INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

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

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

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

SUBORDINATES' PERCEPTIONS OF NURSE EXECUTIVES' LEADERSHIP STYLES: TRANSFORMATIONAL AND TRANSACTIONAL

by

Diane Kacer Opeil

Dissertation Committee

Professor Elaine La Monica Rigolosi, Sponsor
Professor Jane A. Monroe
Professor Keville C. Frederickson

Approved by the Committee on the Degree of Doctor of Education

Date JAN 2 6 1998

Submitted in partial fulfillment of the
requirements for the Degree of Doctor of Education in
Teachers College, Columbia University

1997

ABSTRACT

SUBORDINATES' PERCEPTIONS OF NURSE EXECUTIVES' LEADERSHIP STYLES: TRANSFORMATIONAL AND TRANSACTIONAL

Diane Kacer Opeil

The purpose of this study was to investigate relationships among transformational, transactional, or laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers as perceived by their immediate subordinates and the subordinate reported outcome factors. The outcome factors considered included subordinate satisfaction and leader effectiveness of the immediate supervisor as perceived by subordinates. The relationships among the outcome measures of satisfaction and leader effectiveness were also explored.

This descriptive correlational study used a national sample of 184 immediate registered nurse subordinates of 85 chief nurse executives in Department of Veterans Affairs Medical Centers. A constant, random sample of the subordinates was selected from a list of subordinates provided by the chief nurse executives. Data collection was conducted by mail. Subjects completed the Multifactor Leadership Questionnaire (Bass & Avolio, 1995) to rate leadership styles and outcome factors. Subjects also completed the Minnesota Satisfaction Questionnaire (Weiss, Dawis, England, & Lofquist, 1967) and the Management Effectiveness Profile System (Human Synergistics International, 1993) to measure the respective outcome factors of satisfaction and leader effectiveness.

The investigation of the relationships among the leadership factors provided support and greater understanding of Bass's (1985a) conceptual model within the nursing

profession. The relationship among leadership styles and outcome factors substantiated the advantages of transformational leadership and the positive transactional approach of contingent reward. Relationships among outcome factors identified the link between the outcomes and added credence to the widely used Multifactor Leadership Questionnaire's outcome measures. Most of the relationships involving selected demographic variables occurred with the highest academic educational preparation having a negative relationship with outcomes above and beyond leadership styles. This finding lent support to leadership's relationship with outcomes in favor of demographic variables.

Several implications were identified including awareness of the findings and the refinement of transformational leadership behaviors. Some current thoughts and practices in nursing administration may also need to be reconsidered. Questions for future research related to sample, design, variables, operationalizing implications, and theoretical concepts.

ACKNOWLEDGMENTS

My pursuit of a doctoral degree has been a long, exciting journey into unknown territories. Throughout this journey, I maintained that this educational endeavor was "my hobby," a search for truth. I have enjoyed my journey immensely, primarily due to the many people who accompanied me or provided for my needs along the way.

First, I would like to extend a very special thank you to my guide, sponsor, and advisor -- Elaine La Monica Rigolosi. I consider myself very fortunate to have crossed your path when I did. Your guidance has been like a beacon on a dark night. You lit the way and helped me sustain a straight, steady course. Remarkably, when I needed you most, you were by my side.

I would also like to express heartfelt gratitude to my trailblazers and committee members -- Jane A. Monroe and Keville C. Frederickson. Both of you made my journey easier. Dr. Monroe, you provided a very special gift of making statistics come to life. I learned that in the long run, on the average, nothing matters. Dr. Frederickson, you provided tremendous empathy and caring, the hallmarks of nursing. When I thought that I may have taken the wrong crossroad in my search, you cleared the way.

I would like to express appreciation to my two dissertation examiners -- Kathleen B. Scoble and Sharon A. McDade. When I encountered the last major obstacle to my final destination, you willingly extended a helping hand. I thank you.

In memory of Penelope J. Popp, I would like to acknowledge a supervisor and friend. You provided the final impetus for the start of my journey and quest. Although you could not be with me at the end of my journey, you are still in my thoughts.

To my current immediate supervisor, Richard L. McKernan, I extend much gratitude. Before I ever dreamed that you would formally be such an integral part of this journey, you jumped on board. Over the years, you were truly unique in your support along the way. Fortunately for me, for the final leg of the journey, you were present.

To all the participating chief nurse executives and their subordinates in the VA Medical Centers, I express my thanks. You gave your precious time to lend a hand. I truly appreciated your calls and notes when I still felt so far from home.

To my dear friends and colleagues, you were my companions on this journey. My words can not express how your words of encouragement and concern have helped me. I send an extra special "thank you" to Joan Solski, Joanne Chipego, and Ed Riley.

Last, but certainly not least, I would like to express deep and loving gratitude to my family. You were with me every step of the way. This accomplishment is yours as much as it is mine. Mom and Dad, you provided immeasurable love and support along this journey and during many previous quests. To my dear son, Seth, you were the heart of this journey and many quests to come. My memories of the special moments are most precious -- the best wishes, the bright smiles, the warm laughter, the positive and loving words, the "good luck" charms, the love-filled hugs and kisses. I hope that my quest has provided you with special lessons for the journeys ahead. Never quit. Try your best. Live, love, laugh, and learn. Know the truth, and the truth shall set you free. DKO

TABLE OF CONTENTS

Chapter	Page
I. THE PROBLEM	13
Problem Statement	15
Background of the Study	15
Technological Forces	17
Social Forces	17
Demographics	18
Education	18
Work Values	19
Economic Forces	20
Organizational Forces	20
Environmental Forces and the Department of Veterans Affairs	21
Need for the Study	23
Purposes	28
Definition of Terms	29
Assumptions	32
Significance of the Study	33
Summary	37
II. REVIEW OF THE LITERATURE	39
Conceptual Framework	39

Chapter Page

Historical Evolution of Leadership Theory 40

Transactional Leadership 42

Contingent Rewards 43

Management-by-Exception 43

Transformational Leadership 43

Charisma or Idealized Influence 44

Inspirational Motivation 45

Individualized Consideration 46

Intellectual Stimulation 47

Laissez-Faire Leadership 47

A Comparison of Transactional and Transformational Leadership 47

Transactional and Transformational Leadership Studies 49

Transactional and Transformational Leadership in Nursing Research 53

Outcome Factors 57

Satisfaction 58

Effectiveness 59

Relationships among Outcome Factors 61

Summary 62

III. METHOD 63

Population and Sample 63

Instruments 64

Chapter Page

Multifactor Leadership Questionnaire 65
Description 66
Scoring 67
Instrument Development 67
Reliability 69
Validity 71
Minnesota Satisfaction Questionnaire 72
Description 73
Scoring 73
Instrument Development 74
Reliability 75
Validity 76
Management Effectiveness Profile System 77
Description 77
Scoring 78
Instrument Development 79
Reliability 79
Validity 80
Demographic Data Questionnaire 80
Data Collection Procedures 81
Protection of Human Subjects 83

Chapter Page

Data Analysis 83

Summary 85

IV. RESULTS 86

Response Rates 86

Demographic Data of Respondents 87

Medical Center Characteristics 89

Characteristics of Chief Nurse Executives 89

Characteristics of Registered Nurse Subordinates 99

Instrument Reliabilities 112

Leadership Styles of Chief Nurse Executives 114

Subordinate Perceived Outcome Factors 117

Relationships among Leadership Styles and Outcome Factors 120

Relationships among Leadership Styles, Outcome Factors, and Demographics 123

Summary 136

V. DISCUSSION 140

Chief Nurse Executives' Leadership Styles 141

Subordinate Perceived Outcome Factors 145

Leadership Styles and Outcome Factors 146

Leadership 147

Outcomes 150

Chapter Page

Leadership and Outcomes 152

Leadership Styles, Outcome Factors, and Demographics 154

Satisfaction and Demographics 155

Effectiveness and Demographics 157

Implications 160

Limitations 165

Questions for Future Research 166

Summary 169

REFERENCES 175

APPENDIXES 195

A Multifactor Leadership Questionnaire 195

B Minnesota Satisfaction Questionnaire 196

C Management Effectiveness Profile System 197

D Demographic Data Questionnaire 198

E Letter from Dr. Bernard M. Bass 199

F Permission to Use Multifactor Leadership Questionnaire 200

G Permission to Use Minnesota Satisfaction Questionnaire 201

H Permission to Use Management Effectiveness Profile System 202

I Letter to Chief Nurse Executives 203

J Follow-up Letter to Chief Nurse Executives 204

K Participant Cover Letter 205

Chapter Page

L Instructions for Participants..... 206

M Participant Thank You Letter..... 207

N Second Follow-up Letter..... 208

O Letter of Appreciation..... 209

LIST OF TABLES

Table		Page
1	Response Rates	88
2	Medical Center Characteristics	90
3	Demographic Data of Chief Nurse Executives	91
4	Educational Preparation of Chief Nurse Executives	92
5	Tenure and Career Path of Chief Nurse Executives	95
6	Professional Development of Chief Nurse Executives	100
7	Demographic Data of Registered Nurse Subordinates	101
8	Educational Preparation of Registered Nurse Subordinates	103
9	Tenure and Career Path of Registered Nurse Subordinates	105
10	Professional Development of Registered Nurse Subordinates	111
11	Instrument Reliabilities	113
12	Summary Statistics of Leadership Styles of Chief Nurse Executives	115
13	Summary Statistics of Outcome Factors	118
14	Pearson Product-Moment Correlation Coefficients among Leadership Styles	122
15	Pearson Product-Moment Correlation Coefficients among Leadership Styles and Outcome Factors	124
16	Pearson Product-Moment Correlation Coefficients among Outcome Factors	125
17	Regression of Satisfaction (Minnesota Satisfaction Questionnaire) on Intellectual Stimulation and Demographic Variables	128

Table | Page

18 Regression of Effectiveness (Multifactor Leadership Questionnaire) on Idealized Influence (Attributed) and Demographic Variables..... 129

19 Regression of Effectiveness (Multifactor Leadership Questionnaire) on Individualized Consideration and Demographic Variables..... 130

20 Regression of Effectiveness (Management Effectiveness Profile System) on Idealized Influence (Attributed) and Demographic Variables..... 131

21 Regression of Effectiveness (Management Effectiveness Profile System) on Idealized Influence (Behavior) and Demographic Variables..... 132

22 Regression of Effectiveness (Management Effectiveness Profile System) on Intellectual Stimulation and Demographic Variables..... 133

23 Regression of Effectiveness (Management Effectiveness Profile System) on Individualized Consideration and Demographic Variables..... 134

24 Regression of Effectiveness (Management Effectiveness Profile System) on Management-by-Exception (Active) and Demographic Variables..... 135

There is nothing more difficult to take in hand, more perilous to conduct or more uncertain in its success than to take the lead in the introduction of a new order of things.

Machiavelli, 1592

Chapter I

THE PROBLEM

In response to a turbulent and transforming environment, people are adjusting to a multitude of complex changes in every facet of life. External forces generate most of these changes, often as a result of previously encountered change (Anderson, 1996; Porter-O'Grady, 1992, 1993). The accelerated rate of change in contemporary society is unparalleled in recorded history (Porter-O'Grady, 1992). In addition, the present transformation differs significantly from other revolutionary periods through societal awareness of the occurrence (Barker, 1990). The changes are studied, hypotheses abound, and futurists theorize various possible scenarios (Martel, 1986; Naisbitt, 1982; Toffler, 1970). Numerous writers have noted the changing environment of everyday life, organizations, health care, and nursing (Baldwin, 1990; Beecroft, 1993; Budgen, 1987; Christman & Counte, 1989; Coddington, Palmquist, & Trollinger, 1985; Covey, 1989; Manthey, 1990; McVey & Moore, 1993; Trofino, 1995; Wilson, 1992).

Kuhn (1977) discussed revolutionary intervals in history as paradigm shifts when basic assumptions of society become inappropriate. These assumptions serve as the foundation for thought patterns, moral principles, boundary definitions, and behavioral expectations. As these rules fail to provide guidance through radical changes, new assumptions emerge as replacements. The end of the twentieth century summons people in each nation to confront and examine basic methods of living, perceiving, behaving, thinking, valuing, relating, working, and leading. Practices associated with a new view of

reality will evolve through review, scrutiny, and evaluation (Koerner & Bunkers, 1992; Porter-O'Grady, 1993; Stout-Shaffer & Larrabee, 1992; Wolf, Boland, & Aukerman, 1994a).

Paradigm shifts will transform all roles, organizations, and industries (Porter-O'Grady, 1993; Stout-Shaffer & Larrabee, 1992). The occupational role of manager is undergoing the most pivotal and enormous change (Porter-O'Grady, 1997). Major societal changes and complexity beleaguer the traditional manager, resulting in obsolescent management techniques (Koerner & Bunkers, 1992). Approaches learned and used during times of stability and structure perform less effectively during change. Managers and organizations search for an administrative role clarification and identity, especially related to more highly effective outcomes (Porter-O'Grady, 1993).

American health care is also encountering a tremendous impact from the fundamental changes, perhaps more than any other industry is experiencing (Adler, 1996; Porter-O'Grady, 1990). A combination of substantial societal forces heralds a radically different future for health care. Turbulence has reached legendary proportions with no evidence of diminishing in the foreseeable future (Beyers, 1996; Blair, 1989; Wolf, 1990).

Health care requires highly effective leadership to survive and thrive through these abrupt changes (Hood & Smith, 1994; Kerfoot, 1997a; Miller, 1989; Tichy & Ulrich, 1984). While leaders hold a pivotal position to shape health care, nursing faces a challenging opportunity to become more significant and effective in the leadership of health care delivery (Andrica, 1997; Nagaike, 1997). To facilitate optimal adaptation to

the concentrated environmental changes, new leadership theories and strategies are required (Porter-O'Grady, 1992, 1993). Transformational leadership has been identified as capable of providing an atmosphere that responds effectively to rapid change.

This study investigated relationships among transformational, transactional, or laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers as perceived by their immediate subordinates and the subordinate reported outcome factors. The outcome factors included subordinate satisfaction and leader effectiveness of the immediate supervisor as perceived by subordinates.

Problem Statement

The following problem was investigated: What are the relationships among the transformational, transactional, or laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers and the leadership outcome factors of satisfaction and leader effectiveness, as perceived by immediate subordinates?

Background of the Study

Leadership is one of the most observed and least understood concepts (Bass, 1981). Plato, Confucius, and other renowned scholars have studied and written about leadership for centuries (as cited in Burns, 1978). All forms of businesses have researched organizational performance related to leadership. Numerous theories evolved from the empirical efforts to identify components resulting in effectiveness (Barker, 1990). Leadership unfolded as an increasingly important element during a period of

instability (Gevedon, 1992; Porter-O'Grady, 1993). The search for effective leadership during the present turbulent times has intensified in all of society (Adams, 1994a; Dunham, 1989; McClure, 1989; Taccetta-Chapnick, 1996; Wolf, 1990). The dramatic changes in health care translate into an increasing demand for leadership in the health care system, including nursing (Acee, 1990; Miller, 1989).

In concert with an emerging societal paradigm, the transition to a new understanding of leadership has unfolded (Ehrat, 1990). Burns (1978) described and proposed transformational leadership as a beacon through the turbulent environment. Since Burns' seminal work, numerous nursing and management authors indicated that transformational leadership is needed during these changing times (Hickey & Castaneda, 1995; McBride, 1994; Wolf, 1986; Young, 1992). Transformational leaders led several well-known companies to attain significantly improved performances (Bass, 1985a, 1990). Numerous additional works on management discuss effective leadership characteristics and practices consistent with the transformational leader; however, they do not acknowledge this conceptual foundation (Berlew, 1986; Manz & Sims, 1989; Naisbitt & Aburdene, 1985; Peters & Austin, 1985; Peters & Waterman, 1982).

As society and health care adjust to complex forces, nurses need to be aware of the interrelationships among powerful factors influencing the future. This knowledge will enable nurses to improve health care for all of society (Pesut, 1997; Scruby & Farrell, 1987). In considering societal forces, transformational leadership may contribute to endeavors of improved health care and professional growth by enhancing the satisfaction and leader effectiveness in nursing.

Technological Forces

Transitions in technology have profoundly affected the world. The earth's dimensions have diminished due to the array of technological linkages. Executives in every industry, including the nurse leader, must expand their frame of reference to a world view. Transformational leaders exhibit an expanded perspective and emphasize long-term objectives (Bass, 1985a).

Technology has shifted the industrial society to one that is information based. Requirements for information resources have multiplied and will proceed with growth. To process dependable information expeditiously, people and communications rank as the most important business assets in an information society (Barker, 1990).

Changes in information and communication systems create new business approaches and relationships. In particular, technological advancements directly impact on the thinking and work patterns of nurses in the health care system. Requirements for new skills, knowledge, and activities to enhance the utilization of technology arise. These changes require nursing leaders to comprehend technology, understand needed technological skill, perceive future advancements, and align the profession to adjust and expand services promptly (Porter-O'Grady, 1990). Transformational leaders often display technical expertise, powers of vision, and the skill of persuading others to act (Bass, 1985a).

Social Forces

Numerous social factors are exerting powerful forces leading to change. The changes in demographics, education, and work values have particularly impacted health

care and the work environment. The transformational leader may effectively meet the challenges presented by these social changes.

Demographics. Changing demographics and lifestyles have propelled societal, health care, and nursing transformation. The proportion of older adults in the population has expanded rapidly (Scott & Rantz, 1997; Spera, Monson, & Hernly, 1991). The family structure and the role of women in society have dramatically changed (Gottlieb, 1990). The evidence of diversity among demographic factors prevails (Naisbitt, 1982; Toffler, 1986), including differing products, services, living arrangements, and cultures.

Changing demographics dramatically affect health care and nursing. Health needs related to the diverse population and lifestyles necessitate consideration and alteration, especially sensitivity to generation and cultural differences. Nurses can lead the efforts to address many of these changing health promotion, maintenance, and educational needs of society. Nursing also needs to consider how the diverse demographics of subordinates relate to leadership style and outcomes.

Education. The average educational level has advanced and caused transformations. Education changes peoples' thoughts, behaviors, needs, and expectations. Educated customers exhibit increased needs and demands resulting in the consumer movement (Nanus, 1992; Sovie, 1987; Taccetta-Chapnick, 1996) and an enhanced awareness of human rights (Tichy & Devanna, 1986). Nurse leaders can help nurses become more responsible in the increasingly important role of patient advocate (Ripple, 1988).

Education also increases employee awareness and facilitates participatory decision making; therefore, people become less passive in their work environment (Barker, 1990). More knowledgeable workers express concerns for interesting work and the development of abilities (Lawler, 1985). Transformational leadership practices appear to be congruent with a more highly educated work force (Hater & Bass, 1988).

Work values. Education, rapid change, more diverse workers, increased leisure time, greater interdependence, higher levels of affluence, and other factors have combined to change the work force values (Barker, 1990, 1991; Davidhizar, 1993; Shriver, 1992). People believe they require a high quality work life that includes a balance of work and recreation, treatment with dignity, decision making, empowerment, and a satisfying or meaningful assignment (Shriver, 1992). Employee commitment to work has changed with a resulting decrease in productivity (Bennis & Nanus, 1985).

Changes in values and the growing complexity of society have produced significant changes in the manager-subordinate relationship, rendering traditional management techniques obsolescent. More assertive employees scrutinize, question, challenge, and criticize managers who lack credibility (Acee, 1990; Bennis & Nanus, 1985). The hierarchical structure and depersonalized policies no longer satisfy employees (Barker, 1990). This leadership crisis warrants new strategies, including approaches used by nurse leaders. The transformational leader demonstrates behaviors consistent with these altered work values.

Economic Forces

The changing economic reality profoundly impacted the entire world community, especially American businesses and health care. The United States moved from a position of economic stability and prominence to possession of the highest national debt (Porter-O'Grady, 1990). Federal actions to control costs brought national attention and a series of cost cutting initiatives to the health care arena (Sovie, 1987). The demand for change in health care has never been expressed in such a strong, incessant, and widespread voice.

Nurses on all levels and in all settings experience the turbulence of the health care environment with shifting or unclear priorities and finite human or financial resources (Cottingham, 1988; Gottlieb, 1990; Sovie, 1987). The survival of a health care organization depends on productivity, and management is strongly linked with productivity (McNeese-Smith, 1992). Nurse executives, under constant cost constraints, need to address productivity and cost effective care issues (Flarey, 1992; Vaultier, 1997). A leader with creative efforts can achieve comprehensive, coordinated, relevant, humanistic, and cost effective care (Blair, 1989; Cottingham, 1988; Dunham, 1989; Sovie, 1993). Transformational leadership may effectively meet the challenges and realize the opportunities.

Organizational Forces

Tremendous environmental pressures have forced business leaders to consider major organizational changes (Knox & Irving, 1997; Miller, 1989; Peters, 1987). These leaders have faced increased competition and productivity concerns that demand

improved employee performance (Kanter, 1983; Peters & Waterman, 1982; Shortell, 1985). Familiar organizational structures and management techniques have become ineffective amid the radical societal changes, and new models have emerged consistent with the new world view. These new and effective organizational methods affected all businesses and industries, including health care.

Health care organizations and nursing administrators have historically managed rigidly with bureaucratic cultures and structures. This over-management conflicts with emerging societal views and trends (Barker, 1991; Dunham, 1989). A new kind of leadership is needed to inspire employees to do more with less (Dunham, 1989; Flarey, 1992; Porter-O'Grady, 1993). Transformational leadership provides an important conceptual link for nursing administration (Kilker, 1994).

Environmental Forces and the Department of Veterans Affairs

The Department of Veterans Affairs faces the same environmental forces as other organizations, and possibly even more severe threats. The veteran population is declining, and the number of patients hospitalized in Department of Veterans Affairs Medical Centers reached the lowest level in recent memory (Schwartz, 1992). At the same time, the proportion of aging veterans is increasing more rapidly than the general population (Nielson, 1993). Despite the increasing need for long term care (Schwartz, 1993b), the Department of Veterans Affairs greatest shortcoming remains its limited response to expand long term care facilities (Sunshine, 1993a).

The massive national debt and emphasis on controlling health care costs present the Department of Veterans Affairs with additional stresses due to federal funding. Many

Department of Veterans Affairs Medical Centers require renovation while funding sources limit these improvements (Sunshine, 1994b). In addition, the Department of Veterans Affairs duplicates the health care services available to senior citizens through Medicare (Schwartz, 1993a).

A negative image impacts the viability of the Department of Veterans Affairs Medical Centers (Graning, Walters, & Headley, 1994; Sunshine, 1993b). The Department of Veterans Affairs is viewed as a rigid bureaucracy with senseless rules and ineffective administrators (Sunshine, 1994a, 1994c). The Department of Veterans Affairs requires highly effective leadership to confront these environmental forces that are coming to bear. Transformational leadership may be beneficial in creating the positive changes that are needed.

Transformational leadership inspires subordinates to perform beyond expectations. This style differs from the more traditional approach of transactional leadership (Bass, 1985a; Burns, 1978). Transformational leadership positively correlates with work performance of individuals and groups (Bass, 1985a; Evans, 1992; Tichy & Devanna, 1986). Emerging during times of radical change, transformational leaders can identify new market opportunities and can enlist subordinates to move the organization into new territories. These leaders consider and intellectually stimulate subordinates, inspiring trust, loyalty, and faith. Transformational leaders heighten subordinate energy, attention, comprehension, confidence, sense of ownership, personal responsibility, and control. These leaders fulfill individuals' unique needs and enhance a subordinate's role

clarity and acceptance (Bass, 1985a; Burns, 1978). Transformational leadership seems highly relevant and applicable for the nursing professional during these turbulent times.

Need for the Study

The present time characterized by rapid and unpredictable changes has provoked an intensified search in all of society for effective leadership (Adams, 1994a; Brown & McCool, 1987; Dunham, 1989; Wolf, 1990). Numerous experts have identified the grave importance of leader effectiveness (Holle & Blatchley, 1987; Kerfoot, 1997b; McNeese-Smith, 1992; O'Neil & Gajdostik, 1989). The limitations of current leadership styles and the lack of vision have contributed to the productivity crisis in the United States by eroding the organization's ability and effort for innovation and creativity (Hayes & Abernathy, 1980).

The increasing complexity of the health care system has resulted in a demand for nursing leadership that is unequaled in the past (Acee, 1990). This demand will continue to enlarge (American Hospital Association, 1987; Department of Health and Human Services, 1988). As the nursing profession searches for leadership (Hart, 1994), crisis ensues because of the lack of leadership (Institute of Medicine, 1983; Simms, 1991).

To ensure effective nursing care, an expanded understanding of leader effectiveness is imperative (Acee, 1990; Henderson, 1995; Kerfoot, 1996). The nursing literature indicates a lack of leadership in practice and identifies a need for leadership based on knowledge (Yura, Ozimek, & Walsh, 1981). Many nursing administrators lack a clear identity, especially in management role delineation (Ameigh, 1996; Blair, 1989;

Chaska, 1983; Henry et al., 1987; Jobes & Steinbinder, 1996; Stevens, 1983). Nursing also requires identification of leadership characteristics and styles pertinent to the profession (Gottlieb, 1990). Many recommendations have been formulated in an effort to improve the understanding of nursing administrative roles (Brown & McCool, 1987; Buccheri, 1986; McClure, 1989; Meighan, 1990). Since nursing in the health care setting differs from roles in the business world, the appropriateness and applicability of leadership theory in this labor intensive profession requires exploration (Gottlieb, 1990).

Although nursing theoretical interest and knowledge have expanded (Stevens, 1984), nursing administration theory development has lingered behind in this progress (Rawnsley & Evans, 1992). Nurses in administrative positions need to develop political, social, and behavioral skills based on a knowledge of theory and practice in leadership (Miller, 1989; Stevens, 1981; Yura et al., 1981). Nurses gain insight into the strengths and weaknesses of their leadership style through a leadership knowledge base (Hart, 1994). Practice and theory complement each other to create the foundation of the emerging leadership role (Porter-O'Grady, 1992).

The lack of relevant research in theory development hinders the maturation of nursing administration knowledge base (Lynn & Cobb, 1994; Marriner-Tomey, 1990). Experts in nursing have identified a pressing research need to define the integration of nursing and management domains (Blair, 1989; Chaska, 1983; Stevens, 1983). As the numbers of nursing clinical practice studies have increased, studies in nursing administration have decreased (Jennings, 1995; Trandel-Korenchuk, 1986). In addition, nursing literature emphasizes the need for research specific to leadership (Alexander,

1989; Avolio & Gibbons, 1988; Chaska, 1983; Henry et al., 1987; Stevens, 1983), yet nursing leadership has received limited empirical testing (Fagin & McGiven, 1983; Henry, 1989; Henry, O'Donnell, Pendergast, Moody, & Hutchinson, 1988; McDaniel & Wolf, 1992). The topic of leadership ranks as one of the top four priorities for research in nursing administration during the 1990s (Alexander, 1989).

Employees' performance impacts significantly on the success of an organization. However, little research has been conducted on factors associated with performance from a nursing administration theoretical perspective (Jennings & Meleis, 1988). Leadership style represents one variable that logically links with employees' performance (Evans, 1992).

Department of Veterans Affairs Medical Centers require nursing administration research. Alderson, Gallimore, Gorman, Monahan, and Wojtasinski (1992) conducted a Delphi survey using a sample of nurses in a Department of Veterans Affairs Medical Center. The researchers instructed the nurses to identify clinical practice questions for nursing research. Despite these instructions, administrative practice questions were consistently identified and ranked higher than clinical practice questions. Investigators concluded the administrative issues may be pertinent to other Department of Veterans Affairs Medical Centers.

Administrative heads of nursing services or departments in health care and education institutions represent the top leadership in nursing (Barker, 1990). These positions have evolved into an increasingly integral and essential part of the top-management teams. Responsibility for the success of nursing programs rests with these

executives (Adams, 1994a; Matrone, 1996). Due to a higher profile, understanding nursing administrators' effectiveness becomes more important (Andrica, 1997; Smith et al., 1994). Their leadership ability to change the inaccurate public image of nurses' scope of practice can be delivered to the forefront through public awareness of their full-partner status (Sovie, 1987; Walker, 1992). Because these nurse executives exert a tremendous influence (Dunham-Taylor, Fisher, & Kinion, 1993; Gottlieb, 1990), they hold optimal positions to assist with leading organizational change (Boston, 1994; Brown, 1996; Redmond, 1995).

The Department of Veterans Affairs, Veterans Health Services and Research Administration (1989) established the chief nurse executive position as a key position in Department of Veterans Affairs Medical Centers. General provisions require that the chief nurse executive contribute to medical center policy development, planning, decision making, resource management, and evaluation that affect the delivery of services to patients. The chief nurse executive also contributes to the strategic management process in the medical center. The chief nurse executive ensures nursing service representation on all multidisciplinary committees to enhance the delivery of health care and provides for collaboration with professional or health care organizations in the community to enhance nursing care and staff development. Understanding this leadership position and the related impact is essential for enhancing the delivery of health care in Department of Veterans Affairs Medical Centers.

Activities of the nursing professional relate directly to critical human needs (Levenstein, 1984). In this age of fiscal constraints, nursing accountability for

economically effective, quality patient care outcomes demand attention (Maguire, 1986; Sovie, 1987). Nursing must identify methods to optimize management performance in the patient care delivery system (Haddock, 1989; McClure, 1989; Wolf, 1990; Wolf et al., 1994a). Consideration of the staff experience of a manager's style is essential to understanding management practices (Moss & Rowles, 1997). Transformational leadership was found to correlate with improved work performance (Bass, 1985a; Evans, 1992; Tichy & Devanna, 1986).

New frameworks for designing work develop during periods of transformation, resulting in a new management role (Ling, 1996; Ryan, 1990). Old nursing leadership practices must be shed and new skills adopted during these challenging times (Porter-O'Grady, 1997; Ryan, 1990). Changes suggest a multidimensional leadership model that incorporates rapid change, proactive thinking, empowerment, and decision making autonomy (McDaniel & Wolf, 1992). Nursing and management literature extol the need for new leadership theories and strategies (Berlew, 1986; Goldberg, 1991; House, 1976; Mintzberg, 1975; Porter-O'Grady, 1992). Many have specified the need for transformational leadership (Aroian, Meservey, & Crockett, 1996; Curtin, 1997; Shriver, 1992; Trofino, 1992; Young, 1992). Transformational leadership represents a new conceptual model with strategies that are consistent with identified characteristics of effective emerging leadership practices. Bass (1985a) reported that transformational leadership and numerous related variables required empirical investigation. Research involving nursing and this new conceptual model is needed.

Purposes

The purposes examined follow.

1. The first purpose was to investigate the leadership styles of chief nurse executives as perceived by subordinates and as measured by the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995).

2. The second purpose was to investigate the subordinate perceived outcome factors of satisfaction, as measured by the MLQ (Bass & Avolio, 1995) and the Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967), and leader effectiveness, as measured by the MLQ (Bass & Avolio, 1995) and the Management Effectiveness Profile System (MEPS) (Human Synergistics International, 1993).

3. The third purpose was to investigate relationships among the subordinate perceived chief nurse executives' leadership styles and the outcome factors of satisfaction and leader effectiveness. Leadership styles and outcome factors of satisfaction and leader effectiveness were measured by the MLQ (Bass & Avolio, 1995). Satisfaction and effectiveness were also measured by the MSQ (Weiss et al., 1967) and the MEPS (Human Synergistics International, 1993) respectively.

4. The fourth purpose was to investigate relationships among subordinate reported outcome factors, chief nurse executives' leadership styles, and subordinate demographic variables: age, gender, highest nursing educational preparation, years of service as a registered nurse, years in current position, and membership in professional organizations. Leadership styles and outcome factors of satisfaction and leader

effectiveness were measured by the MLQ (Bass & Avolio, 1995). Satisfaction and effectiveness were also measured by the MSQ (Weiss et al., 1967) and the MEPS (Human Synergistics International, 1993) respectively.

Definition of Terms

The following definitions were used in this investigation.

Department of Veterans Affairs Medical Centers are federally funded hospitals or health care facilities providing acute inpatient and outpatient services to veterans.

Chief nurse executive is the senior registered nurse executive in a medical center. This nurse leader at the executive level coordinates and provides authority and accountability for development of organization-wide patient care programs, policies, and procedures that relate to nursing care; development and implementation of the organization's plan for providing nursing care; participation with the governing body, management, medical staff, and clinical leaders in decision making for the organization; and implementation of a program to measure, assess, and improve the quality of nursing care (Joint Commission on Accreditation of Healthcare Organizations, 1996).

Subordinates refer to registered nurses who directly report to chief nurse executives.

Transformational Leadership "...occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20). Transformational leadership was operationally defined as the scores for transformational factors obtained on the

Multifactor Leadership Questionnaire (Bass & Avolio, 1995). The five factors that characterize transformational leadership are listed below.

Idealized influence (attributed), or attributed charisma, is the impact of the leader's ability to arouse enthusiasm, strong emotions, faith, loyalty, respect, pride, and self-trust (Avolio, Bass, & Jung, 1995; Bass 1985a, 1985b).

Idealized influence (behavior), or behaviorally-based charisma, is the charismatic behavior of the leader to focus on people, develop a vision, transmit the vision, and implement the vision to arouse followers (Avolio et al., 1995; Bass, 1985a).

Inspirational motivation, a subfactor of charisma, refers to a leader's ability to use emotional and nonintellectual qualities to arouse followers (Bass, 1985a).

Individualized consideration represents a leader's personalized orientation to a follower, treating each individual differently according to needs and abilities (Bass, 1985a, 1985b).

Intellectual stimulation is leader behaviors that arouse and change followers' problem awareness and problem solving abilities. These leaders encourage intellectual growth, imagination, and thought (Bass, 1985a, 1985b).

Transactional Leadership occurs "...when one person takes the initiative in making contact with others for the purpose of an exchange of valued things" (Burns, 1978, p. 19). Transactional leadership was operationally defined as the scores for transactional factors obtained on the Multifactor Leadership Questionnaire (Bass &

Avolio, 1995). The three factors that characterize transactional leadership are listed below.

Contingent reward means providing the positive reinforcement of reward when followers meet agreed upon objectives (Bass & Avolio, 1990).

Management-by-Exception (active) means actively seeking mistakes to take corrective action by relying on negative reinforcement when performance standards are not met (Bass & Avolio, 1990).

Management-by-Exception (passive) refers to leaders who use negative reinforcement only if standards are not achieved or if something goes wrong (Bass & Avolio, 1990).

Laissez-Faire Leadership, or nonleadership, is the avoidance or absence of leadership because the leader abdicates responsibilities and decision making (Avolio & Bass, 1991; Bass, 1990).

Outcome Factors are the measures of satisfaction and leader effectiveness. Both outcome factors were measured by the satisfaction and effectiveness scales on the Multifactor Leadership Questionnaire (Bass & Avolio, 1995). Satisfaction was also measured by the Minnesota Satisfaction Questionnaire (Weiss et al., 1967), and effectiveness was measured by the Management Effectiveness Profile System (Human Synergistics International, 1993).

Satisfaction is the overall subordinate contentment from their work experience (Bass, 1985a). Satisfaction was measured by the satisfaction score on the Multifactor Leadership Questionnaire (Bass & Avolio, 1995) and the general

satisfaction score on the Minnesota Satisfaction Questionnaire (Weiss et al., 1967).

Effectiveness is the overall productivity of the work unit. It also represents the superior's ability to meet organizational requirements and job-related needs of subordinates (Hater & Bass, 1988). Effectiveness was measured by the effectiveness score on the Multifactor Leadership Questionnaire (Bass & Avolio, 1995). Effectiveness was also measured by the task skill, interpersonal skills, and personal skills scores on the Management Effectiveness Profile System (Human Synergistics International, 1993).

Assumptions

Certain assumptions formed the basis for conducting this study. The investigator assumed that the transformational and transactional leadership conceptual model, as proposed and operationalized by Bernard M. Bass (1985a), was relevant to nursing leadership practice. In addition, transformational, transactional, and laissez-faire leadership styles would be represented in the sample studied. Several studies have demonstrated the presence of these leadership styles in nurses (Dunham & Klafehn, 1990; Dunham-Taylor & Klafehn, 1995; Gottlieb, 1990; McDaniel & Wolf, 1992).

The investigator assumed that the subordinates of chief nurse executives perceived varying degrees of transformational, transactional, and laissez-faire leadership traits. These subjects would display varying degrees of satisfaction and perceived leader

effectiveness. Previous studies documented the presence of these variables in varying degrees (Bass, 1985b, 1990; Dunham-Taylor & Klafehn, 1995; Singer, 1985).

The investigator assumed that subjects in the study could respond to questions about the leadership characteristics of their immediate supervisor. As direct subordinates, these nurses should have a sufficient amount of contact with the chief nurse executive to identify and select leadership traits. The investigator also assumed that subjects would answer the questions truthfully.

Significance of the Study

The manager remains the most influential individual in the health care organization in achieving productivity, lessening alienation, building morale, and reducing costs (Hood & Smith, 1994; Metzger, 1991). During these times of serious economic constraints and increased competition, the maximization of each employee's full potential is essential. Health care organizations, including Department of Veterans Affairs Medical Centers, cannot afford to support employee lack of productivity (Dunham & Klafehn, 1990). Transformational leadership promotes employee performance that exceeds expectations (Bass, 1985a; Bennis, 1966). If transformational leaders achieve these higher levels of nursing productivity and effectiveness, implications for the development of nursing leadership and the well-being of the health care organization are significant.

Transformational leadership behaviors also can create organizational structures that reinforce emerging, effective organization qualities. Rapid change demands a

flexible, decentralized organization that responds quickly to customer needs. Leaders with positive attitudes and visions inspire employees to enthusiastically participate in innovation teams and share organizational goals. Creative thinking and risk taking are rewarded and constantly reinforced (Bass, 1990; McDaniel & Wolf, 1992). These qualities enhance patient care services and outcomes (McDaniel & Stumpf, 1993; Norman, 1995). These approaches provide opportunities to influence nurses, nursing practice, other disciplines, and the health care delivery system (McClure, 1989).

If transformational leadership is useful, programs to address practice standards for nursing administrators can be developed. Subsequently, practice can be monitored, evaluated, and improved (Gottlieb, 1990). Acting as moral agents, transformational leaders can help define the profession's ethical standards (Cassidy & Koroll, 1994). As the professional nurse exemplifies effective leadership and standards of professional practice to achieve organization and patient care goals, the image of nursing improves. The nurse leader can serve as a beneficial role model to enhance the abilities of others in the organization. When this level of professionalism combines with a more responsive organizational environment, a more positive corporate image is conveyed to customers, suppliers, personnel, shareholders, and the community at large (Bass, 1990).

Transformational leadership fosters the nursing profession's efforts for increasing autonomy, decision-making roles (Trofino, 1993), and professional growth (Barnum, 1994). Transformational leaders empower subordinates and develop staff competencies. These outcomes ultimately advance the nursing profession (Brady, 1994).

Since an instrument is available to measure transformational leadership factors, these factors could be incorporated into placement and guidance programs (Bass, 1990; Yammarino & Bass, 1990). Responses can also be used to identify individuals with specific qualities to lead a new program or to be groomed for a particular position (Hayden, 1994). Feedback from the measurement tool can help with coaching, counseling, and mentoring purposes (Bass, 1990). If subordinate characteristics relate to leadership style effectiveness, these characteristics can also be considered.

Leaders are not born, and leadership can be learned (Hart, 1994; Hood & Smith, 1994; Kerfoot, 1992). The capability of an individual to learn effective leadership behaviors presents significant implications for education, training, and development of current and future leaders (Acee, 1990; Bass, 1990; Hood & Smith, 1994; Yammarino & Bass, 1990). Leadership courses could be offered for growth and development of leaders (Gottlieb, 1990). A survey revealed 600 college leadership courses are offered, including transformational leadership at the United States Air Force Academy at Colorado Springs (Bass, 1990). Transformational leadership could be the subject of management training, as offered at Xerox Corporation (Bass, 1990; Dunham & Klafehn, 1990).

Opportunities and assignments to reinforce, update, and enhance skills can be planned (Bass, 1990; Gottlieb, 1990). Transformational leadership factors could be used to examine one's leadership style, identify areas for improvement, and develop strategies to enhance needed skills (Acee, 1990; Dunham & Klafehn, 1990). Role modeling and mentoring significantly contribute to the development of effective leadership behaviors (Bass, 1990; Kouzes & Posner, 1987). Feedback on transformational leadership factors

can help mentor, coach, and counsel employees to promote transformational leadership patterns (Bass, 1990; Dunham & Klafehn, 1990; Gottlieb, 1990).

The Department of Veterans Affairs provides nursing preceptorship training programs to assist nurses in preparing for key leadership roles in nursing administration and nursing education. The overall goal of the preceptorship program involves developing professional nurses for effective leadership (Department of Medicine and Surgery, 1980; Department of Veterans Affairs, 1993). Understanding nursing leadership to enhance the development of nursing leaders in the Department of Veterans Affairs represents a significant contribution to that health care organization. In considering the size of the Department of Veterans Affairs and the extent of its influence, this endeavor may also impact upon the nursing profession at large.

Schultz (1987) reported that the nursing administrative theoretical perspective would be advanced by an elaboration and clarification of each of the concepts of the nursing metaparadigm: nursing, person, environment, health. An analysis of the transformational leadership conceptual model will provide insight into these concepts and their relevance for nursing administrative practice. For example, the relationship of leadership to outcome factors may impact on the environment in which care is provided. An investigation of the transformational leadership style and its effectiveness in nursing situations can also help attain knowledge of nursing practice and leadership (Acee, 1990; Johnson, 1986). Research could unite concepts truly relevant to nursing with concepts of administration to advance the practice of nursing administration (Blair, 1989). When

variables related to leadership styles are identified, strategies to promote these behaviors in nurses can be investigated.

Summary

Nurses in American health care organizations, including the Department of Veterans Affairs Medical Centers, face tremendous challenges and demands. Success in managing and positioning for change requires highly effective nursing leadership. However, the changing world view demands an alteration in leadership methods. Transformational leadership can provide the nursing profession with the needed tools to prepare for the transitions of the next century. Empirical studies related to the application of leadership theory to nursing administration are required.

As this chapter identified, this study examined the relationships among transformational, transactional, or laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers as perceived by their immediate subordinates and the subordinates' outcome factors. The relationship among these outcome factors of subordinate satisfaction and perceived leader effectiveness were also investigated.

Chapter II, Review of the Literature, presents literature relevant to transformational and transactional leadership conceptual model. Research findings related to the transformational and transactional model are reviewed. Chapter III, Methodology, describes the research methods used in this study. Discussion includes sampling procedures, instruments, data collection, and data analysis. Chapter IV,

Results, will present an analysis of the results of the study. Chapter V, Discussion, will describe the results of the study.

Chapter II

REVIEW OF THE LITERATURE

This chapter presents literature relevant to transformational and transactional leadership conceptual model. The conceptual framework is discussed. Research findings related to transformational and transactional leadership are reviewed, including studies conducted within the nursing profession.

Conceptual Framework

The transactional and transformational conceptual model, as proposed and operationalized by Bernard M. Bass (1985a), provided the conceptual framework for this study. This leadership model identifies the relationship between leader and follower as an interaction of individuals who have purposes and goals. Both leaders and followers experience varying degrees of motivation and power potential.

Transactional, transformational, and laissez-faire leadership styles represent the three types of interactions. The identification of roles and task requirements for followers in exchange for valued rewards forms the basis of the transactional approach. A difference in purpose between the leader and follower remains (Bass, 1985a; Burns, 1978; Byrd, 1987; Kuhnert & Lewis, 1987). Transformational leadership exists when individual leaders "...shape and alter and elevate the motives and values and goals of followers..." (Burns, 1978, p. 425). These leaders exhibit behaviors that reflect vision, empower others with the vision, demonstrate influence of others, acknowledge the

importance of considering and motivating others, model important values, and intellectually stimulate others. The goal of this leadership style is to maximize potential of not only leaders, but followers as well. Individual goals and needs are merged to meet joint goals (Bass, 1985a; Burns, 1978; Byrd, 1987; Kuhnert & Lewis, 1987). Laissez-faire leadership is non-leadership. The leader avoids responsibility and decision making (Avolio & Bass, 1991; Bass, 1990; Bass & Avolio, 1995). This conceptual model ascends from previous work with leadership theory.

Historical Evolution of Leadership Theory

Throughout this century, the study of leadership has evolved. The earliest theories, the great-man approach, focused on the characteristics of important historical leaders. These efforts naturally shifted to the exploration of the traits of more common leaders and the application of these traits in a variety of settings and situations (Acee, 1990; Barker, 1990; Gevedon, 1992; Gottlieb, 1990; Stodgill, 1974). More recent research indicated traits as one of multiple variables related to leader effectiveness (Acee, 1990; Barker, 1990; Gevedon, 1992; Gottlieb, 1990).

The leadership style approach established conceptualization of different dichotomous or continuous style categories such as autocratic, laissez-faire, and democratic (Barker, 1990; Gevedon, 1992). As results started to indicate that successful leaders demonstrated style variability, leadership style research shifted from attempts to identify the most effective style to an exploration of behaviors (Gevedon, 1992). Findings indicated leader behavior correlated to a number of other variables in the

situation, thus resulting in a more complex situational emphasis (Barker, 1990; Gevedon, 1992; Stodgill, 1974).

Behavior theory dominated leadership research by emphasizing that leaders participate in a transaction with subordinates to reach established goals (Yammarino & Bass, 1990). Therefore, most of these theories represent transactional approaches with an exchange relationship (Bass, 1985a; Burns, 1978; Gottlieb, 1990; Hater & Bass, 1988). The exploration of the transactional leadership concept has dominated research, with more recent efforts directed at the exploration of leadership in specific situations. Path-goal theory and other situational theories represent the attempts to understand the effectiveness of contingent rewards (Bass, 1985a; Hater & Bass, 1988). These previously developed theories do not satisfactorily explain leadership complexities (Byrd, 1987; Clover, 1990; Flarey, 1994; Hater & Bass, 1988).

In 1977, James MacGregor Burns (1978) first introduced transactional and transformational leadership. Burns' Pulitzer Prize winning book described famous historical and political leaders including Mahatma Gandhi, Franklin Delano Roosevelt, Woodrow Wilson, and John Kennedy. This book revealed insights into the reasons for the tremendous impact and success of these leaders. Burns concluded the answer resided in a transformational leadership style and differentiated the transactional from the transformational approach.

Numerous authors have bridged the concepts of transformational leadership identified in the political domain to an organizational management application (Bennis, 1989; Gardner, 1989; Paul, 1982; Roberts, 1985; Vardaman, Wimer, & Dugdt, 1986).

Bass (1985a) isolated measurable characteristics and traits of both leadership styles. After studying and comparing these numerous leadership factors, he created a questionnaire to classify leadership behavior into transactional and transformational categories. This measurement scale, the Multifactor Leadership Questionnaire (MLQ), obtained similar results from a variety of business managers, education administrators, and other professional groups. Subsequent studies have refined the conceptual model and the MLQ (Bass, 1985a).

Transactional Leadership

Bass (1985a) described the transactional leader's relationship with subordinates. This type of leader

> 1. Recognizes what it is we want to get from our work and tries to see that we get what we want if our performance warrants it. 2. Exchanges rewards and promises of reward for our effort. 3. Is responsive to our immediate self-interests if they can be met by our getting the work done. (p. 11)

The leader initiates the transactional process by recognizing the outcomes to be attained, the subordinate role in attainment, and the subordinate needs. The leader clarifies the subordinate role and consequences for attaining the outcomes. The subordinate's effort will depend on the value of the reward and confidence that the outcome can be attained. Expected effort will result if all conditions are met (Bass, 1985a).

Transactional leadership maintains the status quo and may not achieve higher levels of performance. Individuals work in isolation without regard for organizational goals and objectives. The transactional leader uses the styles of contingent reward or management-by-exception (Bass, 1985a).

Contingent Rewards

After the expectations of the established contract are realized, the contingent reward manager provides the two levels of positive reinforcement. The most common and lower quality reward results in desired personal outcomes, such salary or vacation. Higher level rewards rooted in exchangeable values include respect, trust, and praise. Frequently, leaders have the ability to provide only the higher level rewards (Bass, 1985a; Bass & Avolio, 1990; Burns, 1978; Kuhnert & Lewis, 1987). Situational theories and research verify the effectiveness of transactional leadership and methods for enhancing the outcomes (Bass, 1985a).

Management-by-Exception

Leaders who practice management-by-exception rely on negative reinforcement when performance standards are not met. Although aversive reinforcement exhibits numerous forms (Bass, 1985a, 1985b), leaders manifest two types of management-by-exception: active and passive. The active type of management-by-exception leader seeks to identify mistakes and takes corrective action. The passive type of management-by-exception leader intervenes only if standards are not met or errors occur (Bass & Avolio, 1990).

Transformational Leadership

Transformational leaders use different processes and goals to motivate followers as compared to transactional leaders (Hater & Bass, 1988). The transformational leader attempts and succeeds in raising others to "...a greater awareness about the issues of

consequence" (Bass, 1985a, p. 17). Transformational leaders identify potential follower motives, expand their needs, seek to satisfy higher needs, and display full interest in the follower. Heightened motivation to attain the designated outcome leads to performance beyond expectations (Bass, 1985a, 1985b; Burns, 1978). To achieve this awareness, a leader requires vision, a deeply held personal value system, self-confidence, and inner strength to successfully present purposes and mobilize followers (Bass, 1985a). These purposes can be in competition or conflict with popular, acceptable, or established wisdom (Bass, 1985a; Burns, 1978).

Transformational leaders acknowledge and understand change. By facing uncertainty or ambiguity, these individuals override a basic desire to maintain the status quo. These leaders view the world as constantly changing, perceive needed changes, and plan for the future (Bennis & Nanus, 1985; Byrd, 1987). They raise an awareness of the importance of outcomes so followers are motivated and transcend self-interests (Hater & Bass, 1988). The four transformational components of charisma or idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation reinforce the effectiveness of this leadership style.

Charisma or Idealized Influence

Charisma or idealized influence represents the most important transformational leadership component (Bass, 1985a). Charismatic ability arouses enthusiasm, strong emotions, faith, loyalty, respect, pride, and self-trust (Bass, 1985a, 1985b; Davidhizar, 1993). Thus, transformational leadership pursues the issue of applying emotions to the leadership process (Clover, 1990). The charismatic leader inspires, encourages, and

influences the beliefs and behaviors of followers (Bass, 1985a; Zaleznik, 1992). Charisma enables a leader to focus on people, determine important consequences, and transmit a vision (Bass, 1985a; Davidhizar, 1993). A dynamic vision provides followers with direction for their work by enhancing the understanding of their contribution in vision attainment. Employees commit to the leader and the vision, transcend personal agendas, and mobilize for the vision to become reality (Adams, 1986; Levenstein, 1984; Wolf, 1986).

To refine this transformational component, charisma has been divided into two separate concepts called idealized influence (attributed) and idealized influence (behavior). The impetus for this distinction was related to measuring the factor of charisma according to the impact charismatic leaders produce and the behaviors charismatic leaders display. Idealized influence (attributed) represents the impact of charismatic leaders; idealized influence (behavior) is behaviorally-based charisma (Avolio et al., 1995).

The charismatic leader appears more readily in times of grave distress, great stress, and emotional disturbance. They arise when crises remain unresolved for long time frames, or when people seek, expect, and encourage their appearance. When old and new paradigms compete, charisma challenges the old order and facilitates implementation of needed change (Bass, 1985a).

Inspirational Motivation

Inspirational motivation, a subfactor within charismatic leadership, represents a leader's ability to use emotional and nonintellectual qualities to arouse followers. The

leader often employs an action orientation, confidence-building, a belief in a cause, and an expectation for followers to perform well. The leader also communicates fluently with persuasive words, symbols, and images. As followers are inspired to identify with the leader and the leader's goals, heightened motivation and extra effort result (Bass, 1985a),

Individualized Consideration

Individualized consideration represents a leader's personalized orientation to a follower, treating each individual differently according to needs and abilities. Individualized consideration implies that the leader remains visible and accessible. Many behaviors depict individualized consideration including providing special attention, expressing appreciation, giving feedback, and emphasizing individualism (Bass, 1985a, 1985b).

The transformational leader displaying individualized consideration attempts to keep each employee fully informed, communicates a vision (Bass, 1985a, 1985b), and listens actively (Hart, 1994). The leader delegates stimulating and challenging assignments to employees for learning experiences. The leader also increases subordinate responsibility and autonomy while providing coaching, teaching, guidance, and support (Bass, 1985a, 1985b). The one-to-one, leader-follower relationship is of prime importance, especially in a mentoring arrangement for the development of future leaders (Bass, 1985a, 1985b).

Intellectual Stimulation

The transformational leader's intellectual stimulation arouses and changes followers' awareness and problem solving abilities. They generate imagination and thought, especially the ability to think in new ways. Transformational leaders stir an unwillingness of followers to accept the status quo; therefore, followers seek revised beliefs, values, and methods. Transformational leaders generate the use of reason prior to action, often concentrating on strategic thinking and analysis. They practice and encourage proactivity, creativity, innovation, and risk taking (Bass, 1985a, 1985b; Wolf, 1986).

Laissez-Faire Leadership

Laissez-faire leadership is nonleadership or the absence of leadership (Avolio & Bass, 1991). The leader avoids leadership through inactivity (Yammarino & Bass, 1990). These laissez-faire leaders abdicate supervisory responsibilities, decision making, and interventions (Bass, 1990).

A Comparison of Transactional and Transformational Leadership

The interest in distinguishing the transactional and transformational leadership types has grown (Singer, 1985). The more common transactional leaders form a bargain or contract, emphasizing different individual goals of leader and follower. Transactional leadership displays characteristics of an old world view in which differences between leader and follower are the primary focus (Barker, 1991). Transformational leadership

supplements reward systems with visioning and emphasizes a joint effort to achieve a shared goal (Hater & Bass, 1988). Transformational leadership incorporates elements of the old and new paradigm. Arising in times of conflict, the conflict exists with external forces, not between leader and followers (Barker, 1991).

Transactional leaders tend to emerge in steady-state bureaucracies and work within the established organizational climate. Transformational leaders facilitate change and emerge in times of change, growth, or crisis (Bass, 1985b). Transactional leaders are indicated when markets, work forces, technologies, and environments are stable. Transformational leaders are indicated in turbulent markets and environments with changing technologies and work forces. Presently, organizations must be more flexible to meet the demands for change (Bass, 1990).

Transactional leadership occurs when leaders engage in an exchange process with followers. The transactional leader identifies desired outcomes and rewards, then responds to followers needs and desires if outcomes are met. Transformational leadership involves a change of followers' needs, values, and beliefs (Bass, 1985a; Bass & Avolio, 1990; Burns, 1978; Kuhnert & Lewis, 1987). Transformational leaders encourage and guide change by elevating needs and inducing extra effort (Singer, 1985). Transactional leadership considers strategies to substitute goals, decrease resistance, and implement decisions. Transformational leaders raise followers' awareness about issues of importance and create change (Bass, 1985a).

Followers of transactional leaders show interest in work for the exchange of rewards. Followers of transformational leaders display interest for more complex reasons

(Bass, 1985a; Bass, Waldman, Avolio, & Bebb, 1987). Transactional leaders contribute to followers' confidence and needs by clarifying expected performance and related consequences of needs' satisfaction if goals are met. Transformational leaders directly increase follower confidence by elevating the value of outcomes through expanded needs (Bass, 1985a). Followers of transactional leaders exert expected effort; followers of transformational leaders perform beyond expectations (Bass, 1985a; Hater & Bass, 1988).

Most leaders have transactional and transformational characteristics, the difference being a matter of degree. Transactional and transformational leadership are not dichotomous (Avolio & Gibbons, 1988; Bass, 1985a, 1985b; Bass, Avolio, & Goodheim, 1987). Leaders have transformational leadership skills needed to inspire others to create a vision and the transactional interpersonal skills to implement the vision (Bass, 1985b; Cottingham, 1988; Trofino, 1990). Transformational leadership is not as effective until coupled with transactional leadership (Bass, Avolio, et al., 1987).

Transactional and Transformational Leadership Studies

Numerous different fields conducted transactional and transformational leadership studies in a variety of settings including hospitals, business establishments, industrial firms, religious institutions, government agencies, military organizations, colleges, and schools (Bass, 1985b; Bass & Avolio, 1990). The United States, Canada, Japan, India, Great Britain (Bass, 1985b), and New Zealand (Bass, Waldman, et al., 1987) served as study locations. Studies included chief executive officers, senior managers, mid-level managers (Bass, 1985b), and first line supervisors. Most studies compared the leader's

appraisals of subordinates' performance with the subordinates' rating of the leader (Hater & Bass, 1988). However, various forms of evaluation were used including financial reports and performance ratings of the leader (Bass, 1990).

The studies on transactional and transformational leadership resulted in similar findings. Transformational leadership correlated with subordinate satisfaction, leader effectiveness, and effort expended by subordinates as reported by colleagues, supervisors, and subordinates (Bass, 1985b, 1990). In some of these studies, a lower positive transactional leadership correlation also was obtained. These findings contributed to support the model proposition that transformational leadership achieves outcomes more effectively than transactional leadership (Bass, 1985a, 1985b, 1990; Hater & Bass, 1988). This increasing focus on transactional and transformational leadership styles may identify outcome variables required to effectively evaluate the different approaches of leadership (Kuhnert & Lewis, 1987).

A study conducted in New Zealand supported the existence of transactional and transformational leaders. Results also indicated that transformational leaders expended larger amounts of time in the development of lower level leaders (Bass, Waldman, et al., 1987). In another New Zealand study, 38 randomly selected company managers completed the MLQ to rate an ideal leader and the real immediate supervisor. Real leader transformational leadership scores correlated more highly with perceived leader effectiveness and job satisfaction than transactional leadership correlated with these factors. Differences between real and ideal leaders negatively correlated with

effectiveness and satisfaction. Ideal leader ratings indicated subordinates preferred a transformational leader (Singer, 1985).

Clover (1990) conducted research in the United States Air Force Academy. Cadets rated their immediate supervisors using the MLQ and completed a survey on organizational climate. Results indicated that transformational leadership, according to subordinates' perceptions, impact on member attitudes, team performance, and strong emotional reactions. Transactional skills facilitated transformational effectiveness.

To assess the association between transformational leadership and various precursors and consequences, 186 randomly selected United States Navy officers and 793 subordinates participated. Numerous sources supplied data for analysis including the officers, subordinates, and records. Results on precursors indicated extracurricular activities and academic performance predicted active management-by-exception. Only military performance correlated as a significant predictor of transformational leadership and consequences as rated by subordinates and superiors of focal officers. Transformational leadership and subordinate rated outcome measures were highly and positively associated. Transactional leadership and outcomes showed less correlation. Laissez-faire and outcomes negatively correlated. Subordinates and superiors of focal officers similarly evaluated the officers, especially transformational leaders. Military performance, early promotion, and superiors' evaluations positively related to subordinate rated charismatic and inspirational leadership of focal officers. The potential to forecast transformational leadership and performance was discussed and suggested for future research (Yammarino & Bass, 1990).

Bass, Waldman, et al. (1987) conducted a study and measured actual leadership style of supervisor, actual leadership style of self, and required leadership style of supervisor. Results indicated a positive correlation between the transformational leadership style of the supervisor and subordinate. These findings suggested a cascading effect of transformational leadership.

Avolio and Bass (1987) compared the follower characteristics of charismatic and noncharismatic leaders. Findings suggested subordinates of charismatic leaders were more self-assured and experienced. They also expended more work effort, found more meaningfulness in their work, received more leader support, and achieved higher performance ratings.

Since transformational leadership depicts characteristics of feminine leadership models (Barker & Young, 1994; Burns, 1978; Miller, 1989), studies of the relationship between the transformational leadership style and gender were conducted. In studies using the MLQ, female leaders scored higher on transformational leadership style and lower on transactional leadership style than male leaders scored (Bass & Avolio, 1990; Rosener, 1990). However, Young (1991) found no significant difference between males and females.

Research indicated that all levels of leaders can be trained to use verbal and nonverbal charismatic behaviors. First level project leaders in high-technology computer businesses and senior executives in insurance organizations demonstrated success after charismatic training programs. In another study using the MLQ, participants included trainees who were inmates in security prisons. Supervisors who were trained in

transformational leadership significantly improved inmate productivity, absenteeism, and citizenship behaviors than untrained supervisors improved. Inmates also reported greater respect for the supervisors with training (Bass, 1990).

Transactional and Transformational Leadership in Nursing Research

A review of nursing literature revealed several studies on transactional and transformational leadership. Dunham and Klafehn (1990) conducted exploratory research using the MLQ and identified the transformational leadership style in nursing. Leadership style self-ratings of 80 nurse executives were compared to ratings of executives as perceived by subordinates. Findings indicated nurse executives used transformational leadership fairly often and transactional leadership occasionally as perceived by themselves and subordinates. Advanced degree nurses rated higher in transformational leadership, and other demographic variables were not significant. Executives with nursing master's degrees were more transformational than executives with master's degrees in other specialties. High retention rates of 90 percent were observed in hospitals with transformational leaders. Additional research was suggested to determine if nurses in these executive roles predominantly display transformational leadership.

Dunham-Taylor and Klafehn (1995) further analyzed data from the previously reported study of excellent nurse executives and differentiated four groups. The differences in the nurse executive self-rating score and the staff rating score for both transformational and transactional leadership skills provided the basis to determine group

composition. The study also determined the groups effect on the variables of staff satisfaction, work group effectiveness, and extra effort from the MLQ. Findings suggested that staff members may be more aware or realistic in describing executive's leadership style. Methods to improve leadership abilities were discussed.

Dunham-Taylor (1995) also examined interview data from the four nurse executive groups and identified themes specific to each group. The group with the highest staff rated scores for satisfaction, effectiveness, and extra effort exemplified balanced leadership and lifestyle. Dunham-Taylor discussed the importance of staff perceptions of leaders, suggested four transformational leadership levels with balance depicting the highest level, and proposed mentorship for leadership development.

Gottlieb (1990) studied transactional and transformational leadership styles in Department of Veterans Affairs Medical Centers. Forty-nine chief nurses, 106 associate chief nurses, and 545 subordinates participated in the study. Results indicated transformational leadership to be more prevalent at higher management levels. Leaders rated themselves higher in transformational leadership than subordinates rated them. Transformational leadership correlated with subordinate job satisfaction and leaders' demographic variables of age, marital status, functional status, and years in current position. Recommendations for future research included an examination of patient care outcomes based on transformational leadership and longitudinal study.

Gevedon (1991, 1992) conducted a study on self-reported leadership behaviors of 35 deans of top-ranked nursing schools in the United States. The transformational leadership theme identified as most important was values, followed by vision, people,

motivation, and influence. Important implications suggested in the study relate to identification, selection, and training of nursing leaders.

Sixty-six nurse leaders from 11 urban hospitals in Virginia participated in an ex post facto study. Results revealed that transformational hospital nurse leaders reported significantly more informal education and perceived education as more important than leaders with lower transformational scores reported. Transformational leaders also reported experiencing higher amounts of formal leadership content and more exposure to teaching strategies. Mentoring ranked as the most important informal educational experience of transformational leaders. Transformational leadership correlated with a nurse believing they could make a difference. The study recommended the design and testing of educational programs to enhance transformational leadership (Young, 1991, 1992).

McDaniel and Wolf (1992) completed a descriptive study to test transformational leadership in a moderate sized hospital with one nurse executive, 11 middle level managers, and 77 staff nurses. Leaders' self-assessment scores on the MLQ were higher in transformational leadership as compared to their subordinates' self-assessment scores. This finding suggested the existence of the cascading effect in nursing. Leaders' self-assessment transformational leadership scores were higher than the subordinates' assessment of the leader. Staff nurse job satisfaction correlated positively with transformational leadership scores; turnover correlated negatively. Implications for educating nurses on transformational leadership were discussed.

Evans (1992) administered the MLQ to 135 head nurses to explore relationships among head nurses' perceptions of immediate supervisor leadership style, work environment, and self-efficacy. Leader transformational characteristics correlated with head nurse self-efficacy in creating an environment of creativity. Head nurse self-efficacy correlated with work environment characterized by high levels of innovation, involvement, and task orientation. Supervisor transformational leadership correlated with a work environment characterized by a high degree of involvement, innovation, task orientation, peer cohesion, autonomy, clarity, and supervisor support. Further investigation of head nurse self-efficacy and an integrated nursing management model were recommended.

A cross-sectional correlation analysis evaluated transformational leadership and organizational culture in seven acute care hospitals. A random selection of 209 nurses, including 45 managers and 164 staff nurses, participated by completing the MLQ, the Organizational Culture Inventory, the Work Satisfaction Scale, and demographic forms. Findings indicated that transformational leadership scores were moderate, and managers rated themselves higher than subordinates rated them. The study reported a positive correlation between a constructive organizational culture and transformational leadership. Implications for developing strategies to enhance services were discussed (McDaniel & Stumpf, 1993).

Hood and Smith (1984) distributed a case study questionnaire to all employees in a home health care agency. Personal concern displayed by a leader correlated positively

with quality of work life attitudes and retention. The use of strategies to enhance personal concern was discussed from the perspective of transformational leadership.

Outcome Factors

The outcome factors in this study included subordinate satisfaction and leader effectiveness as measured by the Multifactor Leadership Questionnaire, as well as the Minnesota Satisfaction Questionnaire (MSQ) and the Management Effective Profile System (MEPS) respectively. Bass's (1985a) conceptual model proposed that the most important phenomenon of transformational leadership involves the accomplishment of higher order change. Transformational leaders enhance the possibility of dramatic increases in quality and quantity. For survival in the turbulent health care environment, nursing and health care organizations require these outcomes.

Some of the previously discussed transformational leadership studies have addressed these concepts, including one nursing study by Gottlieb (1990). Nursing studies on the leadership styles as related to the two outcome factors as measured by different instruments were not found. In addition, no nursing studies were found that address the relationship between these two outcome factors.

Numerous studies explored the concepts of satisfaction and leader effectiveness from the perspective of other theoretic frameworks. These two concepts have often been defined differently in these studies. Nursing studies related to these concepts merit consideration.

Satisfaction

Satisfaction, as defined in this study, represents overall subordinate contentment from their work experience. Most nursing studies on satisfaction relate to subordinates' job satisfaction. The recurring nursing shortages (Abdellah, 1990) and job satisfaction's link with turnover (August, 1988; Friss, 1989; Hinshaw, Atwood, Gerber, & Erickson, 1985; Moore & Simendinger, 1989; Taunton, Krampitz, & Woods, 1989) contributed to the interest in this variable. During the development of a measure of job satisfaction, Traynor and Wade (1993) identified five dimensions of job satisfaction, including personal satisfaction, satisfaction with workload, satisfaction with professional support, satisfaction with pay and prospects, and satisfaction with training.

Numerous studies linked a variety of variables to job satisfaction such as age, shift, kinship responsibilities, other employment opportunities (Blegen & Mueller, 1987), stress (Blegen, 1993; Hinshaw et al., 1985), organizational commitment (Blegen, 1993; Goehner, 1992), communication with peers (Blegen, 1993; Peterson, 1990), locus of control (O'Hanlon-Nichols, 1989), education, tenure, professionalism (Blegen, 1993), doctoral preparation (Gurney, Mueller, & Price, 1997), mentoring (Hamilton, Murray, Lindholm, & Myers, 1989), interpersonal relationships (Johansson, Larsson, & Hamrin, 1994), salary (Barrett, Goldenberg, & Faux, 1992), clinical facilities, accomplishments of school, stimulation by colleagues (Larson, 1990), and work itself (Gilloran, McKinley, McGlew, McKee, & Robertson, 1994). Variables related to job satisfaction that leadership can possibly impact include autonomy (August, 1988; Barrett et al., 1992; Blegen, 1993; Blegen et al., 1993; Carpenter, 1988), skill variety, task identity, value discrepancies (August, 1988), feedback (August, 1988; Carpenter, 1988), recognition

(August, 1988; Blegen, 1993; Blegen et al., 1992), promotion opportunity, distributive justice, workload (Blegen & Mueller, 1987), routinization (Blegen, 1993; Blegen & Mueller, 1987), fairness (Blegen, 1993), empowerment (Radice, 1994), work environment, control over practice, cohesion (Goehner, 1992), shared governance (Scott, 1991), independence (Barrett et al., 1992), participation in decision making, academic freedom (Larson, 1990), decentralization (Acorn, Ratner, & Crawford, 1997), unit culture (Kratina, 1990), organizational climate (Brown, 1989), and hospital policies (Gilloran et al., 1994).

Studies related job satisfaction to certain manager behaviors including communication (Blegen, 1993), reward power, and expert power (Goehner, 1992). Cameron-Buccheri and Ogier (1994) reviewed 20 years of literature on nursing supervision and concluded that nurse managers/ward sisters increased job satisfaction. Numerous nursing studies found correlation between job satisfaction and leadership styles from other theoretical frameworks (Boumans & Landeweerd, 1993; Brown, 1989; Duxbury, Armstrong, Drew, & Henly, 1984; Garrett, 1991; Gilloran et al., 1994; Gresham & Brown, 1997; Kennerly, 1989; Sorrentino, 1992; Snyderman, 1988; Taunton et al., 1989; Uliss, 1991).

Effectiveness

For the purposes of this study, effectiveness refers to the overall productivity of the work unit and represents the supervisor's ability to meet organizational requirements and job related needs of subordinates (Hater & Bass, 1988). Several studies involving an

investigation of leader effectiveness have been conducted. Other conceptual frameworks may define effectiveness differently.

Studies of leader effectiveness related to various variables received differing results. Henderson (1995) surveyed 92 chief nurse officers and found leader effectiveness to correlate with education, professional recognition, and experience. Acee (1990) found no significant relationship between length of service as a head nurse in the same agency or level of nursing education with leader effectiveness. Taylor (1990) reported interpersonal ability and years of management experience directly contributed to managerial effectiveness. Adams' (1988) study of chief nurse administrators revealed years of experience in current position and number of hospital beds to be significant predictors of leader effectiveness. Koszalka (1988) determined a significant relationship between leader effectiveness and educational preparation of nurse administrators.

Sharrow (1989) conducted a descriptive correlational study of deans and identified a relationship between leadership style and effectiveness. Duke (1988) determined a significant relationship between leader effectiveness and empowerment. Ellis (1991) reported a relationship between nursing education administrators' use of humor and leader effectiveness. Coeling (1995) explored aspects of communication and determined perceived leader effectiveness related to communication delivery style. Adams (1994b) found problem-solving styles of nurse executives correlated with leader effectiveness. Forman's (1989) descriptive investigation revealed non-union affiliated head nurses to be more highly effective than union affiliated head nurses.

Several studies linked leadership styles, using other conceptual frameworks, with subordinate job performance (Brown, 1989; Peck, 1988; Sorrentino, 1992). Lee (1987) reported a relationship between leadership behavior and work group performance. A field research by Pincus (1986) of 327 professional nurses found certain aspects of communication, including communications with a supervisor and top-level executives, to be related to job performance.

Roussel (1990) used an inductive research approach through participant observation, interview, and administration of a leadership questionnaire. A gap between two major cultures in a transitioning organization was identified. The two cultures represented different missions, goals, and philosophies. The resulting confusion resulted in decreased worker productivity and poor motivation.

Reyna (1992) examined the relationship between nursing staff motivation levels and nurse manager leadership style. Leadership style significantly correlated with intrinsic and extrinsic levels of motivation. Nurse managers' years of experience and formal nursing education also related to intrinsic levels of motivation. The leader's age and gender showed no impact on nursing staff motivation. In addition, level of staff motivation did not relate to patient satisfaction.

Relationships among Outcome Factors

Two studies explored the relationship between leader effectiveness and job satisfaction. Henderson (1995) surveyed 92 chief nurse officers and determined job satisfaction to be a significant predictor of leader effectiveness. In a cross-sectional

survey of 30 nurse administrators and their faculty members. Mansen (1993) found job satisfaction affected the perception of leader effectiveness.

Summary

This chapter presented the historical evolution of leadership theory. The transformational and transactional model that guided this study was described. Transformational and transactional leadership were compared. Transformational studies, including nursing studies, were discussed. Outcome factors of subordinate satisfaction and subordinate perceived leader effectiveness were reviewed. Studies related to these outcome factors were presented. The research methods for this study will be presented in Chapter III.

Chapter III

METHOD

This chapter presents the research methods used in this study. The purpose of this study was to determine subordinate outcome factors relationships to the perceived leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers and the relationships among these outcome factors. A descriptive, correlational design was used. This type of design examined relationships between and among variables. If a relationship exists, a correlational design clarifies the type and degree of relationship (Burns & Grove, 1987). The specifics of the research methods discussed in this chapter include population, sample, instruments, data collection procedures, protection of human subjects, and data analysis.

Population and Sample

The target population for this study included registered nurse immediate subordinates to the chief nurse executives in the medical facilities of the Department of Veterans Affairs. All chief nurse executives were invited to have their immediate registered nurse subordinates participate in this study. Chief nurse executives who agreed to participate provided a list of immediate registered nurse subordinates. As the lists were received, each list of immediate registered nurse subordinates was randomly ordered by the investigator. The first three randomly selected subordinates were included in the sample, resulting in three subjects from every participating medical center. This constant

or disproportionate sampling aided in equalizing the representation and helped to ensure contributions from each involved nursing service (Burns & Grove, 1987). If a subordinate elected not to participate, the subject was replaced by the next subordinate on the randomly ordered list.

Gottlieb (1990) invited all chief nurses in Department of Veterans Affairs Medical Centers to participate in a study and received a total sample of 49 chief nurses. Gottlieb requested the chief nurses to complete a demographic questionnaire and an instrument involving approximately 30 minutes. Since this study invited the chief nurse executive to complete only a brief demographic questionnaire, the response rate was expected to be larger. If 50 chief nurse executives agreed to participate, a sample size of 150 immediate registered nurse subordinates would result.

A sample size of 150 participants was determined sufficient. A power analysis, using a matrix of all variables with ten subjects per cell category, resulted in a required sample size of 150 (Burns & Grove, 1987). By conducting a power analysis using power tables with a significance level of .05, a medium expected effect of .1, with a sample of 150 results in power of .85. The likelihood of a Type I or Type II error occurring was limited (Judd & McClelland, 1989).

Instruments

The instruments used in this study were the Multifactor Leadership Questionnaire (Bass & Avolio, 1995; see Appendix A), the Minnesota Satisfaction Questionnaire (Weiss et al., 1967; see Appendix B), and the Management Effectiveness Profile System

(Human Synergistics International, 1993; see Appendix C). All subjects were requested to complete all the instruments. The use of the instruments permitted the investigator to measure the variables of interest. Relationships among the leadership styles and outcome factors were also explored by using the measurements. Selected demographic information was collected from the chief nurse executives and subordinates on a separate questionnaire developed by the investigator (see Appendix D). More specific information on the instruments and questionnaire is presented in this section.

Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire (MLQ) is the only available instrument for measuring transformational, transactional, and laissez-faire leadership styles. Transformational leadership consists of the following factors: charisma or idealized influence (attributed and behavior), inspirational motivation, individualized consideration, and intellectual stimulation. The factors of contingent reward and management-by-exception (active and passive) constitute transactional leadership. The MLQ also measures non-leadership style, represented by the laissez-faire factor (Bass & Avolio, 1995).

The MLQ measures the three outcome factors of extra effort, satisfaction, and effectiveness. These outcome factors have been associated with leadership styles. Extra effort reflects the amount of exertion by a subordinate to accomplish work. Satisfaction measures the overall subordinate contentment with their superior's leadership behavior. Effectiveness rates the overall productivity of the work unit, as well as the superior's ability to meet organizational requirements and job-related needs of subordinates (Bass &

Avolio, 1990). Permission was requested from the author, Bernard M. Bass, to use the instrument in this study. Dr. Bass responded (see Appendix E), and permission was received (see Appendix F).

Description. The MLQ consists of 45 statements describing leader behaviors. Two forms of the MLQ are available, a Leader form and a Rater form. Statements and instructions on the forms present the same content with only a change in person focus. As a self-rating, a leader completes the Leader form that is written in first person. Subordinates, superiors, or peers complete the Rater form that is written in second person. Leaders have displayed a tendency to inflate their transformational leadership scores (Bass & Avolio, 1990). For this study, the Rater form was used.

In completing the MLQ, the subject rates each statement on a five-point Likert-type scale ranging from zero, meaning "not at all," to four, meaning "frequently if not always." Statements assess three types of leadership styles including transformational, transactional, and laissez-faire. The instrument also rates outcome factors of extra effort, satisfaction, and effectiveness. The instrument takes approximately 15 minutes to complete (Bass & Avolio, 1990).

The MLQ assesses separate factors for leadership type and outcomes through specific statements for each scale. All the leadership scales have four related statements. Five factors measure transformational leadership: idealized influence (attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration. Transactional leadership consists of three scales: contingent reward, active management-by-exception, and passive management-by-

exception. One scale measures laissez-faire leadership (Bass & Avolio, 1995). Scales of extra effort, satisfaction, and effectiveness are represented by three, two, and four items respectively on the MLQ (Bass & Avolio, 1995).

Scoring. A scoring key is used to calculate the scores for each scale. The numerical values of each response are summed and averaged for the nine leadership factors and three outcome factors. The final score for each factor ranges from zero to four. A high score indicates a perception that the leader's behavior is consistent with the leadership or outcome factor. A low score indicates the rater perceives the leader's behavior is inconsistent with the description of the leadership or outcome factor.

Instrument development. Following preliminary investigations with students and executives, Bass (1985a) developed the MLQ to measure the constructs of transformational and transactional leadership. These initial queries revealed that subordinates could describe at least one transformational leader from their experiences. Through description of transformational and transactional leadership, Bass noted the quality of leader's behaviors differentiated the two types of leaders, not behavior intensity. Bass also found that behaviors of initiation and consideration did not distinguish between transformational and transactional leadership.

Bass (1985a) developed a list of transformational and transactional items from open-ended responses of 70 executives and a literature review. Students enrolled in a leadership seminar sorted the items into transformational, transactional, and "can't say" categories. Seventy-three of the original 142 items remained after frequent selection.

A questionnaire was developed from the 73 remaining items. One hundred and four United States Army colonels, foreign officers, and civilians were asked to describe an immediate supervisor. Transformational and transactional leadership factors were distinguished with split-half reliabilities of .80 and .86 respectively (Bass, 1985a).

To categorize the leadership behaviors, additional testing was completed, and 72 military officers were added to the sample. Five factors emerged, three describing transformational leadership and two describing transactional leadership. Charismatic leadership, intellectual stimulation, and individualized consideration represented transformational characteristics, accounting for 64.9 percent, 2.9 percent, and 6.0 percent of the 89.5 percent of common variance respectively. Contingent reward and management-by-exception described transactional leadership, accounting for 6.3 percent and 4.3 percent of the common variance (Bass, 1985a).

Additional investigations intended to define more precisely the constructs associated with leadership style and behavior resulted in refinements to the MLQ. Three outcome factors of consequence were included: extra effort, satisfaction, and effectiveness (Bass, 1985a). A fourth transformational leadership factor was added to measure inspirational motivation. Non-leadership was also included and measured by the factor called laissez-faire (Bass & Avolio, 1990). Management-by-exception was divided into active and passive types. To distinguish charismatic behaviors and attributes, charisma was separated into idealized influence (attributed) and idealized influence (behavior).

Item development for the latest form of the MLQ used in this study, Form 5X, involved pooling items from several sources. First, a series of factor analyses with the previous MLQ form, Form 5R, provided a base to select items with the best convergent and discriminant validities. Second, items for inclusion were selected using partial least squares analysis. Third, new items were developed from recent literature to distinguish charisma from transformational leadership. Fourth, scholars in the field of leadership recommended modifications based on the conceptual model (Avolio et al, 1995).

When all recommended items for the new MLQ form were gathered, a confirmatory factor analysis was implemented. This technique determined if the new items in the revised instrument accurately measured components that they were intended to measure. The factor analysis also identified items from each scale to eliminate that correlated too highly across similar components. This effort maximized the convergent and discriminant validity of the revised MLQ. Four items for each leadership scale remained that best represented the content of the construct with a broader range of unique aspects for the scale. The items also exhibited the best fit with the overall conceptual model (Avolio et al., 1995).

Reliability. Bass and Avolio (1990) reported test-retest reliability over a six month period using 193 followers and 33 middle to upper level managers employed by a Fortune 500 firm. Test-retest reliabilities ranged from $r = .52$ to $r = .85$ for the Rater form. Test-retest reliability scores for all factors are reported as follows: charisma, $r = .79$; inspirational motivation, $r = .66$; intellectual stimulation, $r = .66$; individualized

consideration, $r = .77$; contingent reward, $r = .52$; management-by-exception, $r = .61$; laissez-faire, $r = .82$; extra effort, $r = .62$; satisfaction, $r = .85$; effectiveness, $r = .73$.

Bass (1985a) completed internal consistency analysis by grouping items identified as transformational or transactional to generate split-half reliabilities. Results indicated reliabilities of $r = .80$ for transformational items and $r = .86$ for transactional items. Bass and Avolio (1990) reported estimates of internal consistency reliabilities for all factors in the MLQ from a sample of 1,006 followers' ratings of 251 business and industrial leaders. Cronbach's alpha coefficients ranged from $\alpha = .77$ to $\alpha = .95$. Internal reliability scores for all factors are as follows: charisma, $\alpha = .90$; inspirational motivation, $\alpha = .84$; intellectual stimulation, $\alpha = .88$; individualized consideration, $\alpha = .85$; contingent reward, $\alpha = .87$; management-by-exception, $\alpha = .79$; laissez-faire, $\alpha = .77$; extra effort, $\alpha = .82$; satisfaction, $\alpha = .95$; effectiveness, $\alpha = .93$. Yammarino and Bass (1990) obtained similar results. Dunham and Klafehn (1990), Gottlieb (1990), and Evans (1992) also obtained results indicating internal consistency using samples of nurse executives and subordinates.

Internal consistency reliabilities for the refined version of the MLQ Rater form used in this study were calculated. The sample included 2,080 subjects from a broad range of organizations. The total items and each leadership factor scale reliabilities ranged from $r = .74$ to $r = .94$. Reliability scores for all scales are as follows: idealized influence (attributed), $r = .86$; idealized influence (behaviors), $r = .87$; inspirational motivation, $r = .91$; intellectual stimulation, $r = .90$; individualized consideration, $r = .90$; contingent reward, $r = .87$; management-by-exception (active), $r = .74$; management-by-

exception (passive), r = .82; laissez-faire, r = .83; extra effort, r = .91; satisfaction, r = .94; effectiveness, r = .91 (Avolio et al., 1995).

All of the scales' reliabilities for the newest version of the MLQ were generally high. The internal consistencies exceeded standards for acceptable reliability levels as reported in literature (Avolio et al., 1995). A reliability of .70 is acceptable for an instrument (Buckwalter & Maas, 1989).

Validity. Bass' (1985) method for development of the MLQ exhibits evidence of content validity. Bass developed a listing of 142 leader behaviors derived from a pilot study of 70 executives and a survey of literature. Students in a leadership seminar sorted these items into transformational leadership, transactional leadership, and "can't say" categories. Seventy-three items remained when frequently used.

One hundred and four Army colonels, foreign officers, and civilians described an immediate supervisor using a questionnaire containing the 73 items. Bass completed additional testing to categorize the items. Eventually, seven leadership factors emerged.

Yammarino and Bass (1990) employed multiple levels of analysis to identify relationships between transformational and transactional leadership styles and selected variables. The sample included 186 Naval officers and 793 subordinates. Transformational leadership correlated positively with measures of verbal and mathematical intelligence, biographical inventories, the Strong Interest Inventory, cumulative fitness reports, and recommendations of early promotion. Transactional leadership correlated more poorly with positive supervisor appraisal, and non-leadership correlated negatively with appraisals.

The process to select items for inclusion in the latest version of the MLQ, Form 5X, were described previously. The sources included items from the earlier MLQ version with the best convergent and discriminant validities, a partial least squares analysis, developments from recent literature, and recommendations based on the conceptual model from scholars in the field of leadership. To confirm the construct validity of the revised MLQ, Form 5X, several different methods were used (Avolio et al., 1995).

Confirmatory factor analysis with a sample of 1,394, resulted in a goodness of fit index of .91. The revised nine factor model exceeds the .90 criterion recommended in literature. The root mean squared residual of .04 also satisfies the recommended criterion of less than .05 (Avolio & Bass, 1995).

Partial least squares analysis was conducted to estimate and test relationships among the constructs of the model. The analysis also provided some useful indicators to determine convergent and discriminant validity of the instrument. All constructs met the minimum standard requirement of .70 (Avolio et al., 1995).

Minnesota Satisfaction Questionnaire

The Minnesota Satisfaction Questionnaire (MSQ) (Weiss et al., 1967) measures contentment with several aspects of work and work environments. The instrument provides an individualized measure of satisfaction that is more useful than a general measure of satisfaction. A general measure may yield the same scores for individuals; however, this level of satisfaction may be related to entirely different aspects of the work. Permission was obtained to use the instrument in this study (see Appendix G).

Description. The MSQ is available in a short and long form. The long form yields 21 scales; the short form yields three scales. The short form consists of the best items from each of the 20 scales on the long form. Both forms yield a general satisfaction score using the same 20 statements (Weiss et al., 1967). After considering other instruments, the MLQ was selected for use in this study due to its ability to yield one general satisfaction score. Because only the general satisfaction score was used, the short form was administered. The two additional scales on the short form include intrinsic and extrinsic satisfaction.

The short form MSQ consists of 20 statements that refer to a reinforcer in the work environment. The subject indicates satisfaction with the reinforcer on the present job. The form uses a five-point Likert-type scale to rate the response ranging from one, meaning very dissatisfied, to five, meaning very satisfied (Weiss et al., 1967).

Directions appear on the first page of the MSQ with rating instructions repeated at the top of each page. There is no time limit for completion. Administration time varies from about five to ten minutes, with most individuals completing it in about five minutes (Weiss et al., 1967).

Scoring. The numerical values of each response are summed to obtain the raw score for each scale. The general satisfaction scale uses all 20 statements on the MSQ, yielding a score ranging from 20 to 100. A high score indicates greater satisfaction than a low score. The intrinsic scale uses 12 statements from the numbered items as follows: 1, 2, 3, 4, 7, 8, 9, 10, 11 15, 16, 20. The extrinsic scale uses six statements from the numbered items as followed: 5, 6, 12, 13, 14, 19 (Weiss et al., 1967).

For each MSQ scale, raw scores can be converted to percentile scores using tables of normative data. Percentile scores provide the subject's relative position in a norm group. The same raw score may convert to different percentile scores for different norm groups (Weiss et al., 1967). For the purposes of this study, the raw score on the general satisfaction scale was used.

Instrument development. The Minnesota Studies in Vocational Rehabilitation began in 1957 as a series of research studies conducted on work adjustment. The development of instruments to assess work adjustment and the evaluation of work adjustment outcomes represented the two main objectives of these studies. The Theory of Work Adjustment provided the conceptual framework for the research (Weiss et al., 1967).

The Theory of Work Adjustment states that work adjustment outcomes relate to the fit between work personality and work environment. The work adjustment outcomes include such concepts as satisfaction, satisfactoriness, and tenure. A person's needs and abilities represent the work personality. The work environment consists of the ability requirements and reinforcer systems. Therefore, work adjustment depends on matching the individual's needs and abilities with a type of work that can fulfill those needs and abilities (Weiss et al., 1967).

In order to measure one of the work adjustment outcomes, satisfaction, 80 items were initially pooled from two existing instruments, the Hoppock Job Satisfaction Blank and the Employee Attitude Scale. This instrument had adequate reliabilities but was difficult to score and did not consider intrinsic reinforcement factors. Based on these

instruments, a new 20 scale instrument, the MSQ, was constructed. Improvements in the MSQ included simplified instructions, less items per scale, better readability, and consideration of intrinsic and extrinsic factors (Weiss et al., 1967).

A short form of the MSQ was developed by selecting 20 representative items, one from each scale on the long form. Items that correlated most highly with their respective scales were chosen. The short form MSQ was administered to a heterogeneous group of 1,460 employees. Data were factor-analyzed, and two factors resulted, intrinsic and extrinsic satisfaction. A scale was composed of the items loading high on each factor. In addition to the intrinsic and extrinsic scale, all items were scored as one scale representing general satisfaction. The general satisfaction scale of the short form, used in this study, is comprised of the same items as the general satisfaction scale from the long form (Weiss et al., 1967).

Reliability. The Hoyt reliability coefficients for each short form scale and each normative group in a sample of 1,460 were high. The reliability coefficient for the intrinsic scale ranged from $r = .84$ for the assemblers group to $r = .91$ for engineers. The coefficient for the extrinsic scale ranged from $r = .77$ for electronic assemblers to $r = .82$ for engineers and machinists. The coefficient for the general satisfaction scale ranged from $r = .87$ for assemblers to $r = .92$ for engineers. The median reliability coefficients were $r = .86$ for intrinsic, $r = .80$ for extrinsic, and $r = .90$ for general satisfaction (Weiss et al., 1967).

According to Weiss et al. (1967), the short form general satisfaction scale stability can also be inferred from data collected on the long form, since both forms use the same

20 items. Using the long form, data on stability were obtained for two time intervals, one week and one year. The heterogeneous sample of 75 participated in the one week retest and yielded a coefficient of $r = .89$. The one year retest group, with a sample size of 115, was also heterogeneous. The stability coefficient for the general satisfaction scale was $r = .70$. Canonical correlation analysis of the test-retest data yielded maximum coefficients for the one week interval of .97 and for the one year interval of .89 (Weiss et al., 1967).

The coefficients obtained from canonical correlation analysis were significant, well beyond the .001 level, and indicated that about 95 percent of the variance of canonical variates are predictable on the one week retest and about 80 percent on the one year interval. These percentages of variance indicate common variance across time intervals (Weiss et al., 1967). In evaluating the other previously discussed methods of determining reliability, all results indicated reliabilities greater than .70, which is acceptable (Buckwalter & Maas, 1989).

Validity. MSQ validity is derived mainly from evidence related to its performance according to theoretical expectations, construct validity. Construct validation studies established general job satisfaction as the dependent variable and the individual's needs as the independent variable. Since the sample included individuals in the same job, reinforcement was assumed constant. The results indicated that the MSQ measured satisfaction as expected from the Theory of Work Adjustment (Weiss et al., 1967).

The study of group differences in satisfaction provided evidence for concurrent validity. Occupational group differences in mean scores were statistically significant for

each of the three scales. These findings were consistent with years of research literature that indicated occupational differences in job satisfaction. In addition, research literature of groups consistently reporting higher satisfaction levels corresponded with the groups receiving higher satisfaction scores on the MSQ (Weiss et al., 1967).

Management Effectiveness Profile System

The Management Effectiveness Profile System (MEPS) is an instrument designed to measure effectiveness as a manager. The MEPS assesses 14 key competencies that are summarized in three broad skill areas: task, interpersonal, and personal (Human Synergistics International, 1995). The MEPS was selected for use in favor of other instruments because the measurement more closely aligned with the definition of study and the MLQ. Permission was obtained to use the MEPS in this study (see Appendix H).

Description. Two parallel forms of the MEPS are available: self-description and description by others. The forms are identical except for a change in person focus. The self-description form presents the statements in first person. The description by others form presents the statements in third person (Human Synergistics International, 1995). For this study, the description by others form of the MEPS was used.

The MEPS consists of 112 items. Each item presents a brief introductory statement and two alternatives that might describe a manager. Subjects compare the two opposing descriptions and select the one that more accurately portrays the manager. Seven response options are available. Response options proceeding from the left include: is almost exactly like the left description, is much like the left description, is somewhat like the left description, about equally like the left and right descriptions, is somewhat

like the right description, is much like the right description, is almost exactly like the right description (Human Synergistics International, 1993). The instrument takes 25 to 35 minutes to complete (Human Synergistics International, 1995).

As previously mentioned, the MEPS rates three broad manager skill areas and 14 different competencies that constitute these skill areas. The three broad skills include task, interpersonal, and personal. The three skills scales were used in this study (Human Synergistics International, 1995).

The six competencies, with a brief description, that are included in the task skill scale include: problem solving, recognizing and resolving problems; time management, allocating time and using it effectively; planning, providing direction and scheduling activities; goal setting, establishing goals and objectives; performance leadership, motivating performance and personal development; organizing, assigning responsibilities and coordinating tasks. The five competencies incorporated in the interpersonal skills scale, with a brief description, include: team development, promoting teamwork and cooperation; delegation, decentralizing and empowering others; participation, sharing power and involving others; integrating differences, accepting and resolving conflicts; providing feedback, facilitating and encouraging growth. The personal skills scale includes three competencies: stress processing, managing crises and reducing stress; maintaining integrity, gaining the trust and confidence of others; commitment, demonstrating loyalty and responsibility (Human Synergistics International, 1995).

Scoring. Human Synergistics International scored the MEPS and provided a raw score for each of the three broad skill areas and 14 specific competencies. Raw scores for

all competencies range from one to seven. Raw scores for the three skill areas used in this study range from seven to forty-nine. A high score indicates a perception of greater effectiveness than a low score. These results can be compared to the results of over 4,000 managers (Human Synergistics International, 1995).

Instrument development. The MEPS was developed to provide participants in management development programs with feedback on their managerial skills and behaviors. Test items were developed by asking 200 managers to describe ways managers fail. This list was to include day-to-day or week-to-week weaknesses, not major career failures. The descriptions of these 90 ineffective behaviors were matched with corresponding successful or effective behaviors, thus creating a continuum (Human Synergistics, 1984).

In considering measurement, a single measure could not provide specific feedback for manager development. A large number of discrete measures would be confusing to interpret. Therefore, the 90 items were distributed into 15 larger domains according to content fit and significant correlation with the domain ($p < .001$ for all cases). Because many of the item behaviors affect more than one larger domain, those items also correlate with other domains (Human Synergistics, 1984).

Reliability. Using the Spearman Brown correction, split-half reliabilities for each of the fifteen domains were high, ranging from $r = .77$ to $r = .89$. These results were considered somewhat artificial because all items correlated with other items (Human Synergistics, 1985; Webber, 1984). Cronbach's alpha internal consistency reliabilities of the scales were also fairly high, ranging from $\alpha = .77$ to $\alpha = .88$. Inter-rater agreement

was found to be acceptable within eta-squared statistics ranging from .34 for the organizing skill to .42 for stress reaction skill. Using analysis of variance, variance between respondents describing different managers was greater than the variance between respondents describing the same manager (Human Synergistics, 1984).

Validity. The method of development, ten years of field experience, and expert involvement provide support for content validity (Webber, 1984). In addition, managers viewed as effective by themselves and others scored higher on all scales. Managers perceived as ineffective scored lower on all scales (Human Synergistics, 1984).

To determine the relationship between managerial effectiveness and MEPS factors, Cooke (1988) collected results on 240 managers. Independent variables included task skills, interpersonal skills, and personal skills. Results indicated that the areas measured by the MEPS were related to overall management effectiveness.

Demographic Data Questionnaire

Demographic information was collected from all the chief nurse executives and their subordinates to identify and compare attributes. These data were used to describe what relationships, if any, exist among the leadership styles, outcome factors, and collected demographic information. A questionnaire designed by the investigator was used to gather the selected demographic information (see Appendix D).

The data collected pertained to personal information and work related characteristics. The personal data included age, sex, marital status, nursing education (basic preparation and other academic degrees), and professional organization memberships. Work related data included length of service (as a registered nurse, as a

staff nurse, in the hospital, in current position), amount of work, assignment in other hospitals, title of current position, title of supervisor, functional role, mentor relationship, and medical center complexity level. The selection of these particular variables was based on suggestions obtained from past research.

A panel of experts were asked to review the demographic information questionnaire for adequacy and clarity of each item on the survey. The panel was composed of leaders in education at Teachers College, Columbia University.

Data Collection Procedures

An initial request to participate in this study was sent to each chief nurse executive (see Appendix I). The initial request described the study. A brief questionnaire obtained permission for the registered nurses to participate, the names of immediate registered nurse subordinates, and identification of the chief nurse executive. The chief nurse executive was also requested to complete and return the demographic data questionnaire (see Appendix D).

A second mailing was completed in three weeks to chief nurse executives who did not respond to the initial mailing to encourage their participation and response (see Appendix J). The participation forms and demographic data questionnaire enclosed in the initial mailing were included. The chief nurse executive were requested to respond within two weeks.

As the lists of the immediate registered nurse subordinates were received, the subordinates' names were randomly ordered without replacement by the investigator.

Each of the first three randomly selected participants received in this order: a cover letter requesting participation (see Appendix K), general instruction sheets (see Appendix L), the four instruments with answer sheets (see Appendixes A, B, C, D), an investigator stamped addressed envelope, a stamped addressed post-card with the subject's mailing label, and a thank you letter (see Appendix M). Questionnaires were marked with a three digit number corresponding to the assigned medical center. To eliminate order effects, the order of the instruments in the first packet was randomized. In subsequent packets, the instruments were rotated with the last instrument becoming the first. The packets were mailed as the responses from the chief nurse executives were received.

Each participant was asked to complete the four instruments in the order presented and return them to the investigator within two weeks of receipt. If electing not to participate, subjects were asked to return the packet to the investigator. When an incomplete packet was received, the next subordinate on the randomly ordered list received a packet. Replacement of subjects for those electing not to participate assured an adequate sample size. Subjects were also instructed to simultaneously, but separately, return the post-card. Receipt of the post-card indicated that the subject returned the questionnaire without violating anonymity of the subject's identity. This procedure also facilitated required follow-up mailing.

Return of the forms was tracked on a data sheet listing each medical center. In three weeks, a second follow-up letter was sent to the subjects to encourage return of the forms (see Appendix N). At the completion of the study, a letter of appreciation and an abstract were sent to each participating medical center (see Appendix O).

Protection of Human Subjects

Several procedures were used to protect the rights of subjects and medical centers included in this study. Chief nurse executives of the medical centers received information regarding the nature of the study and subjects' rights (see Appendix I). Approval for the subordinate registered nurses to participate was indicated on the initial questionnaire and assumed if the questionnaire was returned.

All nurse participants received a cover letter informing them of the nature of the study (see Appendix K). The letter also contained assurances of anonymity, confidentiality, right to withdraw, and lack of penalty. Subjects participated voluntarily without financial remuneration. The investigator offered to answer questions about the directions. If subjects returned completed questionnaires, their willingness to participate was assumed.

The rights of the participants were maintained throughout the study. Instruments contained no method of identifying individual subjects. Questionnaires were only coded by medical center. No mention of individual subjects or medical centers' names occur in this study.

Data Analysis

Response rates in this study were determined and reported. The percentages of responses were calculated on the number of chief nurse executives and subordinates agreeing to participate. Participants returning questionnaires incomplete or beyond the

deadline, four weeks after the second follow-up letter, were not included in the final sample. The percentages of these participants were reported separately.

Descriptive or summary statistics were used to describe the demographic data of chief nurse executives and subordinates who participated in this study. The statistics included mean, distribution, median, mode, and range. Nominal data were displayed in contingency tables. Instruments were examined for internal consistency using Cronbach's coefficient alphas.

The Statistical Package for Social Sciences (SPSS) software was used to conduct data analysis in this study. Data analyses relative to the purposes of the study were as follows.

1. To investigate the leadership styles of chief nurse executives as perceived by subordinates and as measured by the MLQ, the statistical results from the MLQ were calculated and reported. Information included mean, standard deviation, and range.

2. To investigate the subordinate perceived outcome factors of satisfaction and leader effectiveness, the statistical results from the corresponding measures were calculated. The measures for satisfaction included the MLQ satisfaction score and the MSQ general satisfaction score. The measures for effectiveness included the MLQ effectiveness score and the task, interpersonal, and personal skills scores from the MEPS. Mean, standard deviation, and range were determined for these measures.

3. To investigate relationships among the subordinate perceived chief nurse executives' leadership styles and outcome factors, Pearson product-moment correlation coefficient was used.

4. To investigate relationships among subordinate reported outcome factors, chief nurse executives' leadership styles, and subordinate demographic variables, multiple regression was used. The multiple regression techniques specifically determined if subordinate demographics related to outcome factors over and above any outcome factors' relationships with leadership styles.

Summary

This chapter included the research design and methods including sample, instruments, data collection, and data analysis. The descriptive correlational design to determine the relationships among leadership styles and outcome factors was presented. The population sampled, immediate registered nurse subordinates to chief nurse executives in Department of Veterans Affairs Medical Centers, was reviewed. The instruments including the Multifactor Leadership Questionnaire, the Minnesota Satisfaction Questionnaire, the Management Effectiveness Profile System, and a demographic data questionnaire were examined. Data collection procedures, protection of human subjects, and statistical analyses were discussed. Chapter IV, Results, will report an analysis of the findings or results of the study.

Chapter IV

RESULTS

This chapter presents the results of the statistical procedures used to determine the relationships among the transformational, transactional, and laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers and the leadership outcome factors of satisfaction and leadership effectiveness, as perceived by immediate registered nurse subordinates. The data were analyzed using the Statistical Package for Social Sciences (SPSS) software. The chapter begins with the response rates and descriptive statistics for chief nurse executives and subordinates. Each purpose for the study is then addressed.

Response Rates

All the chief nurse executives from the 156 Department of Veterans Affairs Medical Centers were solicited to agree to their immediate registered nurse subordinates' participation. One hundred seven chief nurse executives (68.6%) responded to the solicitation. Eighty-nine chief nurse executives (57.1%) agreed to the participation of their subordinates. Fifteen chief nurse executives responded but declined participation (9.6%). Five of these chief nurse executives indicated that their medical center had reorganized, and they no longer directly supervised registered nurses. Two responses were received beyond the established deadline for inclusion (1.3%). One response

indicated that the medical center had merged with another medical center, and the chief nurse executive position was eliminated (0.6%).

The chief nurse executives listed a varying number of immediate registered nurse subordinates from one to twenty-six. A total of two hundred forty-two randomly selected subordinates received the questionnaires. The overall response rate was 77.3%, representing one hundred eighty-seven subordinates. For survey research, Polit and Hungler (1978) indicated that a response rate of 50% is adequate, 60% is good, and 70% or more is very good. Three packets of questionnaires were incomplete (1.6%) and, therefore, were eliminated. The resulting sample size was one hundred eighty-four registered nurse subordinates, or 76.0% of those receiving the questionnaires.

The tabulation of the medical centers with no, one, two, or three responses and the related percentages are displayed in Table 1. Although thirty-three medical centers had three subordinates who returned the questionnaires (37.1%), two of these were incomplete. Thirty-six medical centers had two subordinate returns (40.5%), and one was incomplete. No subordinates returned the questionnaires in four medical centers (4.5%).

Demographic Data of Respondents

The chief nurse executives and the sample of immediate registered nurse subordinates completed a Demographic Data Questionnaire (Appendix D). The data collected pertained to personal information and work related characteristics. The personal data included age, sex, marital status, nursing education (basic preparation and other academic degrees), and professional organization memberships. Work related data

Table 1

Response Rates

Number of responses per medical center	Number of medical centers	Percentage of medical centers	Number of subjects	Percentage of subjects
0	4	4.5	0	0
1	17	19.1	17	20.0
2	37	41.6	74	43.5
3	31	34.8	93	36.5
Total	89	100.0	184	100.0

included length of service (as a registered nurse, as a staff nurse, in the hospital, in current position), amount of work, assignment in other hospitals, title of current position, title of supervisor, functional role, mentor relationship, and medical center complexity level.

Medical Center Characteristics

The medical centers in the study represented all the major geographic regions of the United States. Of the 50 states and the District of Columbia, only eight states were not included. All the Department of Veterans Affairs Medical Center complexity levels were represented. Level I indicates the highest level of complexity; level IV is the lowest level. The medical center characteristics are displayed in Table 2.

Characteristics of Chief Nurse Executives

The distributions of the chief nurse executives' demographic information are presented in Table 3. The chief nurse executives' mean age was 49.7 and ranged 31 years, from 33 years of age to 64 years of age. The median age was 47, and the mode was 48. Most of the chief nurse executives were female (85.9%) and married (61.2%).

The distributions of the chief nurse executives' educational preparation are presented in Table 4. Most of the chief nurse executives received their first nursing education preparation at the baccalaureate level (62.4.%). The range for receiving this first degree was 34 years, from 1952 to 1986. The mean and median year of graduation was 1970, and the mode was 1975. All the chief nurse executives had obtained a degree beyond the initial nursing preparation and had preparation at the master's degree level.

Table 2

Medical Center Characteristics

Variable	Frequency	Percent
Geographic location		
Northeast	24	28.2
South	29	34.1
Midwest	15	17.7
West	17	20.0
Total	85	100.0
Medical center complexity		
I (Highest level)	20	23.5
II	26	30.6
III	22	25.9
IV (Lowest level)	17	20.0
Total	85	100.0

Table 3

Demographic Data of Chief Nurse Executives

Variable	Frequency	Percent
Age		
30 to 39 years	2	2.4
40 to 49 years	41	48.2
50 to 59 years	32	37.6
60 to 69 years	8	9.4
Missing	2	2.4
Total	85	100.0
Sex		
Female	73	85.9
Male	12	14.1
Total	85	100.0
Marital status		
Single	16	18.8
Married	52	61.2
Divorced	12	14.1
Widowed	5	5.9
Total	85	100.0

Table 4

Educational Preparation of Chief Nurse Executives

Variable	Frequency	Percent
First nursing preparation		
Nursing diploma	24	28.2
Associate degree	8	9.4
Baccalaureate degree	53	62.4
Total	85	100.0
Year of graduation		
1950 to 1959	9	10.6
1960 to 1969	27	31.8
1970 to 1979	40	47.0
1980 to 1989	8	9.4
Missing	1	1.2
Total	85	100.0

(Table continued)

Table 4 -- continued

Variable	Frequency	Percent
Additional academic degrees		
Master's degree in nursing	59	69.4
Master's degree in another field	19	22.4
Master's degree in nursing and another field	5	5.9
Master's and doctoral degree	2	2.3
Total	85	100.0
Graduation year for last degree		
1960 to 1969	3	3.5
1970 to 1979	24	28.2
1980 to 1989	43	50.6
1990 and later	13	15.3
Missing	2	2.4
Total	85	100.0

Although the most advanced degree achieved by the majority of chief nurse executives was a master's degree in nursing (69.4%), a wide variety of degrees were held. The mean and median year for achieving the highest academic degree was 1983; the mode was 1988. Achievement of this highest degree spanned 31 years, from 1966 to 1997.

Information related to tenure and career path of the chief nurse executives is presented in Table 5. Most chief nurse executives had worked as a registered nurse over 25 years. The mean number of years experience as a registered nurse was 26.5, the median was 26 years, and the mode was 22 years. The least amount of time that a chief nurse executive worked as a registered nurse was nine years, and the longest period of experience was 46 years. Most of these chief nurse executives worked less than eight years as a staff nurse with the mean of 6.2, median of five, and a mode of two.

The length of assignment to the medical center ranged from three months to more than thirty years. The mean length of medical center assignment was 8.4 years, median was 6.5 years, and the mode was one year. The length of assignment to the chief nurse executive position ranged from one month to over 23 years. The mean was 4.7 years with a median and mode of three. The chief nurse executive titles varied widely; however, Chief Nursing Service was the most common title (51.8%). Approximately three years before the study, all the chief nurse executives in the Department of Veterans Affairs held this title. All the chief nurse executives worked 40 hours per week and had a primary administrative functional role.

The immediate supervisor's title for most chief nurse executives was the Chief of Staff (56.5%). This position in the Department of Veterans Affairs is equivalent to the

Table 5

Tenure and Career Path of Chief Nurse Executives

Variable	Frequency	Percent
Number of years experience as a registered nurse		
New graduate to 9 years	1	1.2
10 to 19 years	12	14.1
20 to 29 years	46	54.1
30 to 39 years	19	22.4
40 to 49 years	7	8.2
Total	85	100.0
Number of years as a staff nurse		
Less than 5 years	34	40.0
5 to 9 years	35	41.1
10 to 14 years	12	14.1
15 to 19 years	2	2.4
More than 20 years	2	2.4
Total	85	100.0

(Table continued)

Table 5 -- continued

Variable	Frequency	Percent
Length of service in present medical center		
Less than 5 years	31	36.5
5 to 9 years	28	32.9
10 to 14 years	8	9.4
15 to 19 years	11	13.0
20 to 24 years	3	3.5
25 to 29 years	3	3.5
30 years and greater	1	1.2
Total	85	100.0
Number of years in current position		
2 years and less	36	42.4
2+ to 4 years	16	18.8
4+ to 6 years	8	9.4
6+ to 8 years	9	10.6
8+ to 10 years	7	8.2
10+ to 12 years	3	3.5
12+ to 14 years	1	1.2
14+ to 16 years	1	1.2
Over 16 years	4	4.7
Total	85	100.0

(Table continued)

Table 5 -- continued

Variable	Frequency	Percent
Current title		
Chief Nursing Service	44	51.8
Other than Chief Nursing Service	41	48.2
Total	85	100.0
Title of current immediate supervisor		
Chief of Staff	48	56.5
Medical Center Director	20	23.5
Other	17	20.0
Total	85	100.0
Number of years under present supervisor		
Less than 2 years	46	54.1
2+ to 4 years	22	25.9
4+ to 6 years	13	15.3
6+ to 8 years	1	1.2
8+ to 10 years	2	2.4
Over 10 years	1	1.2
Total	85	100.0

(Table continued)

Table 5 -- continued

Variable	Frequency	Percent
Number of other health care facilities worked		
0 or 1	8	9.4
2 or 3	17	20.0
4 or 5	26	30.6
6 or 7	15	17.7
8 or 9	5	5.9
10 or 11	11	12.9
12 or 13	3	3.5
Total	85	100.0

chief medical officer in other health care facilities. Twenty chief nurse executives (23.5%) reported to the chief executive officer in the medical center. The title of this position was most frequently reported to be the Medical Center Director. Numerous other immediate supervisor titles were provided. The mean number of years reporting to these immediate supervisors was 2.7, the median was two years, and the mode was one year. The number of other health care facilities in which the chief nurse executives were assigned ranged from zero to thirteen. The mean number of other health care facilities was 5.4, while the mode and median were five.

Two variables relating to professional development included membership in professional nursing organizations and the influence of a mentor in shaping leadership ability. The distributions of this information are displayed in Table 6. Three chief nurse executives did not hold memberships in professional nursing organizations (3.5%). One chief nurse executive reported 11 memberships. The mean number of memberships was 2.8, the median was three, and the mode was two. Most chief nurse executives considered someone as having been a mentor (92.9%). Most of these mentors (65.8%) exerted somewhat high, high, or very high influence on the chief nurse executives' leadership abilities.

Characteristics of Registered Nurse Subordinates

The distributions of the immediate registered nurse subordinates' demographic information are presented in Table 7. The registered nurse subordinates' mean age was 47.2 and ranged 39 years, from 28 years of age to 67 years of age. The median age was 47; the mode was 45. Most of the subordinates were female (84.8%) and married (63%).

Table 6

Professional Development of Chief Nurse Executives

Variable	Frequency	Percent
Number of memberships in professional nursing organizations		
0 or 1	16	18.8
2 or 3	46	54.1
4 or 5	18	21.1
6 or 7	2	2.4
8 or more	3	3.5
Total	85	100.0
Influence of mentor in shaping leadership abilities		
No mentor	6	7.1
Almost no influence	0	0
Very low influence	0	0
Low influence	2	2.4
Moderate influence	21	24.7
Somewhat high influence	16	18.8
High influence	20	23.5
Very high influence	20	23.5
Total	85	100.0

Table 7

Demographic Data of Registered Nurse Subordinates

Variable	Frequency	Percent
Age		
Less than 30 years	1	.5
30 to 39 years	22	12.0
40 to 49 years	87	47.3
50 to 59 years	54	29.3
60 to 69 years	10	5.4
Missing	10	5.4
Total	184	100.0
Sex		
Female	156	84.8
Male	28	15.2
Total	184	100.0
Marital status		
Single	21	11.4
Married	116	63.0
Divorced	37	20.1
Widowed	10	5.4
Total	184	100.0

The distributions of the immediate registered nurse subordinates' educational preparation are presented in Table 8. Most registered nurse subordinates received their first nursing education preparation at the baccalaureate level (54.3%). The range for receiving this first degree was 42 years, from 1951 to 1993. The mean, median, and mode for the year of graduation was 1973. Most subordinates obtained an academic degree beyond the initial nursing preparation (79.9%) and had preparation at the master's degree level or higher (64.7%). A wide variety of degrees were held. The mean year for achieving the highest academic degree was 1986, the median was 1987, and the mode was 1992. Achievement of this highest degree spanned 50 years, from 1947 to 1997.

Information related to tenure and career path of the immediate registered nurse subordinates is presented in Table 9. Most subordinates had worked as a registered nurse over 20 years. The mean number of years experience as a registered nurse was 23.3, the median was 23.4 years, and the mode was 23 years. The least amount of time that a subordinate worked as a registered nurse was five years, and the longest period of experience was 46 years. Most of these immediate registered nurse subordinates worked less than ten years as a staff nurse with the mean of 9.3, a median of 7.7, and a mode of five years.

The length of assignment to the medical center ranged from six months to more than thirty-six years. The mean length of medical center assignment was 12.2 years, the median was 11.2 years, and the mode was six years. The length of assignment of the immediate registered nurse subordinate to the current position ranged from two months to 30 years. The mean was 5.4 years with a median of four and a mode of one. The

Table 8

Educational Preparation of Registered Nurse Subordinates

Variable	Frequency	Percent
First nursing preparation		
Nursing diploma	53	28.2
Associate degree	27	14.7
Baccalaureate degree	100	54.3
Master's degree	4	2.2
Total	184	100.0
Year of graduation		
1950 to 1959	10	5.4
1960 to 1969	48	26.1
1970 to 1979	83	45.1
1980 to 1989	37	20.1
1990 to 1997	6	3.3
Total	184	100.0

(Table continued)

Table 8 -- continued

Variable	Frequency	Percent
Additional academic degrees		
None	37	20.1
Associate degree in another field	3	1.6
Baccalaureate degree in nursing	20	10.9
Baccalaureate degree in another field	5	2.7
Master's degree in nursing	78	42.4
Master's degree in another field	34	18.5
Master's degree in nursing and another field	3	1.6
Master's and doctoral degree in nursing	1	.5
Master's degree in nursing and doctoral degree in another field	3	1.6
Total	184	100.0
Graduation year for last degree		
Prior to 1960	1	.5
1960 to 1969	2	1.1
1970 to 1979	27	14.7
1980 to 1989	57	31.0
1990 and later	57	31.0
Missing	40	21.7
Total	184	100.0

Table 9

Tenure and Career Path of Registered Nurse Subordinates

Variable	Frequency	Percent
Number of experience as a registered nurse		
New graduate to 9 years	7	3.8
10 to 19 years	44	23.9
20 to 29 years	92	50.0
30 to 39 years	38	20.7
40 to 49 years	3	1.6
Total	184	100.0
Number of years as a staff nurse		
Less than 5 years	47	25.5
5 to 9 years	57	31.0
10 to 14 years	38	20.7
15 to 19 years	25	13.6
20 to 24 years	12	6.5
25 to 30 years	3	1.6
More than 30 years	2	1.1
Total	184	100.0

(Table continued)

Table 9 -- continued

Variable	Frequency	Percent
Length of service in present medical center		
Less than 5 years	40	21.7
5 to 9 years	36	19.6
10 to 14 years	36	19.6
15 to 19 years	39	21.2
20 to 24 years	20	10.9
25 to 29 years	11	6.0
30 years and greater	2	1.1
Total	184	100.0
Number of years in current position		
2 years or less	60	32.6
2+ to 4 years	38	20.7
4+ to 6 years	30	16.3
6+ to 8 years	17	9.2
8+ to 10 years	10	5.4
10+ to 12 years	13	7.1
12+ to 14 years	5	2.7
14+ to 16 years	6	3.3
Over 16 years	5	2.7
Total	184	100.0

(Table continued)

Table 9 -- continued

Variable	Frequency	Percent
Current title		
Nurse Manager	37	20.1
Associate Chief Nursing Service	60	32.6
Supervisor	13	7.1
Coordinator	29	15.8
Manager, other	8	4.3
Director	6	3.3
Other title	31	16.8
Total	184	100.0
Amount of hours worked per week		
40 hours per week	183	99.5
20 hours per week	1	.5
Total	184	100.0
Primary functional role		
Administrative/Supervision	151	82.1
Research	1	.5
Education	19	10.3
Clinical practice	13	7.1
Total	184	100.0

(Table continued)

Table 9 -- continued

Variable	Frequency	Percent
Title of current immediate supervisor		
Chief Nursing Service	95	51.6
Other than Chief Nursing Service	89	48.4
Total	184	100.0
Number of years under present supervisor		
Less than 2 years	75	40.8
2+ to 4 years	40	21.7
4+ to 6 years	34	18.5
6+ to 8 years	14	7.6
8+ to 10 years	8	4.3
10+ to 12 years	6	3.3
Over 12 years	7	3.8
Total	184	100.0

(Table continued)

Table 9 -- continued

Variable	Frequency	Percent
Number of other health care facilities worked		
0 or 1	46	25.0
2 or 3	64	34.8
4 or 5	37	20.1
6 or 7	20	10.9
8 or 9	9	4.9
10 or 11	4	2.2
12 or more	4	2.2
Total	184	100.0

subordinates' titles varied greatly, and most held Associate Chief of Nursing Service (32.6%) or Nurse Manager (20.1%) positions. Only one registered nurse subordinate worked less than 40 hours per week (0.5%). Most subordinates reported primary functional roles as administrative (82.1%).

Although immediate registered nurse subordinates reported a variety of titles for the chief nurse executives, Chief Nursing Service was the most common (51.6%). The mean number of years reporting to these chief nurse executives was 4.2, the median was 3.1 years, and the mode was one year. Nineteen subordinates (10.3%) indicated that they never worked in another health care facility. The number of other health care facilities in which the subordinates were assigned ranged from one to twenty. The mean number of other health care facilities was 3.5 with a mode and median of three.

The distributions of immediate registered nurse subordinates' membership in professional nursing organizations and mentor influence are displayed in Table 10. Twenty-six subordinates did not hold memberships in professional nursing organizations (14.1%). Two subordinates reported six memberships (1.1%). The mean number of memberships was 1.8, the median was 1.6, and the mode was two memberships (32.6%). Most registered nurse subordinates considered someone as having been a mentor (81.5%). The majority of these mentors (58.2%) exerted somewhat high, high, or very high influence on the subordinates' leadership abilities.

Table 10

Professional Development of Registered Nurse Subordinates

Variable	Frequency	Percent
Number of memberships in professional nursing organizations		
0	26	14.1
1	57	31.0
2	60	32.6
3	25	13.6
4	11	6.0
5	3	1.6
6	2	1.1
Total	184	100.0
Influence of mentor to shape leadership ability		
No mentor	34	18.5
Almost no influence	1	.5
Very low influence	0	0
Low influence	3	1.6
Moderate influence	39	21.2
Somewhat high influence	30	16.3
High influence	49	26.6
Very high influence	28	15.2
Total	184	100.0

Instrument Reliabilities

The responses on the Multifactor Leadership Questionnaire (MLQ), the Minnesota Satisfaction Questionnaire (MSQ), and the Management Effectiveness Profile System (MEPS) were examined for internal consistency using Cronbach's coefficient alphas. This procedure tests for homogeneity of all the items in an instrument to determine if the same construct is measured (Burns & Grove, 1987). The scores for each scale on the instruments used in the study are presented in Table 11.

Cronbach's alphas for the MLQ ranged from $\alpha = .65$ for management-by-exception (passive) to $\alpha = .91$ for satisfaction. These indices are consistent with the results from other studies but lower than the results from a broad range of organizations found by Avolio et al. (1995). The homogeneity of the subjects in this study could have resulted in lower reliability coefficients (Thorndike & Hagen, 1977). In addition, the reliability for management-by-exception (passive) at $\alpha = .65$ would increase to $\alpha = .72$ if one item was deleted. A reliability of $\alpha = .70$ is acceptable for an instrument (Buckwalter & Maas, 1989).

Cronbach's alphas for the MSQ and MEPS were high as consistent with other findings (Human Synergistics, 1984; Weiss et al., 1967). Reliability for the general scale on the MSQ was $\alpha = .91$. Cronbach's alphas on the MEPS ranged from $\alpha = .94$ on personal skills to $\alpha = 1.00$ on task and interpersonal skills.

Table 11

Instrument Reliabilities

Scale/Subscale	Cronbach's Coefficient Alpha
Multifactor Leadership Questionnaire (MLQ)	
Idealized influence (attributed)	.85
Idealized influence (behavior)	.80
Inspirational motivation	.88
Intellectual stimulation	.85
Individualized consideration	.84
Contingent reward	.83
Management-by-exception (active)	.75
Management-by-exception (passive)	.65
Laissez-Faire	.75
Satisfaction	.91
Effectiveness	.89
Minnesota Satisfaction Questionnaire (MSQ)	
General Satisfaction	.91
Management Effectiveness Profile System	
Task	1.00
Interpersonal	1.00
Personal	.94

Leadership Styles of Chief Nurse Executive

The first purpose was to investigate the leadership styles of chief nurse executives as perceived by subordinates and as measured by the MLQ (Bass & Avolio, 1995). The MLQ assessed three types of leadership styles including transformational, transactional, and laissez-faire (Bass & Avolio, 1990). Five factors measured transformational leadership: idealized influence (attributed), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration. Transactional leadership consisted of three scales: contingent reward, active management-by-exception, and passive management-by-exception. One scale measured laissez-faire leadership (Bass & Avolio, 1995). The final score for each factor ranged from zero to four. A high score indicated a perception that the leader's behavior was consistent with the leadership factor. A low score indicated the rater perceived the leader's behavior was inconsistent with the description of the leadership factor.

Summary statistics of the leadership factors as perceived by immediate registered nurse subordinates are presented in Table 12. The mean was used to measure central tendency; standard deviation measured spread or variability; and range provided a simple measure of dispersion (Burns & Grove, 1987). Transformational leadership factors of inspirational motivation, idealized influence (attributed), and idealized influence (behavior) received the highest mean scores. The lowest mean score related to laissez-faire leadership. Although the transactional factor of contingent reward received a higher mean score than the transformational leadership factors of intellectual stimulation and individualized consideration, the transactional leadership factors of management-by-

Table 12

Summary Statistics of Leadership Styles of Chief Nurse Executives

Leadership Factor	Mean	SD	Minimum	Maximum	Range
Transformational					
Idealized influence (attributed)	2.88	0.97	0.00	4.00	4.00
Idealized influence (behavior)	2.70	0.89	0.00	4.00	4.00
Inspirational motivation	2.88	0.89	0.00	4.00	4.00
Intellectual stimulation	2.55	0.94	0.25	4.00	3.75
Individualized consideration	2.48	1.04	0.00	4.00	4.00
Transactional					
Contingent reward	2.59	0.94	0.25	4.00	3.75
Management-by-exception (active)	1.53	0.93	0.00	4.00	4.00
Management-by-exception (passive)	1.17	0.80	0.00	3.00	3.00
Laissez-Faire	0.79	0.79	0.00	3.25	3.25

Possible Range: 0 = low to 4 = high

exception (active) and management-by-exception (passive) had lower mean scores than all the transformational leadership factors. Individualized consideration, a transformational leadership factor, had the greatest variation of scores. Laissez-faire leadership received the lowest variation in score. These leadership factor mean scores would indicate that the chief nurse executives were perceived to be more transformational than transactional and more transactional than laissez-faire in leadership style.

In considering a sample of 2,080 reported by Bass and Avolio (1995), the mean scores in this sample for the transformational leadership factors were higher except for individualized consideration. Both studies were based on ratings by others evaluating a leader. The mean scores for the transactional factors of contingent reward and management-by-exception (passive) were also higher, and management-by-exception (active) was lower. Laissez-faire leadership mean scores were lower.

A review of the results obtained in a study by Kilker (1994) of 475 nurse educators' ratings of their leaders indicated that the mean scores in this sample were lower for all the transformational leadership factors. The transactional factor of contingent reward also received a lower mean score in this sample while both management-by-exception factors were higher. Laissez-faire leadership mean scores were lower in this study.

Norms, based on ratings by others, as percentile scores were considered for the leadership factors on the MLQ (Bass & Avolio, 1995). Of the transformational leadership factors, the mean score for idealized influence (attributed) converted to the highest percentile of almost 60%. Other transformational leadership percentile scores

were inspirational motivation, 55%; idealized influence (behavior), 45%; intellectual stimulation, 45%, and individualized consideration, 35%.

Two transactional leadership factor mean scores converted to higher percentile scores than any transformational factors. Contingent reward and management-by-exception (passive) had a 65 percentile score. Percentile score for management-by-exception (active) was 35%. Laissez-faire had a percentile score of 50%.

Subordinate Perceived Outcome Factors

The second purpose was to investigate the subordinate perceived outcome factors of satisfaction, as measured by the MLQ (Bass & Avolio, 1995) and the MSQ (Weiss et al., 1967), and leader effectiveness, as measured by the MLQ (Bass & Avolio, 1995) and the MEPS (Human Synergistics International, 1993). For all the instruments, the higher the score represented the more the variable was perceived to be present. The MLQ scores for the outcome factors of satisfaction and leadership effectiveness range from zero to four (Bass & Avolio, 1995). The general satisfaction scale from the MSQ yields a score ranging from 20 to 100 (Weiss et al., 1967). The MEPS provides a measure of manager effectiveness summarized in three broad skill areas: task, interpersonal, and personal. Raw scores for the skill areas range seven to forty-nine (Human Synergistics International, 1995).

Summary statistics of the outcome factors as perceived by immediate registered nurse subordinates are presented in Table 13. The mean indicated central tendency; standard deviation measured variability; and range provided a simple measure of

Table 13

Summary Statistics of Outcome Factors

Outcome Factor	Mean	SD	Minimum	Maximum	Range
Satisfaction					
Mulitifactor Leadership Questionnaire (MLQ)	2.84	1.13	0.00	4.00	4.00
Minnesota Satisfaction Questionnaire (MSQ)	77.53	11.35	45.00	99.00	54.00
Effectiveness					
Multifactor Leadership Questionnaire (MLQ)	2.89	0.97	0.25	4.00	3.75
Management Effectiveness Profile System (MEPS)					
Task skills	36.61	8.22	11.83	49.00	37.17
Interpersonal skills	36.74	8.90	10.00	49.00	39.00
Personal skills	37.84	8.90	10.67	49.00	38.33

Possible Ranges: MLQ, 0 = low to 4 = high
MSQ, 20 = low to 100 = high
MEPS, 7 = low to 49 = high

dispersion (Burns & Grove, 1987). As measured by the MLQ, the outcome of effectiveness received a higher mean score of 2.89 than satisfaction with a mean of 2.84. Effectiveness scores also varied less and had a smaller range than satisfaction.

In considering other studies, the mean scores for satisfaction and effectiveness on the MLQ were higher in this study. The study by Bass and Avolio (1995) with a sample of 2,080 resulted in a mean satisfaction score of 2.57 and an effectiveness score of 2.62. The results obtained in a study by Kilker (1994) of 475 nurse educators resulted in lower mean scores of 2.59 for satisfaction and 2.70 for effectiveness. As indicated earlier, these studies were also based on ratings of a leader by others.

As discussed previously, percentile norms for outcome variables based on the ratings of others are available (Bass & Avolio, 1995). The mean satisfaction score converted to a percentile of almost 50%. The mean effectiveness score converted to approximately 55%.

The mean satisfaction score on the MSQ of 77.53 was also higher as compared to other samples. For a sample of 1,723 by Weiss et al. (1967), the total group mean was 74.85. Weiss et al. also reported a larger standard deviation of 11.92.

For each MSQ scale, raw scores can be converted to percentile scores using tables of normative data. Percentile scores provide the subject's relative position in a norm group. The same raw score may convert to different percentile scores for different norm groups (Weiss et al., 1967). The mean score in this study converted to a percentile score of between 60% and 65% for both full-time nurses and supervisor nurses norm groups. Only one nurse subordinate in this sample worked part time, and most of the nurses had a

primary administrative or supervisory functional role. Full time nurse percentiles were derived from a sample of 419 nurses who met the educational, legal, and training requirements to practice as professional nurses, as required by a State Board of Nursing. Supervisor nurse percentiles were derived from a sample of 197 nurses who supervised, directed, coordinated, instructed, and evaluated nurses and nursing activities. Questionnaires for both samples were administered by mail with return rates of 81% of the total group (Weiss et al., 1967). However, the nurses from these samples were also younger, less experienced, and had less educational preparation than the immediate registered nurse subordinates in this study.

The personal skill's scale of effectiveness from the MEPS received the highest mean score, followed by interpersonal and task skills respectively. Personal skills also represented the largest standard deviation; interpersonal skills had the largest range. In comparing these scores to the results of over 4,000 managers (Human Synergistics International, 1995), all three skill areas scored within the range that most managers tend to score.

Relationships among Leadership Styles and Outcome Factors

The third purpose was to investigate relationships among the subordinate perceived chief nurse executives' leadership styles and the outcome factors of satisfaction and leader effectiveness. Leadership styles and outcome factors of satisfaction and leader effectiveness were measured by the MLQ (Bass & Avolio, 1995). Satisfaction and

effectiveness were also measured by the MSQ (Weiss et al., 1967) and the MEPS (Human Synergistics International, 1993) respectively.

Simple regression techniques were used to evaluate outliers. Outlier detection procedures of lever, studentized deleted residual, and Cook's D were used to identify outliers. Any unusual observations were examined. Data recording or entry mistakes were corrected as needed.

Pearson product-moment correlation coefficients were used to examine the relationships that exist among the leadership styles and outcome factors. If a relationship existed, data clarified the degree of this relationship. This technique also determined whether the relationship was positive or negative (Burns & Grove, 1987).

Pearson product-moment correlation coefficients among the leadership factors are presented in Table 14. All the transformational leadership factors intercorrelated significantly with ranges from $r = .70$ to $r = .85$. The transactional leadership factor of contingent reward also displayed a significant and positive relationship with the transformational leadership factors ranging from $r = .73$ to $r = .83$. The intercorrelations among the transformational leadership factors and the remaining transactional leadership factors of management-by-exception (active) and management-by-exception (passive) were negative. These relationships reached statistical significance except between idealized influence (behavior) and management-by-exception (passive). A significant and positive relationship of $r = .23$ resulted between the two management-by-exception styles. Laissez-faire leadership significantly and positively related to active and passive management-by-exception at $r = .18$ and $r = .62$ respectively.

Table 14

Pearson Product-Moment Correlation Coefficients Among Leadership Styles

	Idealized Influence (attributed)	Idealized Influence (behavior)	Inspira-tional Motiva-tion	Individual-ized Consider-ation	Intellec-tual Stimula-tion	Contin-gent Reward	Manage-ment-by-exception (active)	Manage-ment-by-exception (passive)	Laissez - Faire
Idealized Influence (attributed)	--	.74***	.76***	.81***	.77***	.77***	-.40***	-.33***	-.57***
Idealized Influence (behavior)		--	.70***	.75***	.73***	.76***	-.14	-.26***	-.48***
Inspirational Motivation			--	.70***	.70***	.73***	-.31***	-.28***	-.44***
Individualized Consideration				--	.85***	.82***	-.28***	-.27***	-.52***
Intellectual Stimulation					--	.83***	-.26***	-.22**	-.50***
Contingent Reward						--	-.28***	-.26***	-.51***
Management-by-exception (active)							--	.23**	.18*
Management-by-exception (passive)								--	.62***
Laissez-Faire									--

Note. N = 184 * p < .05. ** p < .01. *** p < .001.

Pearson product-moment correlation coefficients among leadership and outcome factors are presented in Table 15. Statistically significant intercorrelations were found among all the leadership styles and outcome factors. Relationships were positive among transformational leadership and outcome factors ranging from $r = .47$ to $r = .86$. The transactional leadership factor of contingent reward also correlated positively with all outcomes with a range of $r = .54$ to $r = .76$. The transactional leadership factors of management-by-exception displayed a negative correlation with the outcomes ranging from $r = -.22$ to $r = -.45$. Relationships were also negative between laissez-faire leadership and the outcome factors with a range of $r = -.36$ to $r = -.66$.

Pearson product-moment correlation coefficients among outcome factors are presented in Table 16. Statistically significant positive intercorrelations were found among all the outcome factors. The correlation between satisfaction as measured by the MLQ and MSQ was $r = .62$. Correlation between effectiveness as measured by the MLQ and the three scales from the MEPS ranged from $r = .80$ to $r = .84$. The three skill areas from the MEPS displayed intercorrelations of $r = .88$ to $r = .93$.

Relationships among Leadership Styles, Outcome Factors, and Demographics

The fourth purpose was to investigate relationships among subordinate reported outcome factors, chief nurse executives' leadership styles, and subordinate demographic variables: age, gender, highest nursing educational preparation, years of service as a registered nurse, years in current position, and membership in professional organizations. Leadership styles and outcome factors of satisfaction and leader effectiveness were

Table 15

Pearson Product-Moment Correlation Coefficients Among Leadership Styles and Outcome Factors

	Satisfaction (Multifactor Leadership Questionnaire)	Satisfaction (Minnesota Satisfaction Questionnaire)	Effectiveness (Multifactor Leadership Questionnaire)	Task Effectiveness (Management Effectiveness Profile System)	Interpersonal Effectiveness (Management Effectiveness Profile System)	Personal Effectiveness (Management Effectiveness Profile System)
Idealized Influence (attributed)	.86***	.53***	.86***	.76***	.80***	.82***
Idealized Influence (behavior)	.68***	.44***	.71***	.64***	.63***	.61***
Inspirational Motivation	.73***	.47***	.72***	.66***	.70***	.65***
Individualized Consideration	.81***	.53***	.82***	.71***	.76***	.73***
Intellectual Stimulation	.78***	.52***	.80***	.71***	.74***	.69***
Contingent Reward	.76***	.54***	.78***	.74***	.73***	.67***
Management-by-exception (active)	-.39***	-.22**	-.41***	-.33***	-.45***	-.42***
Management-by-exception (passive)	-.26***	-.25**	-.33***	-.44***	-.30***	-.36***
Laissez-Faire	-.53***	-.36***	-.61***	-.66***	-.58***	-.63***

Note. N = 184 * p < .05. ** p < .01. *** p < .001.

Table 16

Pearson Product-Moment Correlation Coefficients Among Outcome Factors

	Satisfaction (Multifactor Leadership Questionnaire)	Satisfaction (Minnesota Satisfaction Questionnaire)	Effectiveness (Multifactor Leadership Questionnaire)	Task Effectiveness (Management Effectiveness Profile System)	Interpersonal Effectiveness (Management Effectiveness Profile System)	Personal Effectiveness (Management Effectiveness Profile System)
Satisfaction (Multifactor Leadership Questionnaire)	--	.62***	.88***	.78***	.86***	.80***
Satisfaction (Minnesota Satisfaction Questionnaire)		--	.58***	.62***	.63***	.56***
Effectiveness (Multifactor Leadership Questionnaire)			--	.83***	.84***	.80***
Task Effectiveness (Management Effectiveness Profile System)				--	.89***	.88***
Interpersonal Effectiveness (Management Effectiveness Profile System)					--	.93***
Personal Effectiveness (Management Effectiveness Profile System)						--

Note. N = 184 * p < .05. ** p < .01. *** p < .001.

measured by the MLQ (Bass & Avolio, 1995). Satisfaction and effectiveness were also measured by the MSQ (Weiss et al., 1967) and the MEPS (Human Synergistics International, 1993) respectively.

Multiple regression analysis was used to consider the subordinate demographic variables. This technique allowed for the concurrent examination of more than two variables (Burns & Grove, 1987). Due to the high correlation found among the three skill areas on the MEPS, these scales were combined for one effectiveness score. For the three scale scores combined, Cronbach's coefficient alpha for internal consistency resulted in $\alpha = .99$. The outcome factors of satisfaction and effectiveness as measured by two instruments were considered separately as dependent variables. Each leadership factor was entered into the analysis separately as independent variables with the demographic data.

Outlier detection procedures of lever, studentized deleted residual, and Cook's D were used to identify outliers. Data recording or entry mistakes were corrected as needed. Any unusual observations were examined but included in the analysis.

When satisfaction as measured by the MLQ represented the dependent variable, none of the demographic variables had a statistically significant relationship with satisfaction. In addition, the overall regression model that included management-by-exception (passive) did not demonstrate statistical significance due to the decreased parsimony of the model. The demographic variable that demonstrated the weakest relationship with the outcome and lowest tolerance was determined to be number of years in present position. When this variable was eliminated from the model including

management-by-exception (passive) and MLQ satisfaction, the overall model was again statistically significant largely due to the relationship between the leadership and outcome factors. No demographic variables statistically significantly related to the outcome.

With the MSQ measure of satisfaction as the dependent variable, only one regression analysis reached significance. The highest nursing education preparation had a statistically significant, negative relationship with satisfaction when the transformational leadership factor of intellectual stimulation was also included as an independent variable. Therefore, as the highest nursing educational level increased, satisfaction levels of the registered nurse subordinates decreased. This regression is displayed in Table 17.

With effectiveness as the dependent variable, the overall regression models maintained a level of statistical significance. Models with measurements by the MLQ and MEPS regressed on the leadership styles and demographic data resulted in some significant relationships with effectiveness. These regressions are displayed in Tables 18 to 24.

When effectiveness as measured by the MLQ was regressed individually on each leadership factor and the demographic variables, the relationships of two demographic variables reached statistical significance. The first model included idealized influence (attributed) with the number of years in present position having a positive relationship with the perception of effectiveness (Table 18). As the number of years of service as a registered nurse increased, leaders were perceived to be more effective. In the second model to attain significance for a demographic variable, gender was related to effectiveness when individualized consideration was included (Table 19). Females

Table 17

Regression of Satisfaction (Minnesota Satisfaction Questionnaire) on Intellectual Stimulation and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		7070.12	7	1010.02	10.56	.00
Age	.22	127.51	1	127.51	1.33	.25
Gender	1.44	42.19	1	42.19	.44	.51
Education	-2.24	407.51	1	407.51	4.26	.04
Years as RN	-.09	25.83	1	25.83	.27	.60
Years in Position	.02	1.63	1	1.63	.02	.90
Memberships	.44	43.05	1	43.05	.45	.50
Intellectual Stimulation	6.62	6593.92	1	6593.92	68.93	.00
Residual		15879.29	166	95.66		
Total		22949.41	173			

Table 18

Regression of Effectiveness (Multifactor Leadership Questionnaire) on Idealized Influence (Attributed) and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		127.01	7	18.15	75.65	.00
Age	-.00	.01	1	.01	.06	.81
Gender	.06	.07	1	.07	.29	.59
Education	-.10	.80	1	.80	3.33	.07
Years as RN	-.01	.32	1	.32	1.33	.25
Years in Position	.02	1.09	1	1.09	4.55	.04
Memberships	.01	.02	1	.02	.07	.80
Idealized Influence	.89	123.95	1	123.95	516.79	.00
Residual		39.82	166	.24		
Total		166.83	173			

Table 19

Regression of Effectiveness (Multifactor Leadership Questionnaire) on Individualized Consideration and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		117.64	7	16.81	56.71	.00
Age	-.01	.09	1	.09	.29	.59
Gender	.26	1.37	1	1.37	4.64	.03
Education	-.11	1.03	1	1.03	3.47	.06
Years as RN	.00	.00	1	.00	.00	.96
Years in Position	.01	.22	1	.22	.74	.39
Memberships	.02	.11	1	.11	.36	.55
Individualized Consideration	.79	114.58	1	114.58	386.64	.00
Residual		49.19	166	.30		
Total		166.83	173			

Table 20

Regression of Effectiveness (Management Effectiveness Profile System) on Idealized Influence (Attributed) and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		1563152.02	7	223307.43	49.91	.00
Age	-.88	2058.07	1	2058.07	.46	.50
Gender	-9.56	1852.27	1	1852.27	.41	.52
Education	-17.40	24562.66	1	24562.66	5.49	.02
Years as RN	1.14	4017.72	1	4017.72	.90	.35
Years in Position	.78	2013.33	1	2013.33	.45	.50
Memberships	.71	111.85	1	111.85	.03	.88
Idealized Influence	98.06	1501324.10	1	1501324.10	335.56	.00
Residual		742695.98	166	4474.07		
Total		2305848.00	173			

Table 21

Regression of Effectiveness (Management Effectiveness Profile System) on Idealized Influence (Behavior) and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		948906.51	7	140700.93	17.68	.00
Age	-2.34	14944.15	1	14944.15	1.88	.17
Gender	-19.78	7861.99	1	7861.99	.99	.32
Education	-21.50	37400.15	1	37400.15	4.70	.03
Years as RN	2.29	16225.30	1	16225.30	2.04	.16
Years in Position	.38	469.49	1	469.49	.06	.81
Memberships	2.90	1862.05	1	1862.05	.23	.63
Idealized Influence	84.12	923075.49	1	923075.49	116.00	.00
Residual		1320941.49	166	7957.48		
Total		2305848.00	173			

Table 22

Regression of Effectiveness (Management Effectiveness Profile System) on Intellectual Stimulation and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		1315640.49	7	187948.64	31.51	.00
Age	-1.01	2791.67	1	2791.67	.47	.50
Gender	-2.66	143.16	1	143.16	.02	.88
Education	-20.72	34794.46	1	34794.46	5.83	.02
Years as RN	2.25	15694.19	1	15694.19	2.63	.11
Years in Position	.03	0	1	0	.00	.98
Memberships	2.27	1133.37	1	1133.37	.19	.66
Intellectual Stimulation	91.25	1253811.40	1	1253811.40	210.19	.00
Residual		990207.51	166	5965.11		
Total		2305848.00	173			

Table 23

Regression of Effectiveness (Management Effectiveness Profile System) on Individualized Consideration and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		1430598.50	7	204371.22	38.76	.00
Age	-1.25	4233.89	1	4233.89	.80	.37
Gender	12.63	3232.10	1	3232.10	.61	.44
Education	-18.86	28846.33	1	28846.33	5.47	.02
Years as RN	2.32	16661.38	1	16661.38	3.16	.08
Years in Position	-.32	332.17	1	332.17	.06	.80
Memberships	-2.63	1529.05	1	1529.05	.29	.59
Individualized Consideration	86.58	1368768.90	1	1368768.90	259.60	.00
Residual		875249.50	166	5272.59		
Total		2305848.00	173			

Table 24

Regression of Effectiveness (Management Effectiveness Profile System) on Management-by-Exception (Active) and Demographic Variables

Source	β	SS	df	MS	F	p
Regression		469740.06	7	67105.72	6.07	.00
Age	-1.99	10718.00	1	10718.00	.97	.33
Gender	-2.29	110.61	1	110.61	.01	.92
Education	-24.23	46975.60	1	46975.60	4.25	.04
Years as RN	2.37	17387.72	1	17387.72	1.57	.21
Years in Position	.79	2101.57	1	2101.57	.19	.66
Memberships	2.29	1161.39	1	1161.39	.11	.75
Management-by-Exception	-52.42	407914.59	1	407914.59	36.88	.00
Residual		1836107.94	166	11060.89		
Total		2305848.00	173			

tended to perceive the leader as being more effective than males when the style of leadership was controlled.

When the MEPS was used as the measurement for effectiveness, the highest level of nursing education reached statistical significance in five models. These models included holding the leadership styles of idealized influence (attributed), idealized influence (behavior), intellectual stimulation, individualized consideration, and management-by-exception (active) constant. With leadership style controlled, the perception of leader effectiveness decreased as the level of registered nurse subordinate nursing education increased. Tables 20 to 24 display these regressions.

Although not included in the planned purposes, regressions were conducted for the other demographic variables. Specifically, these regressions included first nursing preparation, medical center complexity level, marital status, title of immediate supervisor, and mentor relationships. None of these variables significantly related to the leadership styles and outcome factors.

Summary

This chapter presented the results of statistical procedures used to examine the data and research purposes. Response rates from chief nurse executives and immediate registered nurse subordinates were more than adequate. Demographic data of chief nurse executives and immediate registered nurse subordinates were noted. The participants provided a sample representative of Department of Veterans Affairs Medical Centers across the country.

The frequencies and distributions of chief nurse executives' leadership styles as perceived by immediate registered nurse subordinates were reported. Transformational leadership factors received the highest scores, although the transactional leadership factor of contingent reward was also high. Laissez-faire leadership received the lowest score. In considering norms in the form of percentiles, the transactional leadership factors of contingent reward and management-by-exception (passive) converted to over 60 percentile. The transformational leadership factor of individualized consideration and the transactional leadership factor of management-by-exception (active) received scores in the 30 to 40 percentile range.

The frequencies and distributions of subordinate perceived satisfaction and leader effectiveness were also reported. Satisfaction as measured by the MLQ received a lower score than leader effectiveness. Satisfaction converted to the 40 to 50 normative percentile range, leader effectiveness converted to a range of 50% to 60%. The MSQ provided a normative percentile group for nurses, and satisfaction converted to percentile scores between 60% to 65%. The MEPS measure of effectiveness placed in the score range for most managers for the three skill area scales. Personal effectiveness skills received the highest score, followed by interpersonal and task skills respectively.

Relationships among leadership styles and outcome factors reached statistical significance, except the relationship between idealized influence (behavior) and management-by-exception (active). Positive relationships existed among all the transformational leadership factors and the transactional leadership factor of contingent reward. These factors related negatively to the two transactional leadership factors of

management-by-exception and laissez-faire leadership. Relationships among management-by-exception (active), management-by-exception (passive), and laissez-faire leadership were positive.

In analyzing relationships among leadership and outcome factors, the transformational leadership factors and transactional leadership factor of contingent reward related positively to all outcome measures. Laissez-faire leadership and the transactional leadership factors of management-by-exception (active) and management-by-exception (passive) related negatively to all outcome factors. Intercorrelations among all the outcome factor measures were positive.

When immediate registered nurse subordinates' demographic variables were considered with leadership style controlled, only one variable statistically significantly related to the outcome factor of satisfaction. With the transformational leadership factor of intellectual stimulation controlled, satisfaction as measured by the MSQ decreased as the subordinates' highest nursing education preparation increased. This finding was not supported with the MLQ as a measure of satisfaction.

The regression of the leaders' effectiveness outcome factors as measured by the MLQ and MEPS on leadership styles and demographic variables resulted in a few statistically significant findings. However, the significant relationships were not consistent for both effectiveness measures. When idealized influence (attributed) was entered into the regression model, effectiveness as measured by the MLQ increased as the number of years in a position increased. When individualized consideration was entered, female subordinates perceived the leader to be more effective than male subordinates.

With MEPS as the measure for leader effectiveness, perception of leader effectiveness decreased as the highest nursing educational preparation increased. This relationship reached statistical significance when the leadership factors of idealized influence (attributed), idealized influence (behavior), intellectual stimulation, individualized consideration, or management-by-exception (active) were entered into the regression model.

Chapter V, Discussion, will describe the results of the study. The findings of the study will be discussed. Implications of the study and questions for future research will be presented.

Chapter V

DISCUSSION

The primary purpose of this research was to investigate the relationships among the transformational, transactional, and laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers and the leadership outcome factors of satisfaction and effectiveness as perceived by subordinates. Six major findings resulted from this effort. First, chief nurse executives displayed transformational, transactional, and laissez-faire leadership factors as perceived by subordinates. Second, the chief nurse executives' immediate registered nurse subordinates' outcome factors were investigated. Third, the chief nurse executive leadership styles significantly correlated in support of Bass's (1985a) conceptual framework of leadership theory. In addition, all transformational leadership factors correlated positively with outcome factors of satisfaction and effectiveness; transactional leadership factors correlated both positively and negatively with these outcome factors; and laissez-faire leadership related negatively with outcomes. Also, all of the outcome measures intercorrelated positively. Finally, some demographic variables were related to perceptions of satisfaction and leader effectiveness above and beyond leadership styles.

This chapter explores implications related to the findings. Limitations are identified and discussed. Questions for future research endeavors are raised.

Chief Nurse Executive Leadership Styles

One of the purposes of this research was to investigate the leadership styles of chief nurse executives as perceived by immediate registered nurse subordinates. The presence of transformational, transactional, and laissez-faire leadership styles was found in chief nurse executives in Department of Veterans Affairs Medical Centers as perceived by subordinates. Transformational leadership "occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20). This more complex and potent leadership style represents a sharing, involved relationship that results in mutual elevation and a fusion of goals. Transactional leadership occurs "when one person takes the initiative in making contact with others for the purpose of an exchange of valued things" (Burns, 1978, p. 19). This more common form of leadership represents a bargain or exchange to advance the individual goals of follower and leader, not a common goal. Laissez-faire leadership is absence of leadership (Avolio & Bass, 1991). These leaders abdicate supervisory responsibilities, decision making, and intervention (Bass, 1990).

The presence of transformational leadership factors identified in chief nurse executives supported other findings. Bass (1985b) reported that research determined transformational leadership to be present in different organizational settings at various supervisory levels. Most first line to senior level managers in industrial, military, and academic settings have exhibited some transformational leadership behaviors.

Transformational leadership factors of the chief nurse executives were the factors predominantly perceived by the registered nurse subordinates. The overall mean score

indicated that the nurse executives "sometimes" to "fairly often" displayed the behaviors. The three factors associated with charisma received the highest scores. Although the transformational leadership mean scores were the highest, normative data requires consideration. Subjects tend to score higher on transformational leadership than transactional leadership and higher on transactional leadership than laissez-faire leadership. This imbalance may be related to the higher ranked factors being more socially desirable (Avolio et al., 1995). Therefore, percentile comparisons are more meaningful due to an imbalance of scores. Two transformational leadership scales obtaining high scores from this sample were also above average when compared to normative percentile scores.

Inspiration motivation was the highest rated factor. This subfactor within charismatic leadership represents a leader's ability to use emotional and nonintellectual qualities to arouse followers. The leader often employs an action orientation, confidence-building, a belief in a cause, and an expectation for followers to perform well. The leader also communicates fluently with persuasive words, symbols, and images. As followers are inspired to identify with the leader and the leader's goals, heightened motivation results (Bass, 1985a).

The second and third highly rated factors were idealized influence (attributed) and idealized influence (behavior) respectively. These factors represent the concept of charisma, the most important component of transformational leadership. The charismatic leader inspires, encourages, and influences the beliefs and behaviors of followers (Bass, 1985a; Zaleznik, 1992). Charisma enables a leader to focus on people, determine

important consequences, develop a vision, transmit the vision, and implement the vision (Bass, 1985a; Davidhizar, 1993).

Chief nurse executives may have ascended to high organizational levels because they exhibited transformational leadership. Considering the chief nurse executives' position of leadership and span of control, these executives may have molded their approach to one of transformational leadership to be more effective. The establishment of a transactional, exchange-type of relationship with the numerous levels of subordinates would present difficulties. In addition, chief nurse executives actively participate in organization-wide planning. Since they create the plans for desired future states, they may naturally transmit the related vision.

The transactional factor of contingent reward received a higher score than the two transformational leadership factors of intellectual stimulation and individualized consideration. After the expectations of an established transactional contract are realized, the contingent reward manager provides the positive reinforcement of reward. This finding supported Bass's (1985a) view that transformational and transactional leadership are not dichotomous. Leaders exhibit a variety of these factors. This view differs from the concepts of Burns (1978), which considered transformational and transactional leadership at opposite ends of a continuum.

The next factors, with scores close to contingent reward, were the transformational factors of intellectual stimulation and individualized consideration. Intellectual stimulation arouses and changes followers' problem awareness and problem solving abilities by generating imagination and thought (Bass, 1985a). Intellectual

stimulation may not have scored as high as other transformational leadership factors due to the high level of subordinate educational preparation. Logically, an individual with advanced educational preparation would tend to perceive many behaviors as less intellectually stimulating than a person with less education. Individualized consideration represents a leader's personalized orientation to a follower, treating each individual differently according to needs and abilities. Individualized consideration implies that the leader remains visible and accessible (Bass, 1985a). When compared to normative percentile scores, this factor received lower than average ratings. Due to span of control, chief nurse executives may have difficulties in individualizing approaches to subordinates. These leaders may also not be as visible or accessible to followers.

The factors least commonly perceived were management-by-exception (active), management-by-exception (passive), and laissez-faire leadership. The total mean score indicated that the chief nurse executives "once in a while" to "sometimes" displayed the management-by-exception factors. Laissez-faire behaviors occurred "not at all" to sometimes". Leaders who practice management-by-exception rely on negative reinforcement when performance standards are not met (Bass, 1985a, 1985b). The active type of management-by-exception leader seeks to identify mistakes and takes corrective action. The passive type of management-by-exception leader intervenes only if standards are not met or errors occur (Bass & Avolio, 1990). Since the lack of power to provide rewards can increase reliance on punishment (Bass, 1985a), nurse executives may have a sufficient power base to not rely on this approach to leadership. If a chief nurse executive used management-by-exception, time constraints may restrict the use of the active type.

Thus, a higher level of the passive type in these executives was found. Given the level of responsibility associated with chief nurse executives, an abdication of this responsibility through laissez-faire leadership would not seem feasible.

Generally, these findings suggested a positive portrait of nursing executive leadership within the Department of Veterans Affairs Medical Centers. The chief nurse executives were perceived as exhibiting the transformational leadership factors involved with charismatic behaviors the most frequently of all factors. Charisma has been identified as an important leadership characteristic and frequently attributed to world-class leaders (Bass et al., 1987). The transactional leadership factor of contingent reward also received moderately high scores. Bass (1985a) and Clover (1990) proposed that most effective leaders are transformational and transactional. This blending provides the abilities to motivate or inspire and the interpersonal skills to implement. Both types are essential for continued organizational growth (Bass et al., 1987). Because of the need to take corrective action periodically, management-by-exception scores would also be expected (Bass & Avolio, 1990).

Subordinate Perceived Outcome Factors

The second purpose of this research was to investigate the immediate registered nurse subordinates' perceived outcome factors of satisfaction and leader effectiveness. Satisfaction was defined as the overall subordinates' contentment from their work experience. This general contentment with work experience was measured by the Minnesota Satisfaction Questionnaire (MSQ). One of the satisfaction instruments, the

Multifactor Leadership Questionnaire (MLQ), more specifically measured contentment with leadership behavior.

For each satisfaction measure, raw scores were converted to percentile scores using tables of normative data. Percentile scores provide the subject's relative position in a group. For the general group of employees, the satisfaction scores from the MLQ and MSQ converted to the 50 percentile. For the MSQ, the same raw score may also be converted to different percentile scores for specific norm groups (Weiss et al., 1967). Interestingly, the MSQ mean score from this study converted to a percentile score of between 60% and 65% for both full-time nurses and supervisor nurses norm groups. Therefore, this sample of registered nurses was more satisfied with work as compared to other nurses.

Effectiveness was defined as the overall productivity of the work unit. The MLQ measure for leader effectiveness as perceived by subordinates was higher than satisfaction and converted to the 55 percentile range. The effectiveness scores from the Management Effectiveness Profile System (MEPS) were within a range of most managers.

Leadership Styles and Outcome Factors

The third purpose was to investigate relationships among the subordinate perceived chief nurse executives' leadership styles and the outcome factors of satisfaction and leader effectiveness. This research added supportive evidence to the relationship among these factors. Additionally, these relationships were investigated within the nursing domain.

Leadership

Statistically significant positive intercorrelations were found among the five transformational leadership factors and the transactional leadership factor of contingent reward. Therefore, as one factor was perceived more frequently in leader behaviors, the other factors would also be perceived more frequently. The strongest relationships involved the factor of individualized consideration. Specifically, these relationships existed among individualized consideration, intellectual stimulation, idealized influence (attributed), and contingent reward. These results supported research conducted by others in non-nursing arenas (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990). However, these other studies found lower correlations among the transformational leadership factors and the transactional leadership factor of contingent reward.

Due to the historically steady-state bureaucracy of the Department of Veterans Affairs, the chief nurse executives may have relied more heavily on the transactional factor of contingent reward in conjunction with transformational leadership styles to positively reinforce behaviors. The contingent reward and transformational forms of leadership are active and positive. Transactional leaders tend to emerge in steady-state bureaucracies and work within the established organizational climate. Transformational leaders facilitate change and emerge in times of change, growth, or crisis (Bass, 1985b). Transactional leaders appear in formalized organizations with clear goals and structures. Transformational leaders appear in organizations with unclear goals and structures (Bass, 1985a). This finding may also be consistent for other nurse executives who have historically managed rigidly with bureaucratic cultures and structures.

This positive relationship among transformational leadership factors and contingent reward added evidence to support Bass's (1985a) conceptual framework. He proposed that transformational and transactional leadership are demonstrated simultaneously by a leader. Burns (1978) originally described these leadership styles as dichotomous. Consistent reinforcement through contingent reward may build trust between the leader and follower. Trust provides an essential base for transformational leadership.

Most of the previously conducted studies did not include separate factors of idealized influence (behavior) and inspirational motivation. These factors were identified as the MLQ was refined. In a sample of 2,080 subordinates from various types of organizations, Avolio et al. (1995) found higher correlations among these newly identified factors and the original transformational leadership factors than the correlations in this nurse sample.

Idealized influence (attributed), idealized influence (behavior), and inspirational motivation represent charismatic leadership. On the MLQ, idealized influence (attributed) measures the impact that a charismatic leaders produces. The behaviors linked with charisma are idealized influence (behavior). Inspiration motivation is a subfactor that represents a leader's ability to use emotional and nonintellectual qualities to arouse followers (Avolio et al., 1995).

Although the Department of Veterans Affairs Medical Centers have been confronted with many recent changes, the unsteady environment did not previously exist. Therefore, chief nurse executives may not have refined and fully used all the components

of charismatic leadership. The charismatic leader appears more readily in times of grave danger, great stress, and emotional disturbance. They arise when crises remain unresolved for long time frames, or when people seek, expect, and encourage their appearance. When old and new paradigms compete, charisma challenges the old order and facilitates implementation of needed changes. Well established, highly structured, successful organizations do not encourage charismatic leadership (Bass, 1985a). Again, this finding may be applicable to chief nurse executive in other health care organizations that have only experienced recent changes. Given the numerous changes occurring in health care, reliance on these components of charismatic leadership may increase.

The transformational leadership factors and the transactional leadership factor of contingent reward intercorrelated statistically significantly and negatively among the other transactional and laissez-faire leadership factors. Therefore, as leaders were perceived to display an increased level of transformational leadership and contingent reward behaviors, management-by-exception and laissez-faire leadership would be perceived less frequently in the leaders. The one exception was the lack of a significant relationship between idealized influence (behavior) and management-by-exception (active). Relationships among the two transactional factors of management-by-exception and laissez-faire leadership were positive and statistically significant. These results displayed the same relationships as those of studies conducted with non-nurses (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990); however, differences were observed in the strength of the relationships. Generally, the transformational leadership factors and the transactional leadership factor of contingent reward had a more highly negative

relationship with management-by-exception (active) and a less highly negative relationship with management-by-exception (passive). Contingent reward also exhibited a more profoundly negative relationship with laissez-faire leadership in this study as compared to the other non-nursing studies.

When chief nurse executives use an active form of leadership, such as transformational and the contingent reward factor of transactional leadership, they may less frequently use an active, negative approach as displayed in management-by exception (active). Given the overwhelming demands on these executives, a more passive approach to management-by-exception may be used. In addition, as previously discussed, these nurse executives were less likely to use laissez-faire leadership. The limited use of laissez-faire style is possibly related to the type of position, which may not allow for abdication of responsibility. When alternate styles of leadership are used, laissez-faire would be a less viable choice.

Outcomes

Satisfaction as measured by the MLQ had positive correlation with satisfaction as measured by the MSQ, and the correlations were statistically significant. Several studies have been conducted by using the MLQ as the sole measure of satisfaction (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990). These studies also used the MLQ as the leadership measure. The studies may be biased by using the same instrument to measure both concepts, especially since the MLQ satisfaction scale consists of only two questionnaire items. The significant and positive correlation between the MLQ and another satisfaction instrument added some credence to these previous findings.

Satisfaction was defined as the overall subordinate contentment with their work experience. The MSQ primarily measured this concept. Interestingly, the MLQ measured contentment with the leader in the work environment. The correlation between these two concepts indicated a relationship between satisfaction with the leader and general work satisfaction.

Effectiveness represented the overall productivity of the work unit as measured by the MLQ and MEPS. The effectiveness scale on the MLQ and the three effectiveness skill areas on the MEPS intercorrelated positively with statistical significance, and the correlation coefficients were quite high. As with the MLQ satisfaction measure, the MLQ effectiveness scale provided the only measure of leader effectiveness in other studies (Avolio et al., 1995). Given the statistically significant correlation with a separate effectiveness measure consisting of numerous questionnaire items, this finding may aid the credibility of these other studies.

Positive, statistically significant intercorrelations were found among all the outcome factors of satisfaction and leader effectiveness. As immediate registered nurse subordinates' satisfaction levels increased, they perceived the nurse executive to be more effective. This finding supported other studies that determined a relationship between satisfaction and effectiveness as measured solely by the MLQ (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990), as well as those studies involving different instruments (Henderson, 1995; Mansen, 1993). As immediate registered nurse subordinates' perception of chief nurse executive leadership effectiveness increased, the subordinate satisfaction at work also increased.

Leadership and Outcomes

All the transformational leadership factors correlated statistically significantly and positively with all the outcome measures of satisfaction and leader effectiveness. Therefore, the more the chief nurse executive was perceived as transformational, the more the subordinate perceived satisfaction and leader effectiveness. Idealized influence (attributed), individualized consideration, and intellectual stimulation tended to most highly relate to the outcomes. These results support earlier findings obtained from samples of non-nurses (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990).

A departure from these previous findings involved the transactional leadership factor of contingent reward. In these correlations, contingent reward consistently displayed stronger relationships with satisfaction and effectiveness than the transformational leadership factors of inspirational motivation and idealized influence (behavior). In addition, contingent reward was the leadership factor that most highly correlated with satisfaction as measured by the MSQ.

As previously discussed, contingent reward had also related to the transformational leadership factors of idealized influence (attributed), individualized consideration, and intellectual stimulation more than the transformational factors of idealized influence (behavior) and inspirational motivation. Postulated earlier, these subordinate registered nurses from more steady-state bureaucracies may not respond to some of the charismatic type of factors when compared to other groups. The personalities of the nurse subordinates may also have an impact on the perception of satisfaction and effectiveness related to these charismatic factors. The charismatic leader

appeals more to those who experience psychological distress, dependency, feelings of helplessness, cynicism, and lack of confidence (Bass, 1985a). Egalitarian, highly educated, self-confident, higher status, and self-reinforcing followers resist charismatic leadership (Bass, 1985b). The characteristics of followers who tend to resist charismatic leaders could certainly be applied to the registered nurse subordinates of chief nurse executives.

Laissez-faire leadership and the two transactional leadership factors involving management-by-exception showed statistically significant, negative correlations among all the outcome factors. The more the chief nurse executive was perceived to display laissez-faire or management-by-exception leadership factors, the lower were the subordinates' perceptions of satisfaction and leader effectiveness. Laissez-faire leadership displayed these negative correlations most profoundly for all measures. Except for the correlation with the MSQ measure of satisfaction and the MEPS measure of task skills effectiveness, management-by-exception (active) negatively correlated more strongly with these factors than management-by-exception (passive). In other non-nursing studies (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990), management-by-exception (passive) scales were more strongly, negatively correlated with the MLQ measures of satisfaction and effectiveness.

The immediate registered nurse subordinates were highly educated and assigned to generally autonomous, high level positions. For these individuals in independent roles, a leader who actively sought errors or omissions would logically relate more negatively to perceptions of satisfaction and leader effectiveness. In addition, management-by-

exception tended to more highly negatively relate to effectiveness for leaders in higher levels of organizations versus lower levels (Avolio et al., 1995).

All the relationships among leadership styles and the MLQ outcome factors discussed above were more strongly correlated in their respective directions when compared to other non-nursing studies using the MLQ (Avolio et al., 1995; Bass, 1985a; Yammarino & Bass, 1990). The relationships among the MEPS effectiveness measures and leadership styles were comparatively similar in strength to the MLQ measures. This difference may be attributed to the sample. The subordinates in this sample were a very homogeneous group. The sample was comprised of all nurses from similar backgrounds and experiences in terms of age, gender, education, occupation, and level of income. A lack of sample variation may have resulted in similar perceptions of satisfaction and leader effectiveness, thus, a corresponding increase in the relationship.

Leadership Styles, Outcome Factors, and Demographics

The fourth purpose was to investigate relationships among subordinate reported outcome factors, chief nurse executives' leadership styles, and subordinate demographic variables: age, gender, highest nursing educational preparation, years of service as a registered nurse, years in current position, and membership in professional organizations. The advantages of objective measures are related to their accuracy and reliability. Although Bass (1985a) presented leader variables that may impact outcomes and leadership, subordinate demographic variables had not been considered. Logically, these variables would also relate to perceptions of satisfaction and leader effectiveness.

Satisfaction and Demographics

As discussed in Chapter II, many empirical studies have been conducted to determine the causes of job satisfaction. The relationship between job satisfaction and numerous variables have resulted in conflicting and unclear findings. The multiple variables included in these studies suggested the complex nature of the concept (Blegen, 1993).

After the American Academy of Nursing (1983) identified certain "magnet" hospitals, many researchers focused on these organizations. Results tended to suggest that leadership issues contributed to improved work environments and satisfaction (Kramer & Schmalenberg, 1988a, 1988b). A meta-analysis of job satisfaction and related variables involving over 15,000 subjects indicated similar results (Blegen, 1993). Most of the successful approaches related to transformational leadership factors. The relationship among the leadership factors and satisfaction was demonstrated and discussed previously.

Since earlier findings indicated relationships among satisfaction and demographic variables, would these relationships occur above and beyond leadership styles? Most of the demographic variables included in this study were among the 13 variables most frequently used in quantitative studies of nurses' job satisfaction (Blegen, 1993). Although these variables were selected because of their seemingly potential influence on outcomes, only one statistically significant relationship was found. When intellectual stimulation and the demographic variables were controlled, highest academic educational level related negatively to satisfaction as measure by the MSQ. Therefore, with

increasing educational preparation, immediate registered nurse subordinates reported less satisfaction.

Although no other relationships reached statistical significance, this finding offered further evidence to other studies (Blegen, 1993). A more highly educated nurse would logically remain in a position with a chief nurse executive who intellectually stimulated subordinates. Thus, a higher level of satisfaction would also result. With the transformational leadership factor of intellectual stimulation controlled, the negative relationship of education with satisfaction would result.

No significant findings resulted when the MLQ was used as the measure of satisfaction. This lack of relationship with the MLQ satisfaction outcome may be due to the limitations of the instrument to differentiate levels of satisfaction. The MLQ satisfaction scale contains only two questionnaire items with a scale range of zero to four.

The leadership variables continued to have a statistically significant relationship among the MLQ and MSQ measures of satisfaction. These relationships were consistent with the findings of the simpler regression models discussed previously. The one exception was the overall significance of the regression with the MLQ measure of satisfaction as the dependent variable and management-by-exception (passive) as one of the independent variables entered with demographic information. When the variable with the weakest relationship with satisfaction and the lowest tolerance was eliminated, the overall model was again statistically significant primarily due to the leadership factor. This finding lent support to leadership's relationship with satisfaction in favor of demographic variables.

Effectiveness and Demographics

Unlike satisfaction, no studies were found that explored relationships between subordinates' demographic variables and perceived leader effectiveness. When effectiveness was regressed on each leadership factor and the demographic variables, a few statistically significant demographic relationships were found. Although most of the relationships occurred with the highest academic educational preparation, two other variables were identified.

With the MLQ measure of effectiveness as the dependent variable, the subordinates' number of years in present position had a positive relationship as an independent variable when regressed with idealized influence (attributed) and the other demographic variables. Therefore, as the number of years in present position increased, the subordinates' perception of leader effectiveness also increased.

A positive relationship between effectiveness and years in a position would seem logical. A nurse would tend to remain in a position longer if the leader was perceived to be effective. Yet, when leadership factors were added to the model, the positive relationship of number of years in present position reached significance only with idealized influence (attributed) controlled. This finding may be related to the ability of the leader, who demonstrated idealized influence (attributed), to introduce change and new directions.

A nurse who remains in a position for a longer time would probably be less comfortable with change than a nurse who moves to new positions more frequently. Idealized influence (attributed) represents the positive impact that results from

charismatic leadership (Avolio et al., 1995). This type of leader inspires and encourages the beliefs and behaviors of followers while developing, transmitting, and implementing a vision (Bass, 1985a). This vision generally implies a direction accompanied by change. Idealized influence (attributed) was the factor most strongly related to subordinates' perceptions of effectiveness. Therefore, perception of effectiveness would increase with years in a position, but only when idealized influence (attributed) is controlled. This relationship was not observed with MEPS as the measure of effectiveness.

When individualized consideration and the other demographic variables were controlled, gender was related to the MLQ measure of effectiveness. Female subordinates perceived the chief nurse executive to be more effective than male subordinates. The transformational leadership approach incorporates more feminine behaviors such as cooperation and empathetic interaction (Miller, 1989), and transformational leadership tended to be the type of leadership favored by chief nurse executives. No other findings were obtained when the MLQ was used to measure effectiveness.

When most of the leadership factors were individually entered into the regression model with the demographic variables, highest academic educational level had a negative relationship with leader effectiveness as measured by the MEPS. Therefore, with increasing educational preparation, the immediate registered nurse subordinates perceived the leader to be less effective. Logically, with increased education, a subordinate would be more aware of various leader and resulting work group behaviors considered to be

effective. This awareness would be accompanied by a more critical view of the leader in terms of the most effective approaches to use in a particular situation.

The educational relationship with perceived leader effectiveness was obtained when most of the transformational leadership factors were controlled. As a leader displays transformational leadership behaviors, a subordinate with higher education may perceive this leader as more effective. When these behaviors were controlled in the regression model, the negative relationships were found. The one exception was inspirational motivation that appeals to the nonintellectual qualities of the follower (Bass, 1985a). This finding would also be logically consistent. Subordinates who were more highly educated would seem to not be aroused by these leadership abilities, yet these behaviors are highly correlated with the other transformational factors.

Educational relationship with perceived leader effectiveness also resulted when the transactional leadership factor of management-by-exception (active) was controlled. The strength of this relationship was weaker than in the previously discussed models. As a subordinate's educational level increased, management-by-exception (active) behaviors may have been perceived by the subordinates as more effective. Thus, when this factor was controlled, the level of educational preparation had a negative relationship with perceived leader effectiveness.

Throughout the above regressions, all the leadership factors continued to have a statistically significant relationship among all the outcome measures in these more complex regression models including demographic variables. These relationships remained consistent with the findings of the more parsimonious models discussed

previously. This finding lent support to leadership's relationship with effectiveness in favor of demographic variables. Although most of the demographic variables did not relate to the outcomes above and beyond the leadership effect, variation for some demographic variables among the sample was less than the variation expected in the general population of nurses. Significant variation leads to correlation and regression. A more heterogeneous sample may result in more demographic relationships with outcomes.

Implications

The major purpose of this study was to investigate the relationships among the transformational, transactional, and laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers and the leadership outcome factors of satisfaction and leader effectiveness as perceived by immediate subordinates. Given the demands and challenges of the changing health care environment, the identification of relationship among leadership styles and outcome factors may be beneficial. Chief nurse executives could use leadership as a component in addressing the increasing demands that health care organizations and nurses face.

This research provided supportive evidence that leadership styles relate to outcomes of satisfaction and leadership effectiveness. Chief nurse executives may benefit from this awareness. To maximize subordinate perceived satisfaction and leadership effectiveness, the chief nurse executive can demonstrate and refine leadership

behaviors that positively relate to these outcomes. They can also rely less heavily on any of the leadership behaviors that relate negatively to these outcomes.

All of the transformational leadership factors related positively and significantly to the outcomes of satisfaction and leader effectiveness. The levels of subordinate perceived satisfaction and leader effectiveness increased as the chief nurse executives displayed transformational leadership behaviors. Awareness of these relationships and the behaviors associated with these factors may provide advantages to chief nurse executives in goal achievement.

A chief nurse executive may increase transformational leadership behaviors by having a transformational leader as a role model or mentor. Subsequently, by role modeling transformational leadership, these executives may increase their subordinates' transformational leadership behaviors. Bass, Waldeman, et al. (1987) also found a positive correlation between the transformational leadership style of supervisors and subordinates. This correlation suggested that subordinates model the leadership style of the supervisor.

Transformational leadership may be enhanced through education and development efforts. Leadership content and opportunities may need to be included in nursing education undergraduate and graduate curricula. This increased knowledge and experience in an academic setting should better prepare nurses for leadership positions. Continuing education programs can also be planned to help nurses recognize and utilize transformational leadership behaviors. An ongoing series of classes on transformational leadership styles may increase subordinate satisfaction and leader effectiveness.

Research found educational programs to be successful in increasing the use of transformational leadership (Bass, 1990).

The use of instruments such as the Multifactor Leadership Questionnaire (MLQ) may be helpful in the evaluation and development of the transformational leadership style. Since leaders have a tendency to inflate their transformational leadership scores (Bass & Avolio, 1990), chief nurse executives can consider the results of this measure completed by others to appraise their leadership style. Feedback on transformational leadership factors can help with coaching and counseling nurses to promote transformational leadership approaches.

The chief nurse executives in this study were perceived to display contingent reward behaviors more than leaders in other studies (Bass & Avolio, 1995; Kilker, 1994). The transactional leadership factor of contingent reward positively correlated with subordinate perceived satisfaction and leader effectiveness. However, the correlations among the transformational leadership factors and outcomes were stronger than the relationships among contingent reward and outcomes.

Chief nurse executives need to be aware of the limitations of the contingent reward approach. When chief nurse executives use an active and positive approach to leadership, reliance on transformational leadership behaviors may be more beneficial than the transactional leadership factor of contingent reward. Although positively correlated with outcomes, shortcomings have been associated with the contingent reward approach as compared to transformational leadership (Bass, 1985a, 1985b; Yammarino & Bass,

1990). Therefore, this research suggests that though the transactional leadership factor of contingent reward is effective, overall transformational leadership is more effective.

Chief nurse executives also need to be aware of the negative and significant correlations among outcome factors and the passive or negative leadership behaviors found in this study. These leadership factors include the two transactional leadership factors of management-by-exception and laissez-faire leadership. Leaders who practice management-by-exception rely on negative reinforcement when performance standards are not met. Laissez-faire leaders avoid their leadership responsibilities and decision making (Bass, 1985a, 1985b). If a chief nurse executive relies on these approaches, they can re-evaluate and change their behaviors to an active and positive approach to leadership. This change may result in greater effectiveness and subordinate satisfaction.

In addition, this study found management-by-exception (active) to have a more strongly negative relationship with the outcomes than management-by-exception (passive). At times, a chief nurse executive must take corrective action. In situations requiring management-by-exception, a passive approach can be used instead of an active approach.

Chief nurse executives need to be aware that some demographic variables may influence efforts to maximize the perception of satisfaction and effectiveness. In addition, some of the leadership factors may be employed to minimize the negative effects of these variables. In particular, as the subordinates' academic preparation increases, this study found the subordinates' perceptions of satisfaction and effectiveness to decrease. To minimize these relationships, transformational leadership may be useful.

The relationships among the outcome factors and academic preparation occurred when transformational leadership factors were controlled. As education increases, people become less passive in their work environment (Barker, 1990) and want to develop their abilities (Lawler, 1985). The transformational leader encourages the active participation and development of subordinates (Bass, 1985a).

Due to the results of this study indicating relationships among leadership styles and outcome factors, some current thoughts and practices in nursing administration may need to be reconsidered. To provide successful leadership, organizations may need to appreciate, recruit, and promote the nurse who challenges the status quo. To introduce change and stimulate subordinates, the chief nurse executive may need to willingly support unpopular positions and reject conventional procedures. These behaviors are consistent with transformational leadership (Bass, 1985a).

Chief nurse executives can also evaluate their organizational structures and operating systems to determine if they seem congruent with a transformational leadership approach or to evaluate whether the system is a mitigating factor. Some elements include selection and placement of personnel, feedback, appraisal, rewards, support, and development. These structures can enhance transformational leadership (Bass, 1990).

Nurse executives lead the critical mass of nurses that form the foundation of the health care delivery system (Miller, 1989). Hospitals employ 68 percent of employed nurses (Weisman, Minnick, Dienemann, & Cassard, 1995). Human resource costs exceed 50 percent of health care organizations' total operating budget, with nursing personnel representing the largest number of personnel (Boston, 1994). The relationships among

transformational leadership, subordinate satisfaction, and leader effectiveness represent a significant finding for nursing and health care organizations. The development of transformational leadership may reap benefits for the effective performance of nurses and health care organizations in the future. In turn, these outcomes can lower costs of health care and increase quality.

Limitations

The methods used in this study presented limitations in the generalizability of the results. The generalizability was limited by the fact that all data were collected in Department of Veterans Affairs Medical Centers. Therefore, results may be applicable to only chief nurse executive positions and their subordinates employed in Department of Veterans Affairs Medical Centers.

Situations that occurred during the completion of an instrument could alter the measurement of the variable (Burns & Grove, 1987). In this study, instruments were mailed to the participants. The investigator had no knowledge of the environment in which the instruments were completed. The different circumstances under which the instruments were completed could alter measurement and results.

Some chief nurse executives indicated recent organizational changes within their medical centers. Changes in the chief nurse executive titles were also noted. The effects of these changes on the outcomes were not controlled in this study.

Questions for Future Research

The results of this study provoke new questions and suggestions for future research. The questions are grouped according to major suggestion categories. These categories for future research include sample, design, variables, operationalized implications, and theoretical concepts.

A replication of this study using alternate sampling methods and sources of data can be considered for future research. Since all the nurses were employed in Department of Veterans Affairs Medical Centers, would a more heterogeneous sample of nurses from a variety of public/private or nonprofit/profit organizations result in the same findings? Would the same results occur with chief nurse executives in free-standing, independent medical centers versus a health care network such as the Department of Veterans Affairs? Will ratings by subordinate nurses of leaders at other levels within an organization result in the same findings? Do demographic variable findings hold in other samples, and do these variables relate more to the outcome factors?

Another consideration related to the sample in this design was subordinates' rating of both leadership and outcome factors. Did subordinates distort their perceptions of outcome or leadership factors to attain cognitive consistency between both ratings? If subordinates rated their perceptions of satisfaction and leader effectiveness highly positive, they also may have tended to rate the leader as transformational. Transformational leader behaviors may be viewed as more acceptable. Would separate sources for outcome and leadership ratings achieve the same results? For example,

subordinates could rate their perceptions of leadership style, and supervisors could do ratings on the outcome factors according to objective criteria.

Many of the Department of Veterans Affairs Medical Centers included in the study were experiencing recent restructuring efforts. Other chief nurse executives elected not to participate due the these major restructuring endeavors. Would findings be different during a time of greater stability? Since some of the chief nurse executives supervised non-nurses, would a sample of non-nurse subordinates produce similar results?

Questions related to causality result from the correlational design that was used. Other types of study designs can explore various questions to expand the understanding of leadership. Does leadership cause the different perceptions of satisfaction and effectiveness? Does leader effectiveness cause subordinate satisfaction, or does subordinate satisfaction cause perceptions of effectiveness? Do subordinate or leader demographic variables have an effect on leadership ratings? Is there a subordinate or leader demographic variable that is responsible for changes in outcome factors? How much and in what ways can managers influence subordinates' perceptions?

Additional variables can be considered in research designs to explore correlation or causality. Are there other outcomes related to leadership style? Outcomes to consider include cultural climate, quality of work life, patient care outcomes, and financial outcomes. Are there other subordinate demographic factors that relate to outcomes over and above leadership style? Are there relationships among leader demographic variables, outcome factors, and leadership styles? Are there organizational variables that relate to

leadership styles or outcomes? For example, does the organizational climate or management structure relate to or have an effect on leadership styles or outcome factors?

Many of the implications related to this study focused on methods to maximize the transformational leadership styles that related positively to satisfaction and leader effectiveness. Questions result from considerations of methods that more fully develop transformational leadership. What can chief nurse executives do to maximize transformational leadership and outcomes? What is the best approach to identify educational needs to increase leadership effectiveness? Will the inclusion of transformational leadership theory into academic curriculum result in behavior changes in the leader? What methods for this education are most effective at fostering growth in leaders and followers? Do role modeling and mentoring have an effect on transformational leadership behaviors? What policies, procedures, and other operational structures within an organization best reinforce transformational leadership?

To more fully understand transformational leadership and expand the leadership theory, several questions arise. A further examination of these leadership styles used by nurses would also help the development of a nursing management model. Considering the research on situational leadership, are there specific types of situations where transactional or laissez-faire leadership would be more effective than transformational leadership? To further refine the transformational leadership theory, are there antecedent events that increase a person's use of transformational leadership or influence the effectiveness of this leadership style in a given situation? Are there precursors that can predict future transformational or effective leadership behaviors? For example, do past

academic achievements or life experiences relate to subsequent displays of transformational leadership, subordinate satisfaction, or leader effectiveness?

The "cascading effect" in transformational leadership presents interesting questions. Leaders at higher levels within an organization tend to be more transformational than the leaders at lower levels (Bass, Waldman, et al., 1987). A longitudinal study could explore this finding and provide more insights into transformational leadership. Do the upper level managers ascend to these organizational levels because they are transformational, or are they promoted because of these skills?

Numerous questions arise from the findings of this research. The list of questions and considerations seems endless. The questions presented above relate to sample, design, variables, operationalized implications, and theoretical concepts.

Summary

The purpose of this study was to investigate relationships among transformational, transactional, or laissez-faire leadership styles of chief nurse executives in Department of Veterans Affairs Medical Centers as perceived by their immediate subordinates and the subordinate reported outcome factors. The outcome factors considered included subordinate satisfaction and leader effectiveness of the immediate supervisor as perceived by subordinates. The relationships among the outcome measures of satisfaction and leader effectiveness were also explored. Considering the tremendous challenges in health care and the changing world view, an understanding of highly effective nursing leadership could benefit the nursing profession.

The transactional and transformational leadership model, as proposed and operationalized by Bernard M. Bass (1985a), provided the conceptual framework for this study. This leadership model identified the relationship between leader and follower as an interaction of individuals who have purposes and goals. Transactional, transformational, and laissez-faire leadership represented the three types of interactions. The identification of roles and task requirements for followers in exchange for valued rewards forms the basis of the transactional approach. Transformational leadership exists when individual leaders mold and elevate the purposes, values, and goals of followers. Laissez-faire leadership is an abdication of leadership.

This descriptive correlational study used a national sample of 184 immediate registered nurse subordinates to 85 chief nurse executives in Department of Veterans Affairs Medical Centers. All chief nurse executives were invited to participate. A constant, random sample of the immediate registered nurse subordinates was selected from each list of subordinates provided by the chief nurse executives. Data collection was conducted by mail, including follow-up letters. Subjects completed the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1995) to rate leadership styles and outcome factors. Subjects also completed the Minnesota Satisfaction Questionnaire (MSQ) (Weiss et al., 1967) and the Management Effectiveness Profile System (MEPS) (Human Synergistics International, 1993) to measure the respective outcome factors of satisfaction and leader effectiveness. Demographic information was collected from the chief nurse executives and subordinates on a questionnaire developed by the investigator. Data analysis procedures included descriptive statistics, Pearson product-moment

correlation coefficients, simple regression procedures, and multiple regression techniques.

The first purpose was to investigate the leadership styles of chief nurse executives as perceived by subordinates. Transformational leadership factors received the highest scores, although the transactional leadership factor of contingent reward was also high. Laissez-faire leadership received the lowest score. Although chief nurse executives tended to display transformational behaviors, some inconsistencies in the use of certain transformational factors were noted.

The second purpose was to investigate the subordinate perceived outcome factors of satisfaction and leader effectiveness. Satisfaction as measured by the MLQ received a lower score than leader effectiveness. The MSQ provided a normative percentile group for nurses, and satisfaction converted to percentile scores between 60% to 65%. The MEPS measure of effectiveness placed in the score range for most managers for the three skill area scales.

The third purpose was to investigate relationships among the subordinate perceived chief nurse executives' leadership styles and the outcome factors of satisfaction and leader effectiveness. The investigation of the relationships among the leadership factors provided support and greater understanding of Bass's (1985a) theory within the nursing profession. The relationship among leadership styles and outcome factors substantiated the advantages of transformational leadership and the positive transactional approach of contingent reward. Relationships among outcome factors identified the link between the outcomes and added credence to the widely used MLQ outcome measures.

The fourth purpose was to investigate relationships among subordinate reported outcome factors, chief nurse executives' leadership styles, and subordinate demographic variables: age, gender, highest nursing educational preparation, years of service as a registered nurse, years in current position, and membership in professional organizations. Only the subordinates' highest nursing education preparation statistically significantly related to outcome factor of satisfaction when leadership style was controlled. This relationship was negative when the transformational leadership factor of intellectual stimulation was controlled. Thus, satisfaction decreased as the subordinates' highest nursing education preparation increased. This finding was not supported with the MLQ as a measure of satisfaction.

The regression of the leaders' effectiveness outcome factors as measured by the MLQ and MEPS on leadership styles and demographic variables resulted in a few significant findings. However, the significant relationships were not consistent for both effectiveness measures. When idealized influence (attributed) was entered into the regression model, effectiveness as measure by the MLQ increased as the number of years in a position increased. When individualized consideration was entered, female subordinates perceived the leader to be more effective than male subordinates. With MEPS as the measure for leader effectiveness, perceptions of leader effectiveness decreased as the highest nursing educational preparation increased. This relationship reached statistical significance when most of the transformational leadership factors or management-by-exception (active) were entered into the regression model.

The majority of the relationships involving demographic variables occurred with the highest academic educational preparation having a negative relationship with outcomes above and beyond leadership styles. Throughout these regressions, all the leadership factors continued to have a statistically significant relationship among all the outcome measures. These relationships remained consistent with the findings of the more parsimonious models. This finding lent support to leadership's relationship with effectiveness in favor of demographic variables.

Several implications were identified as related to the findings. Chief nurse executives need to be aware of transformational leadership behaviors and their positive relationships with outcomes, the limitations of the transactional contingent reward factor, and the negative correlations among passive or negative leadership behaviors and outcome factors. In addition, some demographic variables may influence efforts to maximize the perception of satisfaction and effectiveness. These nurse executives may maximize the positive results of their leadership style by demonstrating and refining an array of transformational behaviors. Transformational leadership behaviors can be enhanced through education and development efforts, including the Department of Veterans Affairs nursing preceptorship training programs. Some current thoughts and practices in nursing administration may need to be reconsidered, including the selection of nurses to positions of higher authority.

Limitations of this study involved the sample, the method of data collection, and concerns for the current organizational changes. Since all data was collected in Department of Veterans Affairs Medical Centers, results may be applicable to only chief

nurse executive positions and their subordinates employed in these organizations. The instruments were mailed, so situations that occurred during the completion of the instruments could have altered the measurement of the variable. The effects of organizational changes occurring within the medical centers were not controlled.

The results of this study provoke new questions. Many considerations for future research were identified. The major questions for future research related to sample, design, variables, operationalized implications, and theoretical concepts. Further development of the transformational leadership model may reap benefits for the effective performance of nurses and health care organizations in the future.

REFERENCES

Abdellah, F. G. (1990). Reflections on a recurring theme. Nursing Clinics of North America, 25, 509-515.

Acee, A. M. (1990). What is the head nurses' leadership style and effectiveness in self-reports and reports by staff as measured by Hersey and Blanchard's LEAD instrument and Human Synergistic's Management Effectiveness Profile System (Doctoral dissertation, Columbia University, Teachers College). Dissertation Abstracts International, 51, 4772B.

Acorn, S., Ratner, P. A., Crawford, M. (1997). Decentralization as a determinant of autonomy, job satisfaction, and organizational commitment among nurse managers. Nursing Research, 46, 52-58.

Adams, C. E. (1988). The relationship between creative style and leader behavior in chief nurse administrators [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990109857.

Adams, C. E. (1994a). Innovative behavior in nurse executives. Nursing Management, 25(5), 44-47.

Adams, C. E. (1994b). The impact of problem-solving styles of NE-CEO pairs on nurse executive effectiveness. Journal of Nursing Administration, 24(11), 17-22.

Adams, J. (Ed.). (1986). Transforming leadership: From vision to results. Alexandria, VA: Miles River.

Adler, M. M. (1996). The Beth Israel Health Care System addresses the challenge of cultural diversity. Journal of Nursing Administration, 26(9), 3-4, 26.

Alderson, C., Gallimore, I., Gorman, R., Monahan, M., & Wojtasinski, A. (1992). Research priorities of VA nurses: A Delphi study. Military Medicine, 157, 462-465.

Alexander, J. W. (1989). Programs of administrative research for nursing. In B. Henry, C. Arndt, M. DiVincenti, & A. Marriner-Tomey (Eds.), Dimensions of nursing administration (pp. 267-284). Cambridge, MA: Blackwell Scientific.

Ameigh, A. Y. (1996). The role of the corporate nurse executive: Providing balance and perspective for patient care and the corporate structure. Nursing Administration Quarterly, 20(2), 74-70.

American Academy of Nursing Task Force. (1983). Magnet hospitals: Attraction and retention of professional nurses. Kansas City, MO: American Nurses' Association.

American Hospital Association. (1987). Report of the 1987 hospital nursing demand survey. Chicago: American Hospital Association, Center for Nursing.

Anderson, C. A. (1996). Leaders and leadership: Who are they and what is it? Nursing Outlook, 44, 163.

Andrica, D. (1997). Nursing image: Our public relations responsibility. Nursing Economics, 15, 105

Aroian, J., Meservey, P. M., & Crockett, J. G. (1996). Developing nurse leaders for today and tomorrow. Journal of Nursing Administration, 26(9), 18-26.

August, J. (1988). Strategies: Retention of nurses in hospitals. Nurse Executive Management Strategies (No. 12). Chicago: American Hospital Association.

Avolio, B. J., & Bass, B. M. (1987). Transformational leadership, charisma and beyond. In J. G. Hunt (Ed.), Emerging leadership vistas (pp. 29-50). Elmwood, NY: Pergamon Press.

Avolio, B. J., & Bass, B. M. (1991). The full-range of leadership development. Binghamton, NY: Center for Leadership Studies.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1995). Multifactor Leadership Questionnaire: Technical report. Palo Alto, CA: Mind Garden.

Avolio, B. J., & Gibbons, Y. C. (1988). Developing transformational leaders: A life span approach. In J. A. Conger & R. N. Kanunzo (Eds.), Charismatic leadership: The elusive factor in organizational effectiveness (pp. 276-308). San Francisco: Jossey-Bass.

Baldwin, C. (1990). Life's companion: Journal writing as a spiritual quest. New York: Bantam Books.

Barker, A. M. (1990). Transformational nursing leadership: A vision for the future. Baltimore: Williams & Wilkins.

Barker, A. M. (1991). An emerging leadership paradigm. Nursing & Health Care, 12(4), 204-207.

Barker, A. M., & Young, C. E. (1994). Transformational leadership: The feminist connection in postmodern organizations. Holistic Nursing Practice, 9(1), 16-25.

Barnum, B. S. (1994). Leadership: Can it be holistic? Holistic Nursing Practice, 9(1), 9-15.

Barrett, M. C., Goldenberg, D., & Faux, S. (1992). Career patterns and job satisfaction of Canadian nurse educators. Journal of Advanced Nursing, 17, 1002-1011.

Bass, B. M. (1981). Stogdill's handbook of leadership. New York: Free Press.

Bass, B. M. (1985a). Leadership and performance beyond expectations. New York: Free Press.

Bass, B. M. (1985b). Leadership: Good, better, best. Organizational Dynamics, 13(3), 26-40.

Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. Organizational Dynamics, 18(3), 19-31.

Bass, B. M., & Avolio, B. J. (1990). Transformational leadership development: Manual for the Multifactor Leadership Questionnaire. Palo Alto, CA: Consulting Psychologists Press.

Bass, B. M., & Avolio, B. J. (1995). Multifactor Leadership Questionnaire for research. Palo Alto, CA: Mind Garden.

Bass, B. M., Avolio, B. J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world-class level. Journal of Management, 13, 7-20.

Bass, B. M., Waldman, D. A., Avolio, B. J., & Bebb, M. (1987). Transformational leadership and the falling dominoes effect. Group and Organizational Studies, 12(1), 73-87.

Beecroft, P. C. (1993). Where are the transformational leaders? Clinical Nurse Specialist, 7, 163.

Bennis, W. (1966). Changing organizations: Essays on the development and evolution of human organization. New York: McGraw-Hill.

Bennis, W. (1989). Why leaders can't lead: The unconscious conspiracy continues. San Francisco: Jossey-Bass.

Bennis, W., & Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper & Row.

Berlew, D. E. (1986). Leadership and organizational excitement. In J. N. Williamson (Ed.), The leader-manager (pp. 91-104). New York: Wiley.

Beyers, M. (1996). A new connectedness. Journal of Nursing Administration, 26(9), 5-6.

Blair, E. M. (1989). Nursing and administration: A synthesis model. Nursing Administration Quarterly, 13(2), 1-11.

Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. Nursing Research, 42, 36-41.

Blegen, M. A., Goode, C., Johnson, M., Maas, M., Chen, L., & Moorhead, S. (1993). Preferences for decision-making autonomy. Image: Journal of Nursing Scholarship, 25, 339-344.

Blegen, M. A., Goode, C. J., Johnson, M., Maas, M. L., McCloskey, J. C., & Moorhead, S. A. (1992). Recognizing staff nurse job satisfaction and achievements. Research in Nursing and Health, 15, 57-66.

Blegen, M. A., & Mueller, C. W. (1987). Nurses' job satisfaction: A longitudinal analysis. Research in Nursing and Health, 10, 227-237.

Bollen, K. A. (1989). Statistical equations with latent variables. New York: Wiley.

Boston, C. (1994). If it ain't broke...break it! Journal of Nursing Administration, 24(1), 16-17.

Boumans, N. P. G., & Landeweerd, J. A. (1993). Leadership in the nursing unit: Relationships with nurses' well-being. Journal of Advanced Nursing, 18, 767-775.

Brady, D. C. (1994). Transformational leadership: The catalyst for successful change. AONE's Leadership Prospectives, 2(3), 16.

Brown, B. J. (1997). From the editor. Nursing Administration Quarterly, 21(1), v-vi.

Brown, N. J. (1989). The relative contribution of organizational climate, supervisory leadership, and peer leadership to job satisfaction, performance, and retention [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1991123776.

Brown, M., & McCool, B. P. (1987). High-performing managers: Leadership attributes for the 1990s. Health Care Management Review, 12(2), 69-75.

Buccheri, R. C. (1986). Nursing supervision: A new look at an old role. Nursing Administration Quarterly, 11(1), 11-25.

Buckwalter, K. C., & Maas, M. L. (1989). True experimental designs. In P. J. Brink & M. J. Wood (Eds.), Advanced design in nursing research (pp. 27-56). Thousand Oaks, CA: Sage.

Budgen, C. M. (1987). Modeling: A method for program development. Journal of Nursing Administration, 17(12), 19-25.

Burns, J. M. (1978). Leadership. New York: Harper & Row.

Burns, N., & Grove, S. K. (1987). The practice of nursing research: Conduct, critique and utilization. Philadelphia: W. B. Saunders.

Byrd, R. E. (1987). Corporate leadership skills: A new synthesis. Organizational Dynamics, 16(1), 34-43.

Cameron-Buccheri, R., & Ogier, M. E. (1994). The USA's nurse managers and UK's ward sisters: Critical roles for empowerment. Journal of Clinical Nursing, 3(4), 205-211.

Carpenter, K. D. (1988). The relationship between job characteristics, work motivation, and general job satisfaction of academic middle managers for baccalaureate nursing [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990109832.

Cassidy, V. K., & Koroll, C. J. (1994). Ethical aspects of transformational leadership. Holistic Nursing Practice, 9(1), 41-47.

Chaska, N. (1983). Theories of nursing and organization: Generating integrated models for administrative practice. In N. Chaska (Ed.), The nursing profession: A time to speak (pp. 720-730). New York: McGraw-Hill.

Christman, L., & Counte, M. A. (1989). The changing health care environment: Challenges for the executive team. Nursing Administration Quarterly, 13(2), 67-76.

Clover, W. H. (1990). Transformational leaders: Team performance, leadership ratings, and first hand impressions. In K. E. Clark & M. B. Clark (Eds.). Measures of leadership (pp. 171-184). West Orange, NJ: Leadership Library of America.

Coddington, D. C., Palmquist, L. E., & Trollinger, W. V. (1985). Strategies for survival in the hospital industry. Harvard Business Review, 63(3), 129-138.

Coeling, H. V. (1995). Commentary on speaking of visions and visions being spoken. AONE's Leadership Prospectives, 3(2), 12.

Cooke, R. (1988). Assessing and profiling managerial skills and behaviors. Chicago: University of Illinois at Chicago.

Cottingham, C. (1988). Transformational leadership: A strategy for nursing. Today's OR Nurse, 10(6), 24-27.

Covey, S. R. (1989). The seven habits of highly effective people: Restoring the character ethic. New York: Simon & Schuster.

Curtin, L. L. (1997). How--and how not--to be a transformational leader. Nursing Management, 28(2), 7-8.

Davidhizar, R. (1993). Leading with charisma. Journal of Advanced Nursing, 18, 675-679.

Department of Health and Human Services. (1988). Secretary's Commission on Nursing. Final report, volume I. Washington, DC: U.S. Government Printing Office.

Department of Medicine and Surgery. (1980). Nursing service preceptorship training programs program guide, MII, Part V. Washington, DC: Author.

Department of Veterans Affairs. (1989). Clinical affairs: Nursing service, M-II, Part V. Washington, DC: Author.

Department of Veterans Affairs. (1993). Nursing: Veterans Affairs (VHA Publication No. IB 10-11). Washington, DC: Author.

Duke, L. K. (1988). Relationships between nurse education administrator's leadership behaviors and empowerment of nursing faculty and students [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990112639.

Dunham, J. (1989). The art of humanistic nursing administration: Expanding the horizons. Nursing Administration Quarterly, 13(3), 55-66.

Dunham, J., & Klafehn, K. A. (1990). Transformational leadership and the nurse executive. Journal of Nursing Administration, 20(4), 28-33.

Dunham-Taylor, J. (1995). Identifying the best in nurse executive leadership. Part 2, Interview results. Journal of Nursing Administration, 25(7/8), 24-31.

Dunham-Taylor, J., Fisher, E., & Kinion, E. (1993). Experiences, events, people: Do they influence the leadership style of nurse executives? Journal of Nursing Administration, 23(7/8), 30-34.

Dunham-Taylor, J., & Klafehn, K. (1995). Identifying the best in nurse executive leadership. Part 1, Questionnaire results. Journal of Nursing Administration, 25(6), 68-70.

Duxbury, M. L., Armstrong, G. D., Drew, D. J., & Henly, S. J. (1984). Head nurse leadership style with staff nurse burnout and job satisfaction in neonatal intensive care units. Nursing Research, 33(2), 97-101.

Ehrat, K. S. (1990). Leadership in transition. Journal of Nursing Administration, 20(10), 6-7.

Ellis, A. P. (1991). The relationship between nursing education administrators' use of humor and their leadership effectiveness as perceived by faculty [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1994174354.

Evans, J. A. (1992). A study of the relationship among perceptions of the immediate supervisor's leadership style, work environment, and self-efficacy as reported by head nurses (Doctoral dissertation, Columbia University, Teachers College, 1992). Dissertation Abstracts International, 53, 768B.

Fagin, C., & McGiven, D. (1983). The dean and faculty development. In M. Conway & O. Andruskiew (Eds.), Administrative theory and practice. Norwalk, CT: Appleton-Century-Crofts.

Flarey, D. L. (1992). Transforming healthcare organizations. Journal of Nursing Administration, 22(9), 13-14.

Flarey, D. L. (1994). Flight of the buffalo. Journal of Nursing Administration, 24(10), 12-13.

Forman, H. R. (1989). Descriptive analysis of the effects of union and nonunion affiliation on perceived role conflict, conflict resolution modes, leader behavior styles, and leadership effectiveness of head nurses [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990115525.

Friss, L. (1989). Strategic management of nurses: A policy-oriented approach. Owings Mills, MD: AUPHA Press.

Gardner, J. (1989). On leadership. New York: The Free Press.

Garrett, B. H. (1991). The relationship among leadership preferences, head nurse leader style, and job satisfaction of staff nurses. Journal of the New York State Nurses Association, 22(4), 11-14.

Gevedon, S. L. (1991). A description of the leadership behaviors of the deans of the top-ranked schools of nursing in the United States [CD-ROM]. Abstract from: SilverPlatter File: CINAHL Item: 1992150566.

Gevedon, S. L. (1992). Leadership behaviors of deans of top-ranked schools of nursing. Journal of Nursing Education, 31, 221-224.

Gilloran, A., McKinley, A., McGlew, T., McKee, K., & Robertson, A. (1994). Staff nurses' work satisfaction in psychogeriatric wards. Journal of Advanced Nursing, 20, 997-1003.

Goehner, E. D. (1992). A longitudinal study of factors affecting job satisfaction among pediatric nurses [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1994198322.

Goldberg, L. K. (1991). What is the nurse administrator's perception of his/her leadership as perceived by the nurse middle manager. Unpublished doctoral dissertation, Columbia University, Teachers College.

Gottlieb, T. D. W. (1990). Transactional and transformational leadership styles of chief and associate chief nurses in Department of Veterans' Affairs medical centers: A descriptive study. Dissertation Abstracts International, 51(7), 3322B.

Graning, K., Walters, K., & Headley, E. J. (1994). A bold new world in VA health care reform. VA Practitioner, 11(6), 33-34, 36.

Gresham, J. S. & Brown, H. N. (1997). How satisfied are middle nurse managers? Nursing Management, 28(1), 41-43.

Gurney, C. A., Mueller, C. W., & Price, J. L. (1997). Job satisfaction and organizational attachment of nurses holding doctoral degrees. Nursing Research, 46, 163-171.

Haddock, C. C. (1989). Transformational leadership and the employee discipline process. Hospital and Health Services Administration, 34(2), 185-194.

Hamilton, E. M., Murray, M. K., Lindholm, L. H., & Myers, R. E. (1989). Effects of mentoring on job satisfaction, leadership behaviors, and job retention of new graduate nurses. Journal of Nursing Staff Development, 5(4), 159-165.

Hart, A. L. (1994). Organizational leadership: Meeting the challenge. Gastroenterology Nursing, 16, 277-280.

Hater, J. J., & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. Journal of Applied Psychology, 73, 695-702.

Hayden, M. A. (1994). Artful interviewing: In search of a transformational leader. Seminars for Nurse Managers, 2(4), 184-186.

Hayes, R. H., & Abernathy, W. J. (1980). Managing our way to economic decline. Harvard Business Review, 58(4), 67-77.

Henderson, M. C. (1995). Nurse executives: Leadership motivation and leadership effectiveness. Journal of Nursing Administration, 25(4), 45-51.

Henry, B. (1989). Education for administration: The crisis in nursing administration. Journal of Nursing Administration, 19(3), 6-7, 28.

Henry, B., Moody, L. E., Pendergast, J. F., O'Donnell, J., Hutchinson, S. A., & Scully, G. (1987). Delineation of nursing administration research priorities. Nursing Research, 36, 309-314.

Henry, B., O'Donnell, J., Pendergast, J., Moody, L., & Hutchinson, S. (1988). Nursing administration research in hospitals and schools of nursing. Journal of Nursing Administration, 18(2), 28-31.

Hickey, P. S., & Castaneda, A. R. (1995). Transformation of the cardiovascular program: Leadership and organization. Nursing Clinics of North America, 30, 163-169.

Hinshaw, A. S., Atwood, J. R., Gerber, R. M., & Erickson, J. R. (1985). Testing a theoretical model for job satisfaction and anticipated turnover of nursing staff. Nursing Research, 34, 384.

Holle, M., & Blatchley, M. (1987). Leadership and management in nursing (2nd ed.). San Francisco: Jones & Bartlett.

Hood, J. N., & Smith, H. L. (1994). Quality of work life in home care: The contribution of leaders' personal concern for staff. Journal of Nursing Administration, 24(1), 40-47.

House, R. J. (1976). A theory of charismatic leadership. In J. G. Hunt & L. L. Larson (Eds.), Leadership: The cutting edge. Carbondale, IL: Southern Illinois University Press.

Human Synergistics. (1984, May). A study of the reliability and validity of the Management Effectiveness Profile System instrument. Plymouth, MI: Author.

Human Synergistics International. (1993). Management Effectiveness Profile System. Plymouth, MI: Author.

Human Synergistics International. (1995). MEPS: Professional development report. Plymouth, MI: Sources.

Institute of Medicine. (1983). Nursing and nursing education: Public policies and private actions. Washington, DC: National Academy Press.

Jennings, B. M. (1995). Nursing research: A time for redirection. Journal of Nursing Administration, 25(4), 9-11.

Jennings, B. M., & Meleis, A. I. (1988). Nursing theory and administrative practice: Agenda for 1990s. Advances in Nursing Science, 10(3), 56-69.

Jobes, M., & Steinbinder, A. (1996). Transitions in nursing leadership roles. Nursing Administration Quarterly, 20(2), 80-84.

Johansson, I., Larsson, G., & Hamrin, E. (1994). Changes of nursing organization in a surgical department: Effects on work satisfaction and quality of care. Journal of Clinical Nursing, 3(3), 169-175.

Johnson, M. L. (1986). The nurse executive role: Research relevant to managing. Nursing Administration Quarterly, 11(1), 60-65.

Joint Commission on Accreditation of Healthcare Organizations. (1996). Comprehensive accreditation manual for hospitals: The official handbook. Oakbrook Terrace, IL: Author.

Judd, C. M., & McClelland, G. H. (1989). Data analysis: A model-comparison approach. San Diego: Harcourt Brace Jovanovich.

Kanter, R. M. (1983). The changemasters: Innovation and entrepreneurship in the American corporation. New York: Simon & Schuster.

Kennerly, S. M. (1989). Leadership behavior and organizational characteristics: Implications for faculty satisfaction. Journal of Nursing Education, 28(5),198-202.

Kerfoot, K. M. (1992). Achieving excellence: The nurse manager's challenge. Nursing Economics, 10, 140-143.

Kerfoot, K. M. (1996). Today's patient care unit manager. Nursing Economics, 14, 181-182.

Kerfoot, K. M. (1997a). Glue: The essence of leadership. Nursing Economics, 15, 100-101.

Kerfoot, K. M. (1997b). Leadership: Believing in followers. Nursing Economics, 15, 151-152.

Kilker, M. J. (1994). Correlates of transformational and transactional leadership styles: An empirical investigation of Rogers' principle of integrality. Unpublished doctoral dissertation, Columbia University, Teachers College.

Knox, S., & Irving, J. A., An interactive quality of work life model applied to organizational transition. Journal of Nursing Administration, 27(1), 39-47.

Koerner, J. G., & Bunkers, S. S. (1992). Transformational leadership: The power of symbol. Nursing Administration Quarterly, 17(10), 1-9.

Koszalka, M. V. (1988). An investigation of the relationship between leadership effectiveness of selected nursing administrators and their particular master's degree preparation [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990109963.

Kouzes, J. M., & Posner, B. Z. (1987). The leadership challenge: How to get extraordinary things done in organizations. San Francisco: Jossey-Bass.

Kramer, M., & Schmalenberg, C. (1988). Magnet hospitals: Part I: Institutions of excellence. Journal of Nursing Administration, 18(4), 13-24.

Kramer, M., & Schmalenberg, C. (1988). Magnet hospitals: Part II: Institutions of excellence. Journal of Nursing Administration, 18(5), 11-19.

Kratina, S. H. (1990). Organizational culture and head nurse leadership: The relationship to nurses' job satisfaction and turnover in hospital settings [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1991129257.

Kuhn, T. S. (1977). The essential tension: Selected studies in scientific tradition and change. Chicago: University of Chicago Press.

Kuhnert, K. W., & Lewis, P. (1987). Transactional and transformational leadership: A constructive/developmental analysis. Academy of Management Review, 12, 648-657.

Larson, O. M. (1990). Career aspirations of higher leadership positions of nurse middle managers in the upper midwest states [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1992142448.

Lawler, E. E., III. (1985). Education, management style, and organizational effectiveness. Personnel Psychology, 38, 1-26.

Lee, M. G. (1987). The health care industry ... Is nursing management missing the mark? Nursing Management, 18(11), 96J.

Levenstein, A. (1984). Leadership under the microscope. Nursing Management, 15(11), 68-69.

Ling, C. W. (1996). Performance of a self-directed work team in a home healthcare agency. Journal of Nursing Administration, 26(9), 36-40.

Lynn, M. R., & Cobb, B. K. (1994). Changes in nursing administration research priorities: A sign of the times. Journal of Nursing Administration, 24(4S), 12-18.

Maguire, P. (1986). Staff Nurses' perceptions of head nurses' leadership styles. Nursing Administration Quarterly, 11(1), 34-38.

Mansen, T. J. (1993). Role-taking abilities of nursing education administrators and their perceived leadership effectiveness. Journal of Professional Nursing, 9, 347-357.

Manthey, M. (1990). Trends: Shifting patterns of authority. Nursing Management, 21(10), 14-15.

Manz, C. C., & Sims, H. P. (1989). Super leadership. New York: Prentice Hall.

Marriner-Tomey, A. (1990). Case studies in nursing management: Practice, theory, and research. St. Louis, MO: C. V. Mosby.

Martel, L. (1986). Mastering change. New York: Simon & Schuster.

Matrone, J. (1996). How to move into the next era of health care. Nursing Administration Quarterly, 21(1), 1-6.

McBride, A. B. (1994). From the president: Transformational leadership. Nursing Outlook, 42, 284.

McClure, M. L. (1989). The nurse executive role: A leadership opportunity. Nursing Administration Quarterly, 13(3), 1-8.

McDaniel, C., & Stumpf, L. (1993). The organizational culture: Implications for nursing service. Journal of Nursing Administration, 23(4), 54-60.

McDaniel, C., & Wolf, G. A. (1992). Transformational leadership in nursing service: A test of theory. Journal of Nursing Administration, 22(2), 60-65.

McNeese-Smith, D. (1992). The impact of leadership upon productivity. Nursing Economics, 10, 393-396.

McVey, C., & Moore, L. E. (1993). Managing mediocrity. Nursing Management, 24(6), 68I, 68L, 68N.

Meighan, M. M. (1990). The most important characteristics of nursing leaders. Nursing Administration Quarterly, 15(1), 63-69.

Metzger, N. (1991). The changing health care workplace: A challenge for management development. Journal of Management Development, 10(4), 53-64.

Miller, K. L. (1989). Nurse executive leadership: A corporate perspective. Nursing Administration Quarterly, 13(2), 12-18.

Mintzberg, H. (1975). The manager's job: Folklore and fact. Harvard Business Review, 53(4), 49-61.

Moore, T. F., & Simendinger, E. A.(1989). Managing the nursing shortage: A guide to recruitment and retention. Rockville, MD: Aspen.

Moss, R., & Rowles, C. J. (1997). Staff nurse job satisfaction and management style. Nursing Management, 28, 32-33.

Nagaike, K. (1997). Understanding and managing change in health care organizations. Nursing Administration Quarterly, 21(2), 65-73.

Naisbitt, J. (1982). Megatrends: Ten new directions transforming our lives. New York: Warner Books.

Naisbitt, J., & Aburdene, P. (1985). Re-inventing the corporation: Transforming your job and your company for the new information society. New York: Warner.

Nanus, B. (1992). Visionary leadership. San Francisco: Jossey-Bass.

Nielson, G. J. (1993). The VA market position in inpatient care. VA Practitioner, 10(4), 55-56, 59-60.

Norman, A. (1995). Professional leadership in community nursing services. Health Visitor, 68(1), 21-23.

O'Hanlon-Nichols, T. M. (1989). The relationship between locus of control and perceived head nurse leadership behavior on job satisfaction of registered nurses [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990115507.

O'Neil, K., & Gajdostik, K. (1989). The head nurse's managerial role. Nursing Management, 6, 39-41.

Paul, M. F. (1982). Power, leadership and trust: Implications for counselors in terms of organizational change. Personnel and Guidance Journal, 60, 538-541.

Peck, M. (1988). Head nurse fit with staff, administration, and situation: Impact on unit performance and staff satisfaction [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990109861.

Pesut, D. J. (1997). Future think. Nursing Outlook, 45, 107.

Peters, T. (1987). Thriving on chaos. New York: Random House/Knopf.

Peters, T. J., & Austin, N. (1985). A passion for excellence: The leadership difference. New York: Warner.

Peters, T. J., & Waterman, R. H. (1982). In search of excellence: Lessons from America's best-run companies. New York: Warner.

Peterson, A. M. (1990). New England state college health service nurse managers: Career choice, role perception, and job satisfaction [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1992135122.

Pincus, J. D. (1986). Communication: Key contributor to effectiveness -- The research ... Nurses' job satisfaction and job performance. Journal of Nursing Administration, 16(9), 19-25.

Polit, D. F., & Hungler, B. P. (1978). Nursing research: Principles & methods. Philadelphia: J. B. Lippincott.

Porter-O'Grady, T. (1990). Reorganization of nursing practice: Creating the corporate venture. Rockville, MD: Aspen.

Porter-O'Grady, T. (1992). Transformational leadership in an age of chaos. Nursing Administration Quarterly, 17(1), 17-24.

Porter-O'Grady, T. (1993). Of mythspinners and mapmakers: 21st century managers. Nursing Management, 24(4), 52-55.

Porter-O'Grady, T. (1997). Quantum mechanics and the future of healthcare leadership. Journal of Nursing Administration, 27(1), 15-20.

Radice, B. (1994). The relationship between nurse empowerment in the hospital work environment and job satisfaction: A pilot study. Journal of the New York State Nurses Association, 25(2), 14-17.

Rawnsley, M. M., & Evans, J. A. (1992). Nursing science and administration: Creating an empowering environment. In B. Henry (Ed.), Practice and inquiry in nursing administration. Washington, DC: American Academy of Nursing.

Redmond, G. M. (1995). "We don't make widgets here": Voices of chief nurse executives. Journal of Nursing Administration, 25(2), 63-69.

Reyna, S. L. S. (1992). Leadership styles of nurse managers and how they affect the motivation level of nursing staff. [CD-ROM]. Abstract from: SilverPlatter File: CINAHL Item: 1995000045.

Ripple, H. (1988). Capitalizing on the new economics: Nurse executives as catalysts for action. Nursing Economics, 6, 67-70.

Roberts, N. C. (1985). Transforming leadership: A process of collective action. Human Relations, 38, 1023-1046.

Rosener, J. B. (1990). Ways women lead. Harvard Business Review, 68(6), 119-125.

Roussel, L. A. (1990). Organizational culture and leadership styles in a private psychiatric hospital [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1992139270.

Ryan, S. A. (1990). A new decade of leadership: From vision to reality. Nursing Clinics of North America, 25, 597-604.

Schultz, P. R. (1987). When client means more than one: Extending the foundational concept of person. Advances in Nursing Science, 10(10), 71-86.

Schwartz, H. (1992). Clinton, Bush, and VA: An uncertain future. VA Practitioner, 9(9), 40,43.

Schwartz, H. (1993a). Clinton appointees in for rough ride. VA Practitioner, 10(3), 43-44.

Schwartz, H. (1993b). VA medicine in the age of Clinton. VA Practitioner, 10(9). 29-30.

Scott, J., & Rantz, M. (1997). Managing chronically ill older people in the midst of the health care revolution. Nursing Administration Quarterly, 21(2), 55-64.

Scott, V. L. (1991). Nurses perceptions of shared governance as related to job satisfaction, leadership skills, and nurse retention [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1993156516.

Scruby, L., & Farrell, P. (1987). Entrepreneurship: Advancing education and practice programs objectives. Journal of Professional Nursing, 3, 307-310.

Sharrow, M. A. (1989). Perceived effectiveness of the leadership style of the deans of baccalaureate programs of nursing [CD-ROM]. Abstract from: SilverPlatter File: CINAHL Item: 1990115508.

Shortell, S. M. (1985). High-performing healthcare organizations: Guidelines for the pursuit of excellence. Hospitals & Health Services Administration, 30(4), 7-35.

Shriver, D. A. (1992). Creating a culture of excellence in home care. Nursing Management, 23(4), 34-35.

Simms, L. M. (1991). The professional practice of nursing administration: Integrated nursing practice. Journal of Nursing Administration, 21(5), 37-46.

Singer, M. S. (1985). Transformational vs. transactional leadership: A study of New Zealand company managers. Psychological Reports, 57, 143-146.

Smith, P. M., Parsons, R. J., Murray, B. P., Dwore, R. B., Vorderer, L. H., & Okerlund, V. W. (1994). The nurse executive: An emerging role. Journal of Nursing Administration, 24(11), 56-62.

Snyderman, G. M. (1988). Leadership styles of head nurses and the job satisfaction of registered nurses and aides [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1990109907.

Sorrentino, E. A. (1992). The effect of head nurse behaviors on nurse job satisfaction and performance. Hospital & Health Services Administration, 37(1), 103-113.

Sovie, M. D. (1987). Exceptional executive leadership shapes nursing's future. Nursing Economics, 5, 13-20, 31.

Sovie, M. D. (1993). Hospital culture--Why create one? Nursing Economics, 11, 69-75, 90.

Spera, M. A., Monson, M., & Hernly, S. K. (1991). Acute care for the elderly: A new approach. Nursing Management, 22(2), 36-38.

Stevens, B. J. (1981). Nursing Leadership: Survival and promise. In S. Ketefian (Ed.), Perspectives on nursing leadership (pp. 1-9). New York: Teachers College Press.

Stevens, B. J. (1983). Applying nursing theory. In N. Chaska (Ed.), The nursing profession: A time to speak (pp. 708-716). New York: McGraw-Hill.

Stevens, B. J. (1984). Nursing theory: Analysis, applications, evaluation (2nd ed.). Boston: Little, Brown.

Stodgill, R. M. (1974). Handbook of leadership: A survey of theory and research. New York, The Free Press.

Stout-Shaffer, S., & Larrabee, J. (1992). Everyone can be a visionary leader. Nursing Management, 23(12), 54-58.

Sunshine, J. (1993a). Anniversary thoughts: The first 100 columns. VA Practitioner, 10(3), 73-74.

Sunshine, J. (1993b). Health system reform: What does it mean for VA? VA Practitioner, 10(9), 48-50.

Sunshine, J. (1994a). The new blueprint for a new, competitive VA. VA Practitioner, 10(7), 67-68.

Sunshine, J. (1994b). What Clinton's health reform plan means for VA. VA Practitioner, 11(5), 64-66.

Sunshine, J. (1994c). Why is VA such a weird place? VA Practitioner, 11(4), 65-66,69.

Taccetta-Chapnick, M. (1996). Transformational leadership. Nursing Administration Quarterly, 21(1), 60-66.

Taunton, R. L., Krampitz, S. D., & Woods, C. Q. (1989). Manager impact on retention of hospital staff: Part 2. Journal of Nursing Administration, 19(4), 15-19.

Taylor, D. P. (1990). Effectiveness of first line nursing managers [CD-ROM]. Abstract from: SilverPlatter: CINAHL Item: 1992139277.

Thorndike, R. L., & Hagen, E. P. (1977). Measurement and evaluation in psychology and education (4th ed.). New York: John Wiley & Sons.

Tichy, N. M., & Devanna, M. A. (1986). The transformational leader. New York: John Wiley & Sons.

Tichy, N. M., & Ulrich, D. O. (1984). SMR forum: The leadership challenge--A call for the transformational leader. Sloan Management Review, 26(1), 59-68.

Toffler, A. (1970). Future shock. New York: Bantam Books.

Toffler, A. (1980). The third wave. New York: William Morrow.

Toffler, A. (1986). Beyond the break-up of industrial society: Political and economic strategies in the context of upheaval. In J. N. Williamson (Ed.), The leader-manager (pp. 9-28). New York: Wiley.

Trandel-Korenchuk, D. M. (1986). Concept development in nursing research. Nursing Administration Quarterly, 11(1), 1-9.

Traynor, M., & Wade, B. (1993). The development of a measure of job satisfaction for use in monitoring the morale of community nurses in four trusts. Journal of Advanced Nursing, 18, 127-136.

Trofino, J. (1990). Transformational leadership. Journal of Nursing Administration, 20(4), 3, 12,17.

Trofino, J. (1992). Transformational leadership. Nursing Administration Quarterly, 17(1), ix-x.

Trofino, J. (1993). Transformational leadership: The catalyst for successful change. International Nursing Review, 40(6), 179-187.

Trofino, J. (1995). Transformational leadership in health care. Nursing Management, 26(8), 42-47.

Uliss, D. (1991). What leadership style best suits critical care nurses? Nursing Management, 22(6), 56D, 56F, 56J, 56L, 56M.

Vaultier, A. F. (1997). Guest editorial. Nursing Administration Quarterly, 21(2), viii-ix.

Vardaman, B., Wimer, J., & Dugdt, S. (1986). Transforming leadership. Baylor Business Review, 4(1), 5-8.

Walker, D. D. (1992). Friends of nursing: A strategy for transforming the community-nursing relationship. Nursing Administration Quarterly, 17(1), 34-37.

Webber, T. (1984, May 11). Staff research report summary (File No. H-001). Plymouth, MI: Human Synergistics.

Weisman, C. S., Minnick, A. F., Dienemann, J. A., & Cassard, S. D. (1995). Management education for nurses: Hospital executives' opinions and hiring practices. Hospital & Health Services Administration, 40, 296-308.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. Minneapolis: University of Minnesota, Industrial Relations Center.

Wilson, C. K. (1992). Building new nursing organizations: Visions and realities. Gaithersburg, MD: Aspen.

Wolf, G. A. (1986). Communication: Key contributor to effectiveness--A nurse executive responds. Journal of Nursing Administration, 16(9), 26-28.

Wolf, G. A. (1990). Choices or challenges? Achieving high quality, cost-effective care. In N. L. Chaska (Ed.), The nursing profession: Turning point (pp. 419-424). Philadelphia: C. V. Mosby.

Wolf, G. A., Boland, S., & Aukerman, M. (1994). A transformational model for the practice of professional nursing: Part 1, the model. Journal of Nursing Administration, 24(4), 51-57.

Yammarino, F. J., & Bass, B. M. (1990). Measure of leadership as inspiration and influence. In K. E. Clark & M. B. Clark (Eds.), Measures of leadership (pp. 147-169). West Orange, NJ: Leadership Library of America.

Young, S. W. (1991). Formal and informal educational activities of transformational nurse leaders in urban hospitals [CD-ROM]. Abstract from: SilverPlatter File: CINAHL Item: 1993152195.

Young, S. W. (1992). Educational experiences of transformational nurse leaders. Nursing Administration Quarterly, 17(1), 25-33.

Yura, H., Ozimek, D., & Walsh, M. (1981), Nursing leadership: Theory and process (2nd ed.). New York: Appleton-Century-Crofts.

Zaleznik, A. (1992). Managers and leaders: Are they different? Harvard Business Review, 70(2), 126-135.

Appendix A:

MULTIFACTOR LEADERSHIP QUESTIONNAIRE

SAMPLE ITEMS FOR MULTIFACTOR LEADERSHIP QUESTIONNAIRE (MLQ)

Leadership Factor	Sample Test Item
Transformational Leadership:	
Idealized Influence (Behavior)	Talks about their most important values and beliefs.
Intellectual Stimulation	Re-examines critical assumptions to question whether they are appropriate.
Transactional Leadership:	
Contingent Reward	Discusses in specific terms who is responsible for achieving performance targets.
Management-by-Exception (Active)	Concentrates his/her full attention on dealing with mistakes, complaints, and failures.
Laissez-faire Leadership:	
Laissez-faire	Avoids getting involved when important issues arise.

Note. From Multifactor Leadership Questionnaire for Research, by B. M. Bass and B. J. Avolio, 1995, Palo Alto: Mind Garden. Copyright 1994 by Bernard Bass and Bruce Avolio. Reprinted with permission.

Appendix B:

MINNESOTA SATISFACTION QUESTIONNAIRE

SAMPLE ITEMS FOR MINNESOTA SATISFACTION QUESTIONNAIRE (MSQ)

Satisfaction Scale	Sample Test Item
Intrinsic Satisfaction and General Satisfaction:	The chance to do something that makes use of my abilities
	The feeling of accomplishment I get from the job
Extrinsic Satisfaction and General Satisfaction:	My pay and the amount of work I do
	The chances for advancement on this job

Note. From Minnesota Satisfaction Questionnaire (Short-Form), by Vocational Psychology Research, University of Minnesota, 1977, Minneapolis: Vocational Psychology Research, University of Minnesota. Copyright 1977 by Vocational Psychology Research, University of Minnesota. Reproduced with permission.

Appendix C:

MANAGEMENT EFFECTIVENESS PROFILE SYSTEM

SAMPLE ITEMS FOR MANAGEMENT EFFECTIVENESS PROFILE SYSTEM (MEPS)

Each item begins with a brief introductory statement and ends with two alternatives that might describe someone in a managerial role. The two opposing descriptions are compared to decide which one more accurately describes the behavior of the manager. The selection is made from seven response options.

Effectiveness Scale	Introductory Statement	Left Description	Right Description
Task Skills:			
Problem Solving	Performance discrepancies, failures, and mistakes...	are ignored; problems are not acknowledged and things just continue as if nothing had happened.	are recognized; problems are carefully analyzed to pinpoint underlying causes and areas needing attention.
Time Management	This person usually spends his/her time on...	the wrong things; insignificant activities and issues are emphasized at the expense of those of real importance.	the right things; appropriate time is devoted to the important activities and issues.
Planning	Typically, the plans developed by this person are...	so vague and general that people can't figure out what to do and when to do it.	sufficiently detailed to allow people to determine what needs to be done and when.

Note. From Management Effectiveness Profile System: Description by Others Inventory, by Human Synergistics International, 1993, Plymouth, Michigan: Human Synergistics International. Copyright 1993 by Human Synergistics International. Reproduced with permission.

Effectiveness Scale	Introductory Statement	Left Description	Right Description
Goal Setting	Generally, the objectives this person adopts for his/her work group are...	totally unrealistic; either far too high or well below the group's potential.	challenging but attainable; they reflect the group's past performance as well as its potential for improvement.
Performance Leadership	When people perform their jobs particularly well...	the recognition and rewards they receive are no greater than if their performance had been average.	this person makes sure that their good performance is recognized and rewarded.
Organizing	Duplication of effort...	frequently occurs; things are confused most of the time.	rarely occurs; care is taken to assure that efforts are not redundant.
Interpersonal Skills:			
Team Development	The "climate" of this person's work group is...	competitive; people are compared with and pitted against one another.	cooperative; people are encouraged to help one another and are supported in their efforts.
Delegation	In deciding on how to go about something, this person...	plans everything "to death" and must approve every detail.	adopts a general approach and allow members of the work group to draw up the specifics.

Note. From Management Effectiveness Profile System: Description by Others Inventory, by Human Synergistics International, 1993, Plymouth, Michigan: Human Synergistics International. Copyright 1993 by Human Synergistics International. Reproduced with permission.

Effectiveness Scale	Introductory Statement	Left Description	Right Description
Participation	Suggestions regarding things to be done typically are evaluated on the basis of...	the source of the idea; only those suggestions made by this person or his/her superiors are considered.	the merits of the idea; all reasonable suggestions are considered--regardless of the source.
Integrating Differences	When an argument develops within the work group, this person...	takes a position and does everything possible to prove it's right; he/she hates to lose at anything.	decides what is correct based on facts; it doesn't make any difference who holds what position.
Providing Feedback	When discussing people's work performance, this person focuses on...	weaknesses and shortcomings that somehow must be overcome.	strengths that can be built upon and developed in specific ways.
Personal Skills:			
Stress Processing	When under pressure or dealing with a crisis, this person...	interprets any suggestions as a criticism of his/her abilities.	seeks and discusses all suggestions calmly and openly.
Maintaining Integrity	If you were to share a confidence with is person, you could...	never be sure that it would be confidential.	be sure that it would never be disclosed to anyone else.
Commitment	Considering this person's true capabilities, he/she...	really doesn't apply him/herself most of the time; relatively little is given to the job.	fully applies him/herself virtually all of the time; a great amount is given to the job.

Note. From Management Effectiveness Profile System: Description by Others Inventory, by Human Synergistics International, 1993, Plymouth, Michigan: Human Synergistics International. Copyright 1993 by Human Synergistics International. Reproduced with permission.

Appendix D:

DEMOGRAPHIC DATA QUESTIONNAIRE

DEMOGRAPHIC DATA QUESTIONNAIRE

Please circle only one response.

1. First nursing preparation
   1 - Nursing diploma
   2 - Associate degree
   3 - Baccalaureate degree
   4 - Master's degree
   Year of graduation? _____

2. List other academic degrees, major course of study, and year of completion:

Degree	**Course of Study**	**Year**

3. Amount of work
   1 - less than 20 hours/week
   2 - 20 hours/week
   3 - 40 hours/week

4. Primary current functional role
   1 - Administrative/Supervision
   2 - Research
   3 - Education
   4 - Clinical practice

5. VAMC complexity level
   1 - Level I
   2 - Level II
   3 - Level III
   4 - Level IV

6. Current marital status
   1 - Single
   2 - Married
   3 - Divorced
   4 - Widowed

7. Sex (Optional)
   1 - Female
   2 - Male

8. What is your age? _____ years
   (Optional)

Please fill in the appropriate response.

9. What is the title of your current position?
   _____
   _____
   _____

10. What is the title of your current immediate supervisor?_____
    _____
    _____
    _____

11. How many years have you worked as a Registered Nurse? _____years

12. How many years did you work as a staff nurse? _____years

13. What is your length of service in this medical center? _____years

14. What is your length of service in your present position? _____years

15. In how many other healthcare facilities have you worked as an RN? _____

16. How many years have you worked with your present supervisor? _____years

17. To how many professional nursing organizations do you belong? _____

18. Would you consider anyone as having been a mentor to you? Yes___ No___

    If yes, how influential was this mentor in shaping your current leadership ability?
    Please circle only one:
    1 = almost no influence
    2 = very low influence
    3 = low influence
    4 = moderate influence
    5 = somewhat high influence
    6 = high influence
    7 = very high influence

Appendix E:

LETTER FROM DR. BERNARD M. BASS

Bernard M. Bass, Ph.D.
Wild Irishman 1041-42
c/o Keystone Resort Property Management
Box 38 Keystone, Colorado 80435

March 28, 1996

Diane Kacer Opeil
105 Blue Elder Drive
Mountaintop, PA. 18707

Dear Ms. Opeil,

Thank you for your request of March 12. The delay in reply is due to my being in Colorado until mid - April.

The MLQ is now made available for research for a small nominal fee to reproduce copies by:

Mind Garden
PO Box 60669
Palo Alto, CA 94306

Att: Dr. Robb Most, President

Telephone: 415-424-8495

He will provide you with the information and permission. If I can be of further assistance, please feel free to write again. Good luck with your research. I shall look forward to receiving a copy of your dissertation for our CLS Library.

Cordially yours,

Bernard M. Bass

Bernard M. Bass

Appendix F:

PERMISSION TO USE MULTIFACTOR LEADERSHIP QUESTIONNAIRE

MIND GARDEN

wing the seeds of personal growth

Date: October 3, 1996

To whom it may concern,

This letter is to grant permission for Diane Kacer Cpeil

to use the following purchased copyright material;

Instrument: Multifactor Leadership Questionnaire

Author: Bernard Bass and Bruce Avolio

for her/his thesis research.

In addition, 5 sample items from the instrument may be reproduced for

inclusion in a proposal or thesis.

The entire measure may not at any time be included or reproduced in other published material.

Sincerely,

Anne Tucker

Anne Tucker

Director of Marketing and Customer Relations

Appendix G:

PERMISSION TO USE MINNESOTA SATISFACTION QUESTIONNAIRE

UNIVERSITY OF MINNESOTA

Twin Cities Campus

Department of Psychology
College of Liberal Arts

Elliott Hall
75 East River Road
Minneapolis, MN 55455-0344
612-625-4042
Fax: 612-626-2079

Nov. 26,1996

Diane Kacer Opeil
105 Blue Elder Drive
Mountaintop, PA 18707

Dear Diane Kacer Opeil:

We are pleased to grant you permission to reproduce the Minnesota Satisfaction Questionnaire 1977 short form excluding the last page for your research.

Please note that each photocopy that you make must include the following copyright statement:

Copyright 1977, Vocational Psychology Research
University of Minnesota. Reproduced by permission.

Vocational Psychology Research is currently in the process of revising the MSQ manual and it is very important that we receive copies of your research study results in order to construct new norm tables. Therefore, we would appreciate receiving a copy of your results including 1) Demographic data of respondents, including age, education level, occupation and job tenure; and 2) response statistics including, scale means, standard deviations, reliability coefficients, and standard errors of measurement.

Your providing this information will be an important and valuable contribution to the new MSQ manual. If you have any questions concerning this request, please feel free to call us at 612-625-1367.

Sincerely,

Dr. David J. Weiss, Director
Vocational Psychology Research

Appendix H:

PERMISSION TO USE MANAGEMENT EFFECTIVENESS PROFILE SYSTEM

human
synergistics

39819 Plymouth Road
Plymouth, Michigan 48170-4290
Telephone 313 459-1030
Facsimile 313 459-5557

July 31, 1997

Ms. Diane Opeil
105 Blue Elder Drive
Mountaintop, PA 18707

Dear Diane:

This letter serves as written permission to use the *Management Effectiveness Profile System (MEPS)* for your dissertation research. You also have permission to include one item per skill (up to 14 items) in an Appendix for the purposes of describing the 14 skills *MEPS* measures and demonstrate the type of item used by the inventory.

Also, enclosed is a floppy disk with your data in an EXCEL (Office 97) format. The first four variables are the ones of most interest to you. The first variable, called KEY, is the Identification number, the next three variables are the *total* Task, Interpersonal, and Personal competencies. These variable were created by summing the 14 skills:

Task	Interpersonal	Personal
Problem Solving	Team Development	Stress Processing
Time Management	Delegation	Maintaining Integrity
Planning	Participation	Commitment
Goal Setting	Integrating Differences	
Performance Leadership	Providing Feedback	
Organizing		

Sincerely,

Edgar F. Johns
Vice President
Research & Development

EFJ/kds

Enclosure

Appendix I:

LETTER TO CHIEF NURSE EXECUTIVES

105 Blue Elder Drive
Mountaintop, PA 18707
Date

Chief, Nurse Executive
Department of Veterans Affairs Medical Center

Dear Chief Nurse Executive:

I am writing this letter to request the participation of your nursing organization in a research project. This study is being conducted as part of my doctoral degree requirements at Teachers College, Columbia University. Total anonymity is ensured through the data collection procedure.

The study is entitled "Subordinates' Perceptions of Nurse Executives' Leadership Styles: Transformational and Transactional". The purpose of this study is to examine the relationships among leadership styles of chief nurse executives and outcome factors as perceived by immediate registered nurse subordinates. Chief nurse executive is defined as the nurse leader at the executive level who coordinates and provides authority and accountability for the development organizationwide patient care programs, policies, and procedures that relate to nursing care; development and implementation of the organization's plan for providing nursing care; participation with the governing body, management, medical staff, and clinical leaders in decision making for the organization; and implementation of a program to measure, assess, and improve the quality of nursing care (Joint Commission on Accreditation of Healthcare Organizations, 1996)

This study will benefit nursing leaders, particularly those in the Department of Veterans Affairs, by providing a data base on leadership styles and their outcomes. The results are expected to be of great help to nursing executives in choosing leadership styles that optimize nursing practice. This information can also be used for educational programs to address our learning needs as we continue to strive for excellence.

The sample will be drawn from the population of immediate registered nurse subordinates to the chief nurse executives in VA Medical Centers.

With your permission, a random sampling of your immediate registered nurse subordinates will be included in the study. Each participant will be asked to complete survey instruments and return them to me in an investigator addressed stamped envelope that will be provided. The usual time for completing the questionnaires is under 60 minutes.

Participation in the study is voluntary, and anonymity of subjects will be maintained. No repercussions will be experienced for not participating in the study. Data will be reported in aggregate form. Neither you, your organization, nor the staff will be identified in any way. By returning the research instruments, subjects are consenting to participate in the study. Subjects may withdraw from participation until the research instruments are returned.

Please complete the attached forms and return to me within two weeks so that I can send the survey instruments to the randomly selected registered nurse subordinates. If you agree to participate, I will mail you an abstract describing the results when the study is completed.

If you have any questions about the directions, you can contact me at (717) 474-2764 (home) or FTS (700) 592-7936 (Wilkes Barre VAMC).

Your cooperation in this study will help to better understand nursing leadership within the Department of Veterans Affairs Medical Centers and will be greatly appreciated. I look forward to receiving your reply soon and hope that you will be able to assist me in this research.

Thank you very much in advance for your willingness to participate.

Sincerely,

Diane Kacer Opeil, R.N.

I agree to have my staff participate in this study.

Yes _____ No _____

Please fill in your name and complete work address:

_____

_____

_____

_____

Names of your immediate registered nurse subordinates:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Appendix J:

FOLLOW-UP LETTER TO CHIEF NURSE EXECUTIVES

105 Blue Elder Drive
Mountaintop, PA 18707
Date

Chief, Nursing Service
Department of Veterans Affairs Medical Center

Dear Chief Nurse:

Several weeks ago I wrote to you requesting your permission to conduct a nursing research survey. The data will be used to complete my doctoral dissertation entitled "Subordinates' Perceptions of Nurse Executives' Leadership Styles: Transformational and Transactional". Perhaps the request was misplaced, or you have yet to find the time to complete a preliminary questionnaire containing your personal data.

Since my research sample includes registered nurses in Department of Veterans Affairs Medical Centers throughout the country, your participation is important. While I have heard from many of your colleagues, your participation will provide a broader and more representative sample. I need your help in this endeavor.

For your convenience, I am enclosing another participation form and demographic data questionnaire. I would appreciate it very much if you would return the materials by (date)_____. If you have already returned your forms, please accept my sincere gratitude.

Should you have any questions about the directions, you can contact me at (717) 474-2764 or FTS (700) 592-7936 (Wilkes Barre VAMC).

Thank you very much for your assistance with this research project.

Sincerely,

Diane Kacer Opeil, R.N.

Appendix K:

PARTICIPANT COVER LETTER

105 Blue Elder Drive
Mountaintop, PA 18707
Date

Dear Colleague:

The purpose of this study is to examine the relationships among leadership styles of chief nurse executives and outcome factors as perceived by immediate registered nurse subordinates. The results will benefit nursing leaders in choosing leadership styles that optimize nursing practice, particularly those in the Department of Veterans Affairs Medical Centers.

The sample includes immediate registered nurse subordinates to the chief nurse executives in VA Medical Centers. Your name was randomly selected from a list of these registered nurses provided by your chief nurse.

Your involvement includes the completion of the four attached questionnaires. Time involved is approximately 60 minutes. Participation in the study is voluntary. Your response will be handled totally anonymously and strictly confidentially. Data will be reported in aggregate form, and you will not be identified in any way. There are no repercussions for not participating, and participants may withdraw at any time. By returning the research instruments, you are consenting to participate in this study.

Please answer the questionnaires honestly and thoughtfully so that the data will be more meaningful and accurate. Directions for completing each questionnaire are provided at the beginning of each instrument. When you have completed the questionnaires, please mail your response sheets directly to me in the enclosed envelope. When you mail the questionnaires, please mail the enclosed post card separately.

If you elect not to participate, please return the enclosed packet of information to me.

If you have questions about the directions, please contact me at (717) 474-2764 (home) or FTS (700) 592-7936 (Wilkes Barre VAMC).

Thank you in advance for your willingness to participate. I truly appreciate your assistance.

Sincerely,

Diane Kacer Opeil, R.N.

Appendix L:

INSTRUCTIONS FOR PARTICIPANTS

INSTRUCTIONS FOR PARTICIPANTS

DO NOT WRITE YOUR NAME OR OTHER IDENTIFYING INFORMATION ON ANY OF THE ANSWER SHEETS.

PLEASE READ THE QUESTIONNAIRES CAREFULLY AND FOLLOW THE DIRECTIONS.

RECORD YOUR RESPONSES ON THE ENCLOSED QUESTIONNAIRE ANSWER SHEETS.

PLEASE BE SURE TO COMPLETE ALL FOUR INSTRUMENTS IN THE ORDER PRESENTED.

AFTER YOU HAVE FINISHED THE FOUR QUESTIONNAIRES, PLEASE PLACE THEM IN THE ENCLOSED STAMPED ENVELOPE.

PLEASE MAIL IT TO ME WITHIN 2 WEEKS.

WHEN YOU MAIL THE QUESTIONNAIRES, PLEASE MAIL THE ENCLOSED POST CARD SEPARATELY.

ANONYMITY IS VERY IMPORTANT. DO NOT WRITE YOUR NAME ON ANYTHING THAT YOU ARE RETURNING TO ME.

THANK YOU VERY MUCH!

Appendix M:

PARTICIPANT THANK YOU LETTER

Dear Colleague:

Thank you for taking the time from your busy schedule to complete and mail the questionnaires. Your cooperation and help are greatly appreciated.

Your active participation in nursing research is important to nursing practice in the VA system and the nursing profession at large.

Best wishes as you continue your nursing practice.

Again, thank you.

Sincerely,

Diane Kacer Opeil, R.N.

Appendix N:

SECOND FOLLOW-UP LETTER

105 Blue Elder Drive
Mountaintop, PA 18707
Date

Dear Colleague:

Several weeks ago you received information and questionnaires for a nursing research study. The data collected will be used to complete my doctoral dissertation entitled "Subordinates' Perceptions of Nurse Executives' Leadership Styles: Transformational and Transactional".

Since the sample includes registered nurses in Department of Veterans Affairs Medical Centers throughout the country, your input is very valuable to the outcome of this research study. While I have heard from many of our colleagues, your participation will provide a broader and more representative sample. I need your help in this endeavor.

I would appreciate it very much if you would complete and return the four questionnaires by (date)_____. If you have already returned the questionnaires, please accept my sincere gratitude. If you are unable to participate, please return the packet of information to me.

Upon completion, the results of this study will be shared with all participating nurses.

Should you have any questions about the directions, please contact me at (717) 474-2764 (home) or FTS (700) 592-7936 (Wilkes Barre VAMC).

Again, thank you very much for your assistance with this research project.

Sincerely,

Diane Kacer Opeil, R.N.

Appendix O:

LETTER OF APPRECIATION

105 Blue Elder Drive
Mountaintop, PA 18707
Date

Dear Chief Nurse and Staff:

Thank you very much for participating in my doctoral study entitled "Subordinates' Perceptions of Nurse Executives' Leadership Styles: Transformational and Transactional".

My data collection progressed smoothly because you and your staff graciously took time to help me.

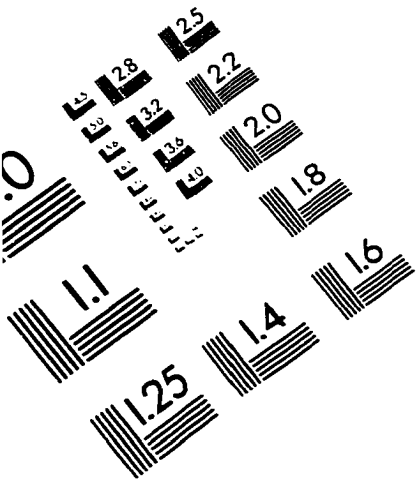
I have enclosed a copy of the abstract from my research. If you would like further information or would like to discuss the results of this study with me, I would be happy to do so. I can be reached at (717) 474-2764 (home) or FTS (700) 592-7936 (Wilkes Barre VAMC).

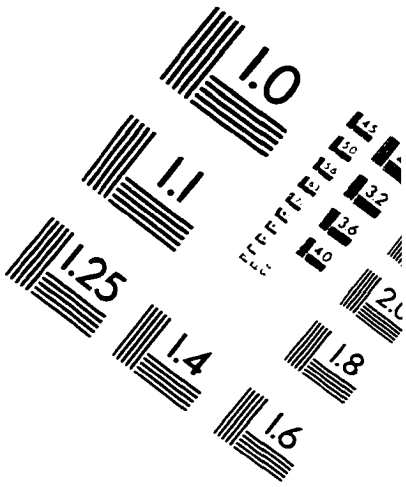
Thank you again for helping me to successfully complete my dissertation research.

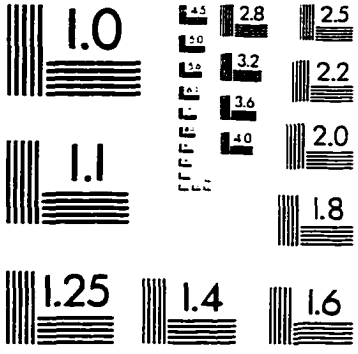
Sincerely,

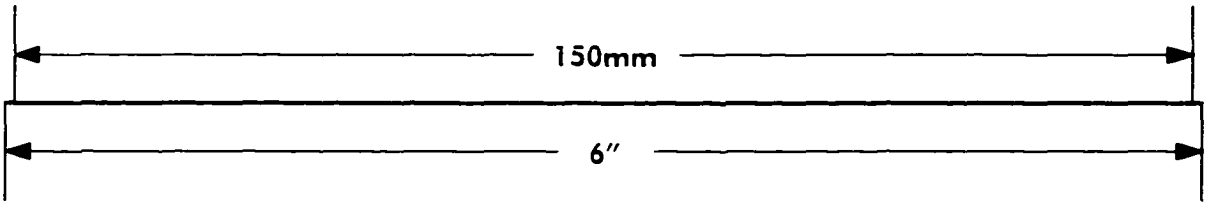
Diane Kacer Opeil, R.N.

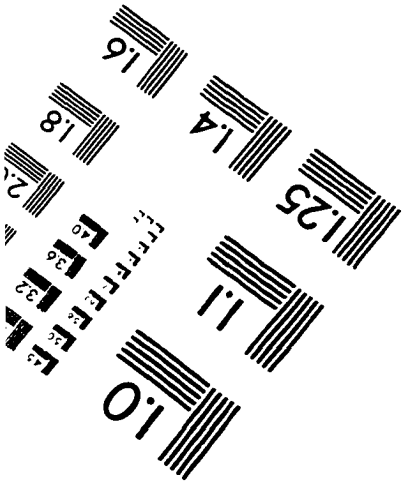
IMAGE EVALUATION TEST TARGET (QA-3)

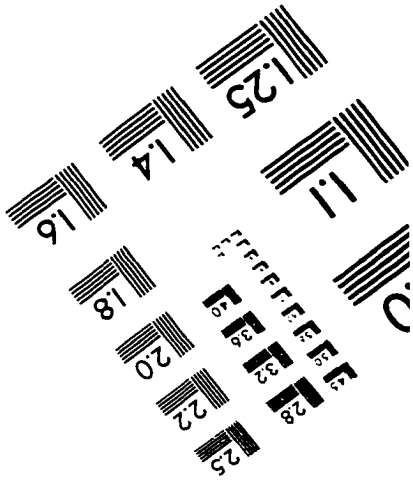












APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989