Moderately dissatisfied	Very Dissatisfied
		5	4	3	2	1
11	How satisfied are you with maternity leave time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	How satisfied are you with child care facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	How satisfied are you with your immediate supervisor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	How satisfied are you with your nursing peers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	How satisfied are you with the physicians you work with?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	How satisfied are you with the delivery of care method used on your unit (functional, team, primary)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	How satisfied are you with opportunities for social contact at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	How satisfied are you with opportunities for social contact with colleagues after work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	How satisfied are you with opportunities to interact professionally with other disciplines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20	How satisfied are you with opportunities to interact with faculty of the College of Nursing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21	How satisfied are you with opportunities to belong to department and institutional committees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	How satisfied are you with control over what goes on in	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		Very Satisfied	Moderately Satisfied	Neither satisfied, or dissatisfied	Moderately dissatisfied	Very Dissatisfied
		5	4	3	2	1
	your work setting?					
23	How satisfied are you with opportunities for career advancement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	How satisfied are you with recognition for your work from superiors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	How satisfied are you with recognition of your work from peers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26	How satisfied are you with amount of encouragement and positive feedback?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	How satisfied are you with opportunities to participate in nursing research?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	How satisfied are you with opportunities to write and publish?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	How satisfied are you with your amount of responsibility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30	How satisfied are you with your control over work conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	How satisfied are you with your participation in organizational decision making?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note. The McCloskey-Mueller Satisfaction Survey is from “Nurses’ job satisfaction: A proposed measure,” by C. W. Mueller and J. C. McClosley 1990, *Nursing Research*, 39, p. 115. Copyright 1990 by University of Iowa. Used with permission of the University of Iowa.

Part 6: Intention to Leave

Instructions: Please choose the category for each questions that best describes you by selecting one response for each statement.

Intention to Leave

		Strongly Disagree						Strongly Agree
		1	2	3	4	5	6	7
1	I frequently think about leaving my current employer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	I am likely to search for a job in another organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	I am likely to actually leave the organization with the next year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note. The Intention to Leave survey is from “Commitment to organizations and

occupations: Extension and test of a three-component conceptualization,”

by J. P. Meyer, N. J. Allen, and C. A. Smith 1993, *Journal of Applied Psychology*, 78, p.

542. Used with permission of the First author.

Appendix B

Permission to Use the Scales in this Study

Global Transformational Leadership Scale

Page 1 of 2

Audrey Gregory

To...

Cc...

Bcc...

Subject: FW: Requesting Permission to Use the Global Transformational Leadership Scale

Attachments:

From: Sally Carless [mailto:sally.carless@med.monash.edu.au]
Sent: Sun 5/3/2009 9:16 PM
To: Audrey Gregory
Subject: Re: Requesting Permission to Use the Global Transformational Leadership Scale

Audrey Gregory wrote:

> Dr. Carless:

>

>

> I am requesting your permission to use the Global Transformational Leadership scale.

>

> I am a doctoral student at Lynn University in Boca Raton, Florida and I am seeking a PhD in Global Leadership, with a specialization in Corporate and Organizational Management. I am currently finalizing my dissertation proposal for my study about the relationship among transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave.

>

> Your help is greatly appreciated. If you have any questions please

> contact me, or you may contact my dissertation chair

>

> Dr. Joan Scialli

> College of Business and Management

> Lynn University

> 3601 N. Military Trail

> Boca Raton, FL 33431

> Work (561) 237-7215

> Home E-mail: jscialli@bellsouth.net

> Work E-mail: jscialli@lynn.edu

>

> I look forward to hearing from you. Thanks.

>

> Sincerely,

>

> Audrey Gregory, RN MSN, MHA

> 6362 Shadow Tree Lane

> Lake Worth, FL 33463

> Phone: (561) 965-6214

> E-mail: alphanurse@hotmail.com

>

>

Dear Audrey

I am more than happy for you to use it

Good luck with your studies

regards

sally

<https://pop.student.lynn.edu/exchange/AGregory/Drafts/FW:%20Requesting%20Permission...> 5/5/2009

Intention to Leave Scale

Page 1 of 4

You forwarded this message on 3/29/2009 2:33 AM.

Audrey Gregory

From: John Meyer [meyer@uwo.ca] **Sent:** Thu 11/27/2008 1:35 PM
To: Audrey Gregory
Cc:
Subject: Re: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Attachments:

Hi Audrey,

Sorry for taking so long to get back to you. It's been busy here and I wasn't quite sure where to look for the turnover intention measures. Unfortunately, I did not have any luck tracking down the surveys we used for the Meyer et al. (1993) study. However, as I recall, the items were essentially as we described them on page 542: How frequently do you think about getting out of nursing? How likely is it that you will explore other career opportunities in the near future? How likely is it that you will leave the nursing profession in the next year? These were accompanied by appropriately labeled 7-point rating scales (e.g., never to very often and very unlikely to very likely).

This is by no means a standard instrument, but I don't really think there is one. The construct is quite straightforward, so it isn't difficult to develop a tailor-made measure. In fact, a simple item like the third one above is probably sufficient. The other items don't really measure intentions per se, but rather thoughts of quitting that are commonly associated with actual intentions.

Sorry I couldn't be of more help, but I hope that gives you something to work with.

Best regards,
John Meyer

----- Original Message -----

From: "Audrey Gregory" <AGregory@email.lynn.edu>
To: "John Meyer" <meyer@uwo.ca>
Sent: Tuesday, November 25, 2008 2:04 AM
Subject: RE: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Thank you so much. You have been most gracious. The article I am working from is:

Meyer, J. P., & Allen, N. J., & Smith, C. A. (1991). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Re:%20Permission%20to%20use%20...> 4/7/2009

From: John Meyer [mailto:meyer@uwo.ca]
Sent: Mon 11/24/2008 5:26 PM
To: Audrey Gregory
Subject: Re: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Hi Audrey - If you can remind me what article you are working from, I'll try to find the items we used to measure intention to leave and send them to you. We have used different measures over the years. I don't think there really is a standard measure of turnover intention that is used consistently.

----- Original Message -----

From: "Audrey Gregory" <AGregory@email.lynn.edu>
To: "John Meyer" <meyer@uwo.ca>
Sent: Monday, November 24, 2008 5:06 PM
Subject: RE: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Thanks you very much. This was a relatively painless exercise. However, the site is specific to the TCM of Organizational Commitment and does not speak to your three-item questionnaire for use in measuring intention to leave. How do I obtain permission to use the questions?

From: John Meyer [mailto:meyer@uwo.ca]
Sent: Mon 11/24/2008 7:38 AM
To: Audrey Gregory
Subject: Re: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Dear Audrey,

Thank you for your interest in our commitment scales. Requests for permission to use the scales are now being handled by our university. For more information, please go to one of the following websites:

For commercial use: www.employeecommittment.com

For academic research: www.employeecommittmentresearch.com

There is a small administrative fee for permission to use the commitment

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Re:%20Permission%20to%20use%...> 4/7/2009

scales for research purposes, but it is much less than for commercial use, so please be sure to go to the correct webpage. I hope all goes well with your research.

Best regards,

John Meyer

----- Original Message -----

From: "Audrey Gregory" <AGregory@email.lynn.edu>

To: <meyer@uwo.ca>

Sent: Thursday, November 20, 2008 4:21 PM

Subject: Permission to use the Meyer and Allen Organizational Commitment and the three item intention to leave the organization

Dr. John Meyer:

I am requesting your permission to use the 24 item organizational commitment scale and the three item intention to leave the organization questionnaire.

I am a doctoral student at Lynn University in Boca Raton, Florida and I am seeking a PhD in Global Leadership, with a specialization in Corporate and Organizational Management. I am currently finalizing my dissertation proposal for my study about the relationship among transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave.

Your help is greatly appreciated. If you have any questions please contact me, or you may contact my dissertation chair

Dr. Joan Scialli
College of Business and Management
Lynn University
3601 N. Military Trail
Boca Raton, FL 33431
Work (561) 237-7215
Home E-mail: jscialli@bellsouth.net
Work E-mail: jscialli@lynn.edu

I look forward to hearing from you. Thanks.


Sincerely,

Audrey Gregory, RN MSN, MHA
6362 Shadow Tre lane

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Re:%20Permission%20to%20use%...> 4/7/2009

Three Component Model Organizational Commitment Scale

Page 1 of 4

 You forwarded this message on 12/4/2008 5:04 PM.
To help protect your privacy, links to images, sounds, or other external content in this message have been blocked. Click here to unblock content.

Audrey Gregory

From: support@flintbox.com [support@flintbox.com] **Sent:** Mon 11/24/2008 4:58 PM
To: Audrey Gregory
Cc:
Subject: Flintbox - License Agreement for Student License for Use of the Survey in a Single Student Research Project (Academic Users Guide - Dec 2004.pdf)

Attachments:

Licensee: Audrey Gregory
Lynn University
6263 Shadow Tree Lane
Lake Worth, Georgia
33463
USA
(561) 637-5112

Project: TCM Employee Commitment Survey - Academic Package - Student License for Use of the Survey in a Single Student Research Project (Academic Users Guide - Dec 2004.pdf)
Date: 24 November 2008 13:58 PST

TCM EMPLOYEE COMMITMENT SURVEY LICENSE AGREEMENT – FOR STUDENT USE

TCM EMPLOYEE COMMITMENT SURVEY LICENSE AGREEMENT – FOR STUDENT USE

As posted on November 10, 2008

IMPORTANT – PLEASE READ CAREFULLY: This License Agreement is a legally binding agreement between you and your employer, educational institution or organization (collectively "YOU") and The University of Western Ontario ("WESTERN") for the "TCM Employee Commitment Survey" and all associated documentation (together, the "Product") developed by Dr. John Meyer and Dr. Natalie Allen in the Faculty of Social Science at WESTERN. Your use of the Product is subject to the terms and conditions set forth below. Please carefully read the terms and conditions of this license agreement.

THIS LICENSE IS LIMITED TO A SINGLE USE OF THE PRODUCT IN A RESEARCH PROJECT. ADDITIONAL USES OF THE PRODUCT REQUIRE A RENEWAL LICENSE.

IF YOU AGREE TO BE BOUND BY THE TERMS OF THIS AGREEMENT, YOU SHOULD CLICK ON THE " I Accept" BOX AT THE BOTTOM OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, YOU ARE NOT AUTHORIZED TO ACCESS OR USE THE PRODUCT.

1. **LICENSE TO USE:** WESTERN hereby grants to YOU a non-exclusive, revocable, non-transferable, limited license to use the Product in a single Student Research Project, solely on the terms, conditions and restrictions contained in this Agreement. The rights granted to YOU shall, subject to the restrictions set out in Section 4, mean the right to use the Product for a Student Research Project, in accordance with the conditions contained in this Agreement. "Student Research Project" indicates the administration of the Product to a person(s) or an organization by a Student for the purpose of a single academic research study and fulfillment of course requirements whereby no consideration of any kind, payment or otherwise, is received from the participants, or any affiliates of the participants, for the results from administering the Product. Any use of the Product for consulting or other commercial purposes is strictly prohibited.

"Student" indicates a person registered and enrolled in a course of study, either part-time or full-time, at an academic institution. YOU agree (at the request of WESTERN or the Inventors) to provide WESTERN by facsimile with a photocopy of your student identification card in order to verify your status as a Student at the time this license was granted;

2. **LICENSE FEE:** In consideration for the rights granted to YOU by WESTERN under this Agreement, YOU must pay to WESTERN the license fee and any applicable taxes (the "License Fee") set out on the Download Summary screen, which YOU should print-out or download, and which is incorporated by reference into this Agreement. The License Fee shall be due and payable upon acceptance of the terms of this Agreement with acceptance of the terms of this Agreement. Neither all nor any portion of the License Fee shall be refundable to YOU under any circumstances. If paying by credit card, payment of the license fee must be made to UBC Research

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Flintbox%20-%20%20License%20...> 4/7/2009

Enterprises, Inc. doing business as FLINTBOX, acting as WESTERN's authorized payment agent.

3. DELIVERY OF PRODUCT: WESTERN will provide YOU with the Product via web delivery after YOU have executed this Agreement and WESTERN has received payment of the Licence Fee from YOU.

4. OWNERSHIP & RESTRICTIONS: The Product and any and all knowledge, know-how and/or techniques relating to the Product, in whole or in part, is and will remain the sole and absolute property of WESTERN and WESTERN owns any and all right, title and interest in and to the Product. All inventions, discoveries, improvements, copyright, know-how or other intellectual property, whether or not patentable or copyrightable, created by WESTERN prior to, after the termination of, or during the course of this Agreement pertaining to the Product is and will remain the sole and absolute property of WESTERN. No right, title or interest in or to any trademark, service mark, logo, or trade name of WESTERN is granted to YOU under this Agreement. Without limiting the foregoing YOU shall not, and shall not authorize any third party to:

- make copies of the Product for any purpose other than as permitted in Section 1;
- challenge the integrity of the Product or any rights of ownership or in the copyright thereof;
- modify, create derivative works, or otherwise alter the Product or any part thereof for any purpose other than as permitted in Section 1;
- distribute, sell, lease, transfer, assign, trade, rent or publish the Product or any part thereof and/or copies thereof, to others;
- use the Product or any part thereof for any purpose other than as stated in Section 1 above;
- use the Product to process any data other than Your own;
- use the Product or any part thereof for any purpose other than as permitted in Section 1;
- allow any other person or entity to use the Product; or
- use, without its express permission, the name of WESTERN in advertising publicity, or otherwise.

This Product has been prepared initially in the English language, and the English version is the only authorized version of the Product. Any translated version is not endorsed or authorized by the Licensor as an official copy of the Product. Any translation of the Product shall require the express and prior consent of Western (direct all enquiries to ecomm@uwo.ca). Should permission be granted to translate the Product, Western does not represent or warrant that any translated versions of the Product are scientifically valid or appropriate for the use intended.

5. INTELLECTUAL PROPERTY RIGHTS: All patents, copyrights, trade secrets, service marks, trademarks and other proprietary rights in or related to the Product and any improvements, modifications and enhancements thereof are and will remain the exclusive property of WESTERN or its licensors. YOU agree that YOU will not, either during or after the termination of this Agreement, contest or challenge the title to or the intellectual property rights of WESTERN or its licensors in the PRODUCT or any portion thereof.

6. ACKNOWLEDGEMENT OF WESTERN: If YOU use or reference the Product in any publication (including scientific publications, electronic documents or websites) or derivative work, YOU must include appropriate acknowledgment of WESTERN and Dr. John Meyer and Dr. Natalie Allen as the inventors of the Product.

7. DISCLAIMER OF REPRESENTATIONS AND WARRANTIES: THE PRODUCT IS PROVIDED TO YOU BY WESTERN "AS IS", AND YOU ACKNOWLEDGE AND AGREE THAT WESTERN MAKES AND HAS MADE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE OR THAT THE USE OF THE PRODUCT WILL PROVIDE A DESIRED RESULT, OR THAT THE PRODUCT WILL OPERATE UNINTERRUPTED OR ERROR FREE OR THAT ANY DEFECTS IN THE PRODUCT WILL BE CORRECTED OR THAT THE USE OF THE PRODUCT WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER RIGHTS OF A THIRD PARTY, OR ANY OTHER EXPRESS OR IMPLIED WARRANTIES. THE UNITED NATIONS CONVENTION ON THE INTERNATIONAL SALE OF GOODS SHALL NOT APPLY TO THE PROVISIONS OF THIS AGREEMENT.

IN ADDITION, NOTHING IN THIS AGREEMENT IS OR WILL BE CONSTRUED AS A REPRESENTATION OR WARRANTY BY WESTERN AS TO THE VALIDITY OR SCOPE OF ANY COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHTS IN THE PRODUCT.

8. LIMITATION OF LIABILITY: WESTERN WILL NOT BE LIABLE TO YOU, YOUR END-USERS, OR ANY OTHER PERSON OR ENTITY FOR ANY CAUSES OF ACTION, LIABILITY, LOSS OR DAMAGES CAUSED OR ALLEGED TO HAVE BEEN CAUSED, EITHER DIRECTLY OR INDIRECTLY, BY THE PRODUCT, OR THE USE, APPLICATION OR INTERPRETATION THEREOF, OR OF FLINTBOX. WITHOUT LIMITING THE FOREGOING, IN NO EVENT WILL WESTERN BE LIABLE FOR ANY LOST REVENUE, PROFIT, BUSINESS INTERRUPTION OR LOST DATA, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT EVEN IF WESTERN HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SUBJECT TO THE FOREGOING LIMITATIONS, WESTERN'S TOTAL LIABILITY AS PROVED WILL BE RESTRICTED TO THE AMOUNT OF THE LICENSE FEES (IF ANY) ACTUALLY PAID TO WESTERN.

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Flintbox%20-%20%20License%20...> 4/7/2009

9. INDEMNITY: YOU WILL INDEMNIFY, DEFEND AND HOLD HARMLESS WESTERN, ITS BOARD OF GOVERNORS, FACULTY, STAFF, STUDENTS AND AGENTS FROM AND AGAINST ANY AND ALL CAUSES OF ACTION, LIABILITY, LOSS, DAMAGES, ACTION, CLAIM OR EXPENSE (INCLUDING ATTORNEYS FEES AND COSTS) IN CONNECTION WITH ANY CLAIM, SUIT, CAUSES OF ACTION, DEMAND OR JUDGEMENT ARISING OUT OF, CONNECTED WITH, RESULTING FROM, OR SUSTAINED AS A RESULT OF USE OF THE PRODUCT, OR IN EXECUTING AND PERFORMING THIS AGREEMENT.

10. TERM: This Agreement commences on the date the Product is electronically or physically delivered to YOU and continues in effect unless it is terminated in accordance with this clause. YOU may terminate this Agreement at any time by ceasing use of the Product. This Agreement is limited to use in a single Student Research Project and shall terminate at the conclusion of the Research Project. Use of the Product in subsequent research requires a renewal of the license. WESTERN may terminate this Agreement upon giving YOU 90 days' notice, or upon its election to no longer make the Product available. This Agreement will terminate immediately without notice from WESTERN if YOU fail to comply with any provision of this Agreement. On termination for breach or at Western's election, YOU must immediately delete and destroy all electronic and physical copies of the Product in Your possession or control. On any termination of this Agreement, the Disclaimer of Representations and Warranties, Limitation of Liability and Indemnity provisions of this Agreement shall survive, notwithstanding such termination.

11. REPRESENTATIONS/USE OF FLINTBOX: YOU represent and warrant that YOU possess the legal authority to enter into this Agreement, and that YOU will be financially responsible for YOUR use of the Product and of the download service ("FLINTBOX"). YOU agree to be responsible for any License Fees, costs, charges and taxes arising out of your use of the Product and FLINTBOX. YOU are responsible for supplying any hardware or Product necessary to use the Product and FLINTBOX pursuant to this Agreement.

WESTERN is not responsible or liable for the availability of FLINTBOX, and is not responsible or liable for any damage or loss caused, or alleged to be caused by the use of FLINTBOX including loss of data or the presence of a virus, worm, trojan horse or similar impairment.

12 JURISDICTION: WESTERN is located in and operates from Ontario, Canada and this Agreement will be governed and interpreted according to the laws of Ontario and any applicable federal laws. YOU agree that by accepting the terms of this Agreement and using the Product YOU submit to the exclusive jurisdiction of the Courts of competent authority in the City of London, Province of Ontario, Canada.

USE OF THE PRODUCT OR FLINTBOX IS PROHIBITED IN ANY JURISDICTION WHICH DOES NOT GIVE EFFECT TO THE TERMS OF THIS AGREEMENT

13. GENERAL PROVISIONS.

(a) YOU agree that no joint venture, partnership, employment, consulting or agency relationship exists between YOU and WESTERN as a result of this Agreement or your use of FLINTBOX

(b) This Agreement is the entire agreement between YOU and WESTERN relating to this subject matter. YOU will not contest the validity of this Agreement merely because it is in electronic form.

(c) No modification of this Agreement will be binding, unless in writing and accepted by an authorized representative of each party.

(d) The provisions of this Agreement are severable in that if any provision in the Agreement is determined to be invalid or unenforceable under any controlling body of law, that will not affect the validity or enforceability of the remaining provisions of the Agreement.

(e) All prices are in Canadian dollars and prices are subject to change without notice. WESTERN will not be liable for any typographical errors, including errors resulting in improperly quoted prices on the Download Summary screen.

(f) YOU agree to print out or download a copy of this Agreement and retain it for your records

(g) YOU consent to the use of the English language in this Agreement

If you have any questions or comments, please contact us

Sincerely,

Flintbox Customer Support
Email: support@flintbox.com

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/Flintbox%20-%20%20License%20...> 4/7/2009

McCloskey Mueller Satisfaction Scale



Permission to use form:

This gives permission to use the McCloskey/Mueller Satisfaction Scale (MMSS) to Audrey E. Gregory for the purpose as stated in the request dated November 20, 2008.

The instrument may be reproduced in a quantity appropriate for this project.

Signed:

Sue Moorhead

Sue Moorhead, Associate Professor, College of Nursing

Date: 11/26/08



The University of Iowa
The Center for Nursing Classification & Clinical Effectiveness
College of Nursing 407 NB
Iowa City Iowa 52242 USA

Subscription to Survey Monkey

SurveyMonkey - My Account: Billing: Invoices

Page 1 of 1



SurveyMonkey.com
because knowledge is everything

Web Site: www.surveymonkey.com

SurveyMonkey.com
815 NW 13th Ave. Suite D
Portland, OR 97209 USA
Tax ID (EIN) 39-1989790

Invoice #: 16230084
Payment Made On: 03/15/09

Payment Receipt (03/15/09 - 04/15/09)

To
Gregory, Audrey
alphanurse@hotmail.com
6263 Shadow Tree Lane
Lake Worth, FL 33463 USA

Payment Details
Paid with credit card
Name on Card: Audrey E Gregory
Card Number: 6102
Expiration: 11/12

Description	Qty	Price	Amount
Monthly Subscription	1	\$19.95	\$19.95
Monthly SSL Charge	1	\$9.95	\$9.95
		Total (USD)	\$29.90

NOTES:
Monthly Professional Subscription Renewal



Thank you for your valued business!


SurveyMonkey.com 815 NW 13th Ave. Suite D Portland, OR 97209 USA Tax ID (EIN) 39-1989790

Appendix C

Permission from Tenet Healthcare Corporation

Permission from Tenet Healthcare Corporation

Page 1 of 4

 You forwarded this message on 3/29/2009 2:25 AM.

Audrey Gregory

From: Kiger, Anna [Anna.Kiger@tenethealth.com] **Sent:** Mon 2/23/2009 11:57 AM
To: Audrey Gregory
Cc:
Subject: RE:
Attachments:

Audrey

Garry Olney has asked me to review your request for access to our registered nurses working in our South Florida market for the purposes of completing your dissertation with Lynn University.

I have reviewed the attached Chapter 3 outlining the methodology for your prospectus and the ethical considerations and data collection methods. I would like to ask the following in exchange for access to the registered nurses working in our facilities in the targeted area:

1. Electronic or faxed copy of the permission granted for #1 below (use of scales used in the study).
2. Electronic or faxed copy of the IRB approval letter for #2 below.
3. Electronic or faxed copy of the statement for #6 (d) below - for online consent.
4. An electronic copy of the study results once final defense has been completed. We would like to have the opportunity to review your completed work - especially the results section of your dissertation.

If Garry or I can be of any assistance in your final paper review please let us know. We are very happy to support your efforts to obtain a terminal degree and wish you the very best in this "experience".

Thank you,

Anna J. Kiger, DSc, MSN, MBA, RN, NEA-BC
Senior Director, Patient Care Services
Tenet Healthcare Corporation
13737 Noel Road, Suite 100, Office 12082
Dallas, Texas 75240
Office: 469-893-2874
Office Fax: 469-893-3874
Cell: 504-400-5650
Assistant: Lisa Carey 469-893-6776
anna.kiger@tenethealth.com

The information in this communication is confidential and is directed only to the intended recipient. Please do not forward this communication without my permission. If you have received this communication in error, please notify me immediately and delete/destroy this communication.

-----Original Message-----

From: Audrey Gregory [mailto:AGregory@email.lynn.edu]
Sent: Sunday, February 22, 2009 11:40 AM

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/RE:-3.EML?Cmd=open>

4/7/2009

To: Kiger, Anna
Subject: RE:

Anna:
Please remember to send my officoal email granting permision to this email address (university requirement). Thx. It was great to see you in Dallas :)

From: Kiger, Anna [mailto:Anna.Kiger@tenethealth.com]
Sent: Tue 12/2/2008 8:53 AM
To: Audrey Gregory
Subject: Re:

I will send you an official email this morning giving prmission.

----- Original Message -----
From: Audrey Gregory <AGregory@email.lynn.edu>
To: Olney, Garry M
Cc: Kiger, Anna
Sent: Tue Dec 02 01:23:01 2008
Subject: RE:

Hello Anna and Garry:
I am checking on the status of this study permission. Thanks.

Audrey

From: Olney, Garry M [mailto:GARRY.M.OLNEY@tenethealth.com]
Sent: Wed 11/19/2008 3:31 PM
To: Audrey Gregory
Cc: Kiger, Anna
Subject: RE:

Audrey,
I have given this to Anna to review. She has a PHD and can give more expert advise. She will be back in the office next Monday. Thanks
Garry

Garry Olney
Vice President, Patient Care Services
Tenet Healthcare Corporation, Headquarters Office
13737 Noel Road, Suite 100
Dallas, Texas 75240
Office: 469.893.6325
Computer fax: 469. 893. 7325

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/RE:-3.EML?Cmd=open>

4/7/2009

Cell 469.585.4888
Interim Assistant: Cynthia Shailer 469.893.6776 The all new website for
and About Tenet Nurses-www.tenetnurse.com

-----Original Message-----

From: Audrey Gregory [mailto:AGregory@email.lynn.edu]
Sent: Wednesday, November 19, 2008 12:29 PM
To: Olney, Garry M
Subject: RE:

Gary:
I am just checking on the satus of this. Ttx Audrey

From: Gregory, Audrey
Sent: Thursday, November 13, 2008 11:27 AM
To: Olney, Garry M
Subject: Dissertation Permission

Hi Gary:

As you are aware I am a doctoral student at Lynn University in Boca Raton, Florida and I am seeking a PhD in Global Leadership with a specialization in Corporate and Organizational Management. I am currently finalizing my dissertation proposal for my study about the relationship among transformational leadership, job satisfaction, organizational commitment and non-supervisory nurses' intention to leave. I plan on doing an online survey of RNs in the 10 South Florida Hospitals. I am requesting permission from Tenet in order to do this and before I approach the South Florida CNOs.

Your help is greatly appreciated. If you have any questions please contact me, or you may contact my dissertation chair

Dr. Joan Scialli
College of Business and Management
Lynn University
3601 N. Military Trail
Boca Raton, Fl 33431

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/RE:-3.EML?Cmd=open>

4/7/2009

Work (561) 237-7215

Home E-mail: jscialli@bellsouth.net

Work E-mail: jscialli@lynn.edu

I look forward to hearing from you. Thanks.

Audrey Gregory RN MSN, MHA
Chief Nursing Officer
Delray Medical Center
Nationally Recognized Award Winning Healthcare
(561) 637-5112 Office
(561) 495-3445 Office Fax
Email: audrey.gregory@tenethealth.com

Notice: This e-mail (including attachments) is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521, is confidential and may be legally privileged. If you are not the intended recipient, you are hereby notified that any retention, dissemination, distribution, or copying of this communications is strictly prohibited. Please reply to the sender that you have received the message in error, then delete it. Thank you.

<https://pop.student.lynn.edu/exchange/AGregory/Inbox/RE:-3.EML?Cmd=open>

4/7/2009

Appendix D

Email to Tenet South Florida CNOs

Dear CNO Team:

This is a follow-up to our discussion at the Florida Regional Chief Nursing Officer meeting. I am a Ph.D. candidate at Lynn University, requesting your help to complete part of my degree requirements.

I am conducting a study on Transformational Leadership, Job Satisfaction, Organizational Commitment and Non-Supervisory Nurses' Intention to Leave.

This research study requires registered nurses to complete an online survey that consists of questions about demographic characteristics, a work profile characteristics, transformational leadership, job satisfaction, organizational commitment and nurses' intention to leave.

The survey will take about 15 to 20 minutes to complete. The target population of the study is the registered nurses in all of the Tenet South Florida Hospital. As discussed, I will need your assistance with forwarding the survey invitation with the email link to all registered nurses employed at your facility.

This is an anonymous survey and upon submission, neither the nurse's name nor e-mail address will be attached to the responses. The Lynn University Institutional Review Board has approved this study. Tenet Corporate has also given permission for me to conduct this study at Tenet South Florida hospitals.

Thank you for your assistance.

Sincerely,

Audrey Gregory RN MSN MHA
Ph.D. Candidate
Lynn University
3601 N. Military Trail
Boca Raton, FL 33431

Appendix E

Invitation Letter to Initial Sample

Dear Registered Nurse:

I am a Ph.D. candidate at Lynn University, requesting your help to complete part of my degree requirements. Please follow the link at the end of this letter to an online survey titled: **RELATIONSHIP AMONG TRANSFORMATIONAL LEADERSHIP, JOB SATISFACTION, ORGANIZATIONAL COMMITMENT, AND NON-SUPERVISORY NURSES' INTENTION TO LEAVE.**

I am conducting a study on **The Relationship among Transformational Leadership, Job Satisfaction, Organizational Commitment and Non-Supervisory Nurses' Intention to Leave.**

This research study requires non-supervisory registered nurses employed in Tenet South Florida hospitals to complete a survey that consists of questions about demographic characteristics, a work profile characteristics, transformational leadership, job satisfaction, organizational commitment and nurses' intention to leave.

The survey will take about 15-20 minutes to complete. The target population of the study is all the registered nurses in ten Tenet South Florida Hospital. As a registered nurse, your honest opinions are invaluable to this study. I invite you to take a few minutes to review the informed consent and complete the anonymous survey.

This is an anonymous survey and upon submission, neither your name nor your e-mail address will be attached to the responses. The Lynn University Institutional Review Board has approved this study. Tenet Corporate has also given permission for me to conduct this study at Tenet South Florida hospitals.

To begin, please click this link:

https://www.surveymonkey.com/s.aspx?sm=uBncpDrBXHoZ6iEaji_2bWvA_3d_3d

Thank you for your time and assistance.

Sincerely,

Audrey Gregory RN MSN MHA
Ph.D. Candidate
Lynn University
3601 N. Military Trail
Boca Raton, FL 33431

Appendix F

Follow up Letter to Initial Sample

Dear Registered Nurse:

As a follow-up to my recent email, I would like to thank you for your participation in the recent survey that your Chief Nursing Officer forwarded to you regarding my dissertation work on **RELATIONSHIP AMONG TRANSFORMATIONAL LEADERSHIP, JOB SATISFACTION, ORGANIZATIONAL COMMITMENT, AND NON-SUPERVISORY NURSES' INTENTION TO LEAVE.**

In the event that you have not had the opportunity to complete the survey, please consider doing so at this time.

As a reminder, this is an anonymous survey and upon submission, neither your name nor your e-mail address will be attached to the responses. The Lynn University Institutional Review Board has approved this study. Tenet Corporate has also given permission for me to conduct this study at Tenet South Florida hospitals.

To begin, please click this link:

https://www.surveymonkey.com/s.aspx?sm=uBncpDrBXHoZ6lEaji_2bWvA_3d_3d

Thank you for your time and assistance.

Sincerely,

Audrey Gregory RN MSN MHA
Ph.D. Candidate
Lynn University
3601 N. Military Trail
Boca Raton, FL 33431

Appendix G
Authorization for Voluntary Consent
(Online Version)

Lynn University
**THIS DOCUMENT SHALL ONLY BE USED TO PROVIDE AUTHORIZATION
FOR VOLUNTARY CONSENT**

PROJECT TITLE: Transformational Leadership, Job Satisfaction, Organizational Commitment, and Non-Supervisory Nurses' Intention to Leave

Project IRB Number: 2009-016

Lynn University, 3601 N. Military Trail, Boca Raton, Florida 33431

I, Audrey E. Gregory, am a doctoral student at Lynn University. I am studying Global Leadership, with a specialization in Corporate and Organizational Management. One of my degree requirements is to conduct a research study.

DIRECTIONS FOR THE PARTICIPANT:

You are being asked to participate in my research study. Please read this carefully. This form provides you with information about the study. The Principal Investigator (Audrey Gregory) will answer all of your questions. I can be contacted at (954) 673-1060 or by e-mail at agregory@email.lynn.edu. Ask questions about anything you don't understand before deciding whether or not to participate. You are free to ask questions at any time before, during, or after your participation in this study. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You acknowledge that you are at least 18 years of age, and that you do not have medical problems or language or educational barriers that precludes understanding of explanations contained in this authorization for voluntary consent.

PURPOSE OF THIS RESEARCH STUDY: The study is about the relationship among transformational leadership, job satisfaction, organizational commitment, and non-supervisory nurses' intention to leave their current employer. There will be approximately 2300 people invited to participate in this study. Participants are at least 18 years of age, are full time registered nurses from Tenet hospitals within South Florida, and are full-time non-supervisory registered nurses in one of the hospitals in this study.

PROCEDURES: Your e-mail was obtained from your Chief Nursing Officer. The invitation e-mail sent used a blind copy (Bcc) feature so that the names and e-mail addresses of other recipients did not appear in the header. The survey is completed electronically using Survey Monkey and you can choose to begin by clicking the "I agree to participate in this study" button below. If you agree to participate, you will be directed

to answer 3 questions. If you meet the criteria for participation, you will be asked to complete the survey.

The entire survey should take approximately 15 minutes to complete.

The researcher will not obtain any identifying information to link you to the survey data. The Web site will not track respondents' IP addresses or any personal identification information. At no time will you be asked to give your name, social security number, or other identifiers which could reveal who you are.

All the data gathered, which were previously described will be kept strictly confidential. The electronic data will be kept in "password protected" computers in the principle investigators home. All hard copy data will be kept in a locked file cabinet in the principle investigators home. Both electronic and hard copy data will be destroyed after five years.

POSSIBLE RISKS OR DISCOMFORT: This study involves minimal risk. You may find that some of the questions are sensitive in nature. In addition, participation in this study requires a minimal amount of your time and effort.

POSSIBLE BENEFITS: There may be no direct benefit to you in participating in this research. But knowledge may be gained which may help improve nurses' intention to remain within the organizations.

FINANCIAL CONSIDERATIONS: There is no financial compensation for your participation in this research. There are no costs to you as a result of your participation in this study.

ANONYMITY: Anonymity will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties. This researcher will not identify you and data will be reported as group responses. Participation in this survey is voluntary and proceeding with the survey will constitute your informed consent to participate. All information will be held in strict confidence and will not be disclosed unless required by law or regulation.

The results of this study may be published in a dissertation, scientific journals or presented at professional meetings. In addition, you privacy will be maintained in all publications or presentations resulting from this study.

RIGHT TO WITHDRAW: You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate.

CONTACTS FOR QUESTIONS/ACCESS TO CONSENT FORM: Any further questions you have about this study or your participation in it, either now or any time in the future, will be answered by Audrey Gregory (Principal Investigator) who may be reached at: 954-673-1060 and Dr. Joan Scialli, faculty advisor who may be reached at: (561) 237-7215. For any questions regarding your rights as a research subject, you may call Dr. Farideh Farazmand, Chair of the Lynn University Institutional Review Board for the Protection of Human Subjects, at (561) 237-7847. If any problems arise as a result of your participation in this study, please call the Principal Investigator (Audrey Gregory) and the faculty advisor (Dr. Joan Scialli) immediately.
Please print a copy of this consent.

INVESTIGATORS AFFIDAVIT: I hereby certify that a written explanation of the nature of the above project has been provided to the person participating in this project. A copy of the written documentation provided is attached hereto. By the person's consent to voluntarily participate in this study, the person has represented that he/she is at least 18 years of age, and that he/she does not have a medical problem or language or educational barrier that precludes his/her understanding of my explanation. Therefore, I hereby certify that to the best of my knowledge the person participating in this project understands clearly the nature, demands, benefits, and risks involved in his/her participation.

Signature of Investigator

Date of IRB Approval: _____
Date of IRB Expiration: _____

If you wish to participate, you MUST click YES below

- Yes, I agree to participate in this study
- No, I do not agree to participate in this study

Appendix H

Survey Monkey Policies and Agreement

Terms of Use

ANY PERSON OR ENTITY ("User") ACCESSING THE SURVEYMONKEY.COM WEB SITE (the "Site" or "Service") OR ANY OF THE INFORMATION CONTAINED HEREIN AGREES TO AND IS BOUND BY THE FOLLOWING TERMS AND CONDITIONS OF THIS SURVEYMONKEY.COM WEB SITE TERMS OF USE ("Agreement"):

This Agreement is a legal agreement between the User and SurveyMonkey.com Corporation for the SurveyMonkey.com Software Application Services you subscribe to. These Software Application Services include computer software, data storage mechanisms, databases and related designs, printed materials, and online or electronic documentation (Software Application Services, Application Services, or Software). By using the Software Application Services, you agree to be bound by the terms of this Customer Agreement. If you do not agree to the terms of this Customer Agreement, you are not authorized to use the Software Application Services.

1. PAYMENT

You agree to pay all applicable charges under this Agreement, including any applicable taxes or charges imposed by any government entity, and that SurveyMonkey.com may change its minimum pricing at any time. User must supply SurveyMonkey.com with correct credit card information, and any changes in credit card validity or expiration date must be updated. SurveyMonkey.com will automatically renew and charge User's account every month, quarter, or year for subscriptions. The renewal charge will be equal to the original subscription price, unless SurveyMonkey.com notifies User otherwise in advance. If the credit card cannot be processed for any reason, SurveyMonkey.com reserves the right to cancel the Service.

2. MEMBER ACCOUNT, PASSWORD AND SECURITY

You will receive a password and account designation upon completing the Service's registration process. You are responsible for maintaining the confidentiality of the password and account, and are fully responsible for all activities that occur under your password or account. You agree to (a) immediately notify SurveyMonkey.com of any unauthorized use of your password or account or any other breach of security, and (b) ensure that you exit from your account at the end of each session. SurveyMonkey.com cannot and will not be liable for any loss or damage arising from your failure to comply with this Section.

3. MEMBER CONDUCT

You understand that all information, data, text, software, music, sound, photographs, graphics, video, messages or other materials ("Content"), whether publicly posted or privately transmitted, are the sole responsibility of the person from which such Content originated. This means that you, and not SurveyMonkey.com, are entirely responsible for all Content that you upload, post, email, transmit or otherwise make available via the Service. SurveyMonkey.com does not control the Content posted via the Service and, as such, does not guarantee the accuracy, integrity or quality of such Content. You understand that by using the Service, you may be exposed to Content that is offensive, indecent or objectionable. Under no circumstances will SurveyMonkey.com be liable in any way for any Content, including, but not limited to, for any errors or omissions in any Content, or for any loss or damage of any kind incurred as a result of the use of any Content posted, emailed, transmitted or otherwise made available via the Service.

User agrees not to attempt to damage, deny service to, hack, crack, reverse-engineer, or otherwise interfere (collectively, "Interfere") with SurveyMonkey.com's web site in any manner. If User in any way Interferes with SurveyMonkey.com's web site, User agrees to pay all damages incurred by SurveyMonkey.com, including any consequential damages, and agrees that the measure of hard to determine damages will be the highest estimate of damages as provided by SurveyMonkey.com. User's Interference with SurveyMonkey.com's web site relieves SurveyMonkey.com of any of its contractual or other legal obligations to User, including SurveyMonkey.com's obligations under its Privacy Policy. SurveyMonkey.com will cooperate with the authorities in prosecuting any User who Interferes with SurveyMonkey.com's web site, attempts to defraud SurveyMonkey.com, or attempts to defraud credit card companies or any other parties through User's use of SurveyMonkey.com's web site or services.

You agree to not use the Service to

- upload, post, email, transmit or otherwise make available any Content that is unlawful, harmful, threatening, abusive, harassing, tortious, defamatory, vulgar, obscene, libelous, invasive of another's privacy, hateful, or racially, ethnically or otherwise objectionable,
- harm minors in any way,
- impersonate any person or entity, including, but not limited to, a SurveyMonkey.com official, forum leader, guide or host, or falsely state or otherwise misrepresent your affiliation with a person or entity,
- upload, post, email, transmit or otherwise make available any Content that you do not have a right to make available under any law or under contractual or fiduciary relationships (such as inside information, proprietary and confidential information learned or disclosed as part of employment relationships or under nondisclosure agreements);
- upload, post, email, transmit or otherwise make available any Content that infringes any patent, trademark, trade secret, copyright or other proprietary rights ("Rights") of any party,
- upload, post, email, transmit or otherwise make available any unsolicited or unauthorized advertising, promotional materials, "junk mail," "spam," "chain letters," "pyramid schemes," or any other form of solicitation,
- interfere with or disrupt the Service or servers or networks connected to the Service, or disobey any requirements, procedures, policies or regulations of networks connected to the Service,
- intentionally or unintentionally violate any applicable local, state, national or international law, including, but not limited to, regulations promulgated by the U.S. Securities and Exchange Commission, any rules of any national or other securities exchange, including, without limitation, the New York Stock Exchange, the American Stock Exchange or the NASDAQ, and any regulations having the force of law,

Violation of any of the items in this Section relieves SurveyMonkey.com of any of its contractual or other legal obligations to User, including SurveyMonkey.com's obligations under its Privacy Policy

SurveyMonkey.com reserves the right to refuse any or all service to any User for any reason, at any time, at SurveyMonkey.com's sole discretion. User agrees that SurveyMonkey.com may block its IP address or addresses at any time, and at SurveyMonkey.com's sole discretion, thereby disallowing User's continued use of SurveyMonkey.com's web site

4. COMPLIANCE WITH AGREEMENT AND LAWS

You shall use the survey tool only in compliance with this Terms of Use, the [FTC's CAN-SPAM Law](#), and all other applicable U.S., state, local, and international laws (including, but not limited to, policies and laws related to spamming, copyright and trademark infringement, defamation, privacy, obscenity, and child protective email address registry laws)

You also agree not to intentionally or unintentionally violate any applicable local, state, national, or international law, including, but not limited to, regulations promulgated by the U.S. Securities and Exchange Commission, any rules of any national or other securities exchange, including, without limitation, the New York Stock Exchange, the American Stock Exchange, or the NASDAQ, and any regulations having the force of law

Although SurveyMonkey has no obligation to review the content provided by you or your use of the Survey Tool, SurveyMonkey may do so and may block any email messages and or terminate any use of the Survey Tool that SurveyMonkey believes may be (or is alleged to be) in violation of the foregoing

You also agree not to upload survey links to message boards or newsgroups without express permission

5. ANTI-SPAM

Email and Prohibited Content

Email messages sent in connection with the Survey Tool must contain an "unsubscribe" link that allows subscribers to remove themselves from your email messages. You acknowledge and agree that you will not hide, disable, or remove or attempt to hide, disable, or remove the opt-out link from the email invitation. You will actively manage and process unsubscribe requests received by you directly within ten days of submission, and update your email lists and address

books to reflect the unsubscribe requests. You are responsible for ensuring that during use of the Survey Tool your email messages do not generate a number of spam complaints in excess of industry standards. If SurveyMonkey determines that your level of spam complaints is higher than industry standards, SurveyMonkey, at its sole discretion, has the right to terminate your use of its Survey Tool.

Permission Lists Only

SurveyMonkey has a zero-tolerance spam policy. Subscriber accounts will be terminated for sending unsolicited email messages. This means that all recipients sent to must have opted in to receiving communications from you, the sender.

You can only use SurveyMonkey to send emails to lists of people that gave you permission to email them. If you don't have proof that each recipient on your list opted in for your emails, don't import them into SurveyMonkey.

- We prohibit the use of third-party, purchased, rented, or harvested mailing lists. SurveyMonkey will terminate accounts violating the foregoing.
- You cannot mail to newsgroups, message boards, distribution lists, or unsolicited email addresses.
- You agree that you shall not utilize the Survey Tool to send any commercial electronic mail messages (as defined in the [Act of 2003](#)) to any recipient who has opted out, unsubscribed, or otherwise objected to receiving such messages from you or another party on whose behalf you may be commissioned. The CAN-SPAM Act outlines requirements for sending out commercial emails. These rules govern the Internet by United States law. A brief description of the [CAN-SPAM Act](#) follows:

1. **Bans false of misleading header information.** Requires valid "reply" and "from" addresses. These must be accurate and identify the person who initiated the email.
2. **Prohibits deceptive subject lines.** The subject line cannot mislead the recipient about the contents or subject matter of the message.
3. **Requires the email to provide recipients with a valid opt-out method.** You must provide a return email address or another Internet-based response mechanism that allows a recipient to ask you not to send future email messages to that email address, and you must honor the requests. You may create a "menu" of choices to allow a recipient to opt out of certain types of messages, but you must include the option to end any commercial messages from the sender.

Any opt-out mechanism you offer must be able to process opt-out requests for at least thirty days after you send your commercial email. When you receive an opt-out request, the law gives you ten business days to stop sending email to the requestor's email address. You cannot help another entity send email to that address, or have another entity send email on your behalf to that address. Finally, it's illegal for you to sell or transfer the email addresses of people who choose not to receive your email, even in the form of a mailing list, unless you transfer the addresses so another entity can comply with the law.

4. **Include physical mailing address.** Your message must contain clear and conspicuous notice that the message is an advertisement or solicitation and that the recipient can opt out of receiving more commercial email from you. It also must include your valid physical postal address.

Reporting Spam

If you suspect that SurveyMonkey.com has been used to send spam, please contact us immediately at abuse@surveymonkey.com and we will investigate accordingly.

6. MODIFICATIONS TO SERVICE

SurveyMonkey.com reserves the right at any time and from time to time to modify or discontinue, temporarily or permanently, the Service (or any part thereof) with or without notice. You agree that SurveyMonkey.com shall not be liable to you or to any third party for any modification, suspension or discontinuance of the Service.

You agree that SurveyMonkey.com has no responsibility or liability for the deletion or failure to store any survey data or other Content maintained or transmitted by the Service. You acknowledge that SurveyMonkey.com reserves the right to delete accounts that are inactive for an extended period of time. You further acknowledge that SurveyMonkey.com reserves the right to change these general practices and limits at any time, in its sole discretion, with or without notice.

7. COPYRIGHTS

The Software Application Services are protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. The Software Application Services are licensed, not sold.

All title and copyrights in and to the Software are owned by SurveyMonkey.com or its suppliers. All title and intellectual property rights in and to the content which may be accessed through use of the Software Application Services is the property of the respective content owner and also may be protected by applicable copyright or other intellectual property laws and treaties.

8. LINKS TO THIRD PARTIES

SurveyMonkey.com makes no claims or representations about any Web Site not under SurveyMonkey's control that a User may access from SurveyMonkey.com's web site-- by link, frame, or any other means ("Linked Site"). Any link, frame, or any other means to access any Linked Site provided by SurveyMonkey.com or otherwise on SurveyMonkey.com's web site does not constitute SurveyMonkey.com's endorsement, recommendation, or acceptance of any responsibility for the content of that Linked Site or the operators of that Linked Site.

9. LIABILITY DISCLAIMER

THE INFORMATION, SOFTWARE, PRODUCTS, AND SERVICES INCLUDED IN OR AVAILABLE THROUGH THE SURVEYMONKEY.COM SITES/SERVICES MAY INCLUDE INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY MADE TO THE SURVEYMONKEY.COM SITES/SERVICES AND TO THE INFORMATION THEREIN. SURVEYMONKEY.COM AND/OR ITS RESPECTIVE SUPPLIERS MAY MAKE IMPROVEMENTS AND/OR CHANGES IN SURVEYMONKEY.COM SITES/SERVICES AT ANY TIME.

SURVEYMONKEY.COM CORPORATION AND/OR ITS RESPECTIVE SUPPLIERS MAKE NO REPRESENTATIONS ABOUT THE SUITABILITY, RELIABILITY, AVAILABILITY, TIMELINESS, LACK OF VIRUSES OR OTHER HARMFUL COMPONENTS AND ACCURACY OF THE INFORMATION, SOFTWARE, PRODUCTS, SERVICES AND RELATED GRAPHICS CONTAINED WITHIN THE SURVEYMONKEY.COM SITES/SERVICES FOR ANY PURPOSE. ALL SUCH INFORMATION, SOFTWARE, PRODUCTS, SERVICES AND RELATED GRAPHICS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. SURVEYMONKEY.COM AND/OR ITS RESPECTIVE SUPPLIERS HEREBY DISCLAIM ALL WARRANTIES AND CONDITIONS WITH REGARD TO THIS INFORMATION, SOFTWARE, PRODUCTS, SERVICES AND RELATED GRAPHICS, INCLUDING ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, WORKMANLIKE EFFORT, TITLE AND NON-INFRINGEMENT.

YOU SPECIFICALLY AGREE THAT SURVEYMONKEY.COM SHALL NOT BE RESPONSIBLE FOR UNAUTHORIZED ACCESS TO OR ALTERATION OF YOUR TRANSMISSIONS OR DATA, ANY MATERIAL OR DATA SENT OR RECEIVED OR NOT SENT OR RECEIVED, OR ANY TRANSACTIONS ENTERED INTO THROUGH A SURVEYMONKEY.COM SITE/SERVICE. YOU SPECIFICALLY AGREE THAT SURVEYMONKEY.COM IS NOT RESPONSIBLE OR LIABLE FOR ANY THREATENING, DEFAMATORY, OBSCENE, OFFENSIVE OR ILLEGAL CONTENT OR CONDUCT OF ANY OTHER PARTY OR ANY INFRINGEMENT OF ANOTHER'S RIGHTS, INCLUDING INTELLECTUAL PROPERTY RIGHTS. YOU SPECIFICALLY AGREE THAT SURVEYMONKEY.COM IS NOT RESPONSIBLE FOR ANY CONTENT SENT USING AND/OR INCLUDED IN A SURVEYMONKEY.COM SITE/SERVICE BY ANY THIRD PARTY.

IN NO EVENT SHALL SURVEYMONKEY.COM AND/OR ITS SUPPLIERS BE LIABLE FOR ANY DIRECT, INDIRECT, PUNITIVE, INCIDENTAL, SPECIAL, CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF USE, DATA OR PROFITS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE USE OR PERFORMANCE OF THE SURVEYMONKEY.COM SITES/SERVICES, WITH THE DELAY OR INABILITY TO USE THE SURVEYMONKEY.COM SITES/SERVICES OR RELATED SERVICES, THE PROVISION OF OR FAILURE TO PROVIDE SERVICES, OR FOR ANY INFORMATION, SOFTWARE, PRODUCTS, SERVICES AND RELATED GRAPHICS OBTAINED THROUGH THE SURVEYMONKEY.COM SITES/SERVICES, OR OTHERWISE ARISING OUT OF THE USE OF THE SURVEYMONKEY.COM SITES/SERVICES, WHETHER BASED ON CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, EVEN IF SURVEYMONKEY.COM OR ANY OF ITS SUPPLIERS HAS BEEN ADVISED OF THE POSSIBILITY OF DAMAGES. BECAUSE SOME STATES/JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATION MAY NOT APPLY TO YOU. IF YOU ARE DISSATISFIED WITH

ANY PORTION OF THE SURVEYMONKEY.COM SITES/SERVICES, OR WITH ANY OF THESE TERMS OF USE, YOUR SOLE AND EXCLUSIVE REMEDY IS TO DISCONTINUE USING THE SURVEYMONKEY.COM SITES/SERVICES.

If for any reason a court of competent jurisdiction finds any provision or portion of the Terms of Use to be unenforceable, the remainder of the Terms of Use will continue in full force and effect.

These Terms of Use constitute the entire agreement between the parties with respect to the subject matter hereof and supersedes and replaces all prior or contemporaneous understandings or agreements, written or oral, regarding such subject matter. Any waiver of any provision of the Terms of Use will be effective only if in writing and signed by SurveyMonkey.com Corporation.

Appendix I

Lynn University IRB Approval Letter

Consent

Lynn University

THIS DOCUMENT SHALL ONLY BE USED TO PROVIDE
AUTHORIZATION FOR VOLUNTARY CONSENT

PROJECT TITLE: Transformational Leadership, Job Satisfaction,
Organizational Commitment, and Non-Supervisory Nurses'
Intention to Leave

Project IRB Number: 2009 - 016

Lynn University, 3601 N. Military Trail, Boca Raton, Florida
33431

I, Audrey E. Gregory, am a doctoral student at Lynn
University. I am studying Global Leadership, with a
specialization in Corporate and Organizational Management.
One of my degree requirements is to conduct a research study.

DIRECTIONS FOR THE PARTICIPANT:

You are being asked to participate in my research study.
Please read this carefully. This form provides you with
information about the study. The Principal Investigator
(Audrey Gregory) will answer all of your questions. I can be
contacted at (954) 673-1060 or by e-mail at
agregory@email.lynn.edu. Ask questions about anything you
don't understand before deciding whether or not to participate.
You are free to ask questions at any time before, during, or
after your participation in this study. Your participation is
entirely voluntary and you can refuse to participate without

penalty or loss of benefits to which you are otherwise entitled. You acknowledge that you are at least 18 years of age, and that you do not have medical problems or language or educational barriers that precludes understanding of explanations contained in this authorization for voluntary consent.

PURPOSE OF THIS RESEARCH STUDY: The study is about the relationship among transformational leadership, job satisfaction, organizational commitment, and non-supervisory nurses' intention to leave their current employer. There will be approximately 2300 people invited to participate in this study. Participants are at least 18 years of age, are full time registered nurses from Tenet hospitals within South Florida, and are full-time non-supervisory registered nurses in one of the hospitals in this study.

PROCEDURES: The invitation e-mail has been forwarded by the Chief Nursing Officer. The invitation e-mail sent used a blind copy (Bcc) feature so that the names and e-mail addresses of other recipients did not appear in the header. The survey is completed electronically using Survey Monkey and you can choose to begin by clicking the "I agree to participate in this study" button below. If you agree to participate, you will be directed to answer 3 questions. If you meet the criteria for participation, you will be asked to complete the survey.

The entire survey should take approximately 15 minutes to complete.

The researcher will not obtain any identifying information to link you to the survey data. The Web site will not track respondents' IP addresses or any personal identification information. At no time will you be asked to give your name, social security number, or other identifiers which could reveal who you are.

All the data gathered, which were previously described will be kept strictly confidential. The electronic data will be kept in

"password protected" computers in the principle investigators home. All hard copy data will be kept in a locked file cabinet in the principle investigators home. Both electronic and hard copy data will be destroyed after five years.

- 1. POSSIBLE RISKS OR DISCOMFORT:** This study involves minimal risk. You may find that some of the questions are sensitive in nature. In addition, participation in this study requires a minimal amount of your time and effort.

POSSIBLE BENEFITS: There may be no direct benefit to you in participating in this research. But knowledge may be gained which may help improve nurses' intention to remain within the organizations.

FINANCIAL CONSIDERATIONS: There is no financial compensation for your participation in this research. There are no costs to you as a result of your participation in this study.

ANONYMITY: Anonymity will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties. This researcher will not identify you and data will be reported as group responses. Participation in this survey is voluntary and proceeding with the survey will constitute your informed consent to participate. All information will be held in strict confidence and will not be disclosed unless required by law or regulation.

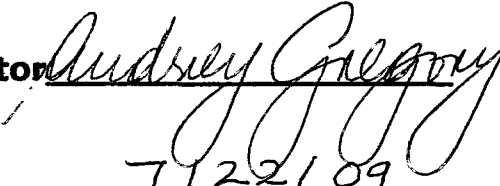
The results of this study may be published in a dissertation, scientific journals or presented at professional meetings. In addition, your privacy will be maintained in all publications or presentations resulting from this study.

RIGHT TO WITHDRAW: You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate.

CONTACTS FOR QUESTIONS/ACCESS TO CONSENT FORM:

Any further questions you have about this study or your participation in it, either now or any time in the future, will be answered by Audrey Gregory (Principal Investigator) who may be reached at: 954-673-1060 and Dr. Joan Scialli, faculty advisor who may be reached at: (561) 237-7215. For any questions regarding your rights as a research subject, you may call Dr. Farideh Farazmand, Chair of the Lynn University Institutional Review Board for the Protection of Human Subjects, at (561) 237-7847. If any problems arise as a result of your participation in this study, please call the Principal Investigator (Audrey Gregory) and the faculty advisor (Dr. Joan Scialli) immediately. Please print a copy of this consent.

INVESTIGATORS AFFIDAVIT: I hereby certify that a written explanation of the nature of the above project has been provided to the person participating in this project. A copy of the written documentation provided is attached hereto. By the person's consent to voluntarily participate in this study, the person has represented that he/she is at least 18 years of age, and that he/she does not have a medical problem or language or educational barrier that precludes his/her understanding of my explanation. Therefore, I hereby certify that to the best of my knowledge the person participating in this project understands clearly the nature, demands, benefits, and risks involved in his/her participation.

Signature of Investigator 
Date of IRB Approval 7/22/09
Date of IRB Expiration 7/22/2010

I agree to participate in this study

I do not agree to participate in this study

Add Question Here



Lynn University

Principal Investigator: Audrey E. Gregory
Project Title: Transformational Leadership, Job Satisfaction, Organizational Commitment, and Non-Supervisory Nurses' Intention to Leave

IRB Project Number: 2009-016 REQUEST FOR EXPEDITED REVIEW of Application and Research Protocol for a New Project

IRB Action by the IRB Chair or Another Member or Members Designed by the Chair

Expedited Review of Application and Research Protocol and Request for Expedited Review (FORM 3): Approved Approved; w/provision(s) ___

COMMENTS:

Consent Required: No ___ Yes Not Applicable ___ Written Signed ___

Consent forms must bear the research protocol expiration date of 7/22/10.

Application to Continue/Renew is due:

- 1) For an Expedited IRB Review, one month prior to the due date for renewal ___.
- 2) Other:

Name of IRB Chair: Farideh Farazmand

Signature of IRB Chair Farideh Farazmand Date: 7/22/09

Cc: Dr. Sciali

VITA

Audrey Gregory
6263 Shadow Tree Lane, Lake Worth, FL 33463
(561) 965-6214
Cell: (954) 673-1060
Email: alphanurse@hotmail.com

PROFESSIONAL EXPERIENCE

Delray Medical Center, Delray Beach, FL (2004- Present)

**Chief Nursing Officer
September 2008- Present**

**Interim Chief Nursing Officer
April 2008- September 2008**

Achievements

- Led organization to successful Chest Pain Center with PCI Accreditation by the Society of Chest Pain Centers.
- Achieved successful unannounced JCAHO survey.
- Implemented hospital-wide communication system to be used between providers to enhance care-delivery.
- Sustained incremental improvements in patient satisfaction scores.

Director of Nursing

October 2006-Present

Serves as a member of administrative team for 493-bed acute care facility with responsibility for the division of nursing with an operating budget of \$20M. Reports to Chief Nursing Officer. Areas of responsibility include: Inpatient Nursing, to include Trauma Services and Fair Oaks Behavioral Health Facility; Nursing Supervisors, Nurse Practitioners, and Emergency Services and the nursing department of the acute care rehabilitation facility-Pinecrest Rehabilitation Hospital. Assists with coordination of clinical quality initiatives and functions within the organization.

Hospital Awards include:

2008 Healthgrades:

- America's 50 Best Hospitals

2007 Healthgrades:

- America's 50 Best Hospitals
- Specialty Excellence Award: Cardiac Care & Cardiac Surgery
- #1 in Florida for Overall Cardiac Services/Top 5% in the Nation

Blue Cross Blue Shield: Blue Distinction for Cardiac Care

AHA: Get With The Guidelines Achievement Award: CAD, Stroke, Heart Failure
2006 Healthgrades

- Top 5% for Overall Clinical Performance, Cardiology Services, Heart Surgery Coronary Interventional Procedures
- Distinguished Hospital Award for Clinical Excellence

JCAHO Primary Stroke Center Certification

2001-2004

Solucient Top 100 Hospitals

Achievements:

- Currently serves as part of project team for \$8M Emergency Department expansion (ongoing since role of Emergency Department Director. Responsibilities include unit design and development, equipment acquisition and oversight of ongoing functioning of Emergency Department.
- Successful Joint Commission Primary Stroke Center Recertification without Recommendations for Improvements.
- Submitted application for Chest Pain Center designation.
- Provide guidance, training and direction as Initiative Champion for organizational-wide service initiatives to include: patient satisfaction, physician satisfaction and employee satisfaction.
- Nursing team lead for nursing/case management team assessing length of stay of patients and clinical quality initiatives.
- Assisted with oversight of hospital preparedness for JCAHO and AHCA validation surveys.

Emergency Services Director

May 2004- October 2006

Provided oversight for all administrative and operational functions of Level 2 Trauma Emergency Department. Responsibilities included budget planning, equipment acquisition and personnel management. Served as representative on hospital-wide emergency preparedness committee and as hospital representative on county-wide Healthcare Emergency Response Coalition (HERC).

Achievements:

- Established cardiac alert and stroke alert designations for Emergency Department
- Achieved sustained results of 95% or greater on all core measures to include an average of 58 minutes for door-to-balloon times.
- Team lead for ED throughput team resulting in decrease in number of patients who left without being seen (< 3%); 50% decrease in length of stay of ED patients
- Worked collaboratively with laboratory Director to establish STAT lab in ED decreasing lab turnaround times to 45 minutes.
- Researched, proposed, and implemented electronic documentation system for Emergency Department. Converted ED to MEDHOST system resulting in 100% capture of chargeable items and procedure charges.

- Nursing team lead for ED expansion project to include planning, design, implementation and operational oversight

Boca Raton Community Hospital, FL

Director Surgical Nursing

June 2003-April 2004

Provided oversight for all administrative and operational functions of multiple nursing units including: Surgical unit, orthopedic unit, Medical Intensive Care unit and Surgical Intensive Care Unit at a 390 beds community hospital. Responsibilities included budget planning, including the forecasting of equipment, supplies, and personnel requirements. Analyzed budget variances based on department statistics.

Achievements:

- Developed orthopedic course as part of recruitment and retention plan for surgical service line.
- Successful expansion of surgical service line to include sports medicine, bariatric surgery and elective plastic surgery.
- Maintained productivity standards at 95% or above for all units.

Northwest Medical Center, FL

Director Telemetry Department

June 2002-June 2003

Provided oversight for all administrative and operational functions for telemetry services at a 200 bed hospital. Developed, monitored and controlled annual budget. Performed annual budgetary reviews, including staffing mix and performance improvement activities.

Liberty Regional Medical Center, GA (August 1998-May 2002)

Chief Nursing Officer

October 2000-May 2002

Served as member of senior management team for 30-bed community hospital with full responsibility of nursing and other clinical departments (cardiopulmonary services, rehabilitation services, occupational health services) with a \$3M operating budget. Responsible for assessment, development, and maintenance of the Performance Improvement Plan.

Achievements:

- Actively engaged in physician recruitment resulting in addition of general

- surgeon, pulmonologist, OB/GYN and gastroenterologist to active medical staff
- Successful JCAHO survey without Type 1's
- Developed staffing matrices with use of HPPD's
- Developed case management role in organization with resulting 1.5 days decrease in LOS and \$300,000 annual increase in reimbursement.

Director, Emergency Department

April 2000- October 2000

Provided oversight of all administrative and operational functions for emergency department with 21,000 annual visits.

Achievements:

- Designed and implemented Chest Pain Protocol
- Designed and implemented Triage protocol
- Decreased left without being seen rate from 6% to less than 2% of total volume
- Redesigned charging system resulting in 100% increase in revenue

ER staff nurse; Relief Clinical Shift Coordinator

August 1998-April 2000

United States Army-Vilseck Health Facility, Vilseck, Germany

Assistant Head Nurse

October 1995-June 1998

Coordinated care for over 10,000 soldiers and their dependents in Southern Germany and directed Emergency Department.

Liberty Regional Medical Center

Staff RN

October 1994-October 1995

EDUCATION

Armstrong Atlantic State University, Savannah, GA
Master of Science in Nursing, 2001
Master of Health Services Administration, 2001
Bachelors of Science in Nursing, 2001

Broward Community College
Associate of Science in Nursing, 1993.

LICENSES, CERTIFICATIONS and REGISTRATIONS

Florida Registered Nurse
ACLS
Trauma Nurse Core Course

PROFESSIONAL AFFILIATIONS

American Nurses Association
Sigma Theta Tau, Nursing Honor Society
American Organization of Nurse Executives