12-1-2010

Current practices in leadership development for front-line nurse managers

Bret Lyman

Follow this and additional works at: http://digscholarship.unco.edu/dissertations

Recommended Citation
UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

CURRENT PRACTICES IN LEADERSHIP DEVELOPMENT FOR FRONT-LINE NURSE MANAGERS

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

Bret Ronald Lyman

College of Natural and Health Sciences
School of Nursing
Nursing Education

December 2010
This Dissertation by: Bret Ronald Lyman

Entitled: *Current Practices in Leadership Development for Front-Line Nurse Managers*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in the College of Natural and Health Sciences in the School of Nursing, Program of Nursing Education

Accepted by the Doctoral Committee

______________________________________________________
Vicki Wilson, PhD, Chair

______________________________________________________
Debra Leners, PhD, Committee Member

______________________________________________________
Karna Schofer, PhD, Committee Member

______________________________________________________
Dianna Gray, PhD, Faculty Representative

Date of Dissertation Defense ________________________________

Accepted by the Graduate School

________________________________________
Robbyn R. Wacker, Ph. D.
Assistant Vice President for Research
Dean of the Graduate School & International Admissions
ABSTRACT


Nursing leadership is critical to the provision of affordable, accessible, and high-quality healthcare, yet there exists a shortage of front-line nurse managers who are well-prepared to provide leadership in the complex and rapidly changing context of healthcare. The purposes of this national study were to describe and compare current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States, and to explore the influence of hospital characteristics on leadership development practices. Data were gathered via a web-based survey designed by the author and publicly accessible websites.

The results suggest leadership development is heavily focused on unit-level managerial skills, although actual leadership content is usually well-aligned with the concept of transformational leadership in both Magnet and non-Magnet hospitals. Leadership development rarely addresses the personal and professional development needs of the nurse manager. Pedagogical practices used in leadership development programs do not always offer the necessary balance of assessment, challenge, and support, nor is it common for these practices to be used with intentionality to facilitate leadership development. Leadership development often occurs outside the context of the nurse managers’ work. Program evaluation commonly involves Reaction/Planned Response evaluation. Evaluation of Learning and Behavior Change is relatively rare,
precluding meaningful attribution of tracked Business Results to the nurse manager or the leadership development program. Compared to non-Magnet hospitals, leadership development in Magnet hospitals is better aligned with transformational leadership, and more commonly includes evidence-based pedagogical practices and elements of a comprehensive program evaluation. Leadership development content is most influenced by having a leadership development specialist with experience in organizational development. Pedagogical practices are most influenced by Magnet designation. Evaluation methods are influenced by Magnet status, urban location, affiliation with a hospital system, and designation as a teaching hospital.
ACKNOWLEDGEMENTS

There are many people who have provided inspiration, guidance, and support throughout this journey toward earning a doctorate degree. I am especially grateful for the time, effort, and energy so graciously offered by Dr. Vicki Wilson, the chair of my doctoral committee. Dr. Wilson provided invaluable advice, encouragement, and mentoring at critical times, and helped me maintain the focus necessary to complete this process. Dr. Wilson also served as an exceptional facilitator for my committee.

I am thankful for the thoughtful comments, suggestions, and recommendations provided by the members of my doctoral committee, Dr. Debra Leners, Dr. Karna Schofer, and Dr. Dianna Gray. Each of these individuals contributed valuable insight and feedback throughout the conceptualization, design, and implementation of this study.

I am sincerely appreciative of the many faculty members at the Bridgerland Applied Technology College, Weber State University, and the University of Northern Colorado who challenged, inspired, and encouraged me as an undergraduate and graduate nursing student. I aspire to do for others what these individuals have done for me. Although many faculty deserve individual mention, I especially want to recognize the efforts Dr. Debra Leners, who was my advisor as I began graduate-level coursework. In addition to working with me as a new graduate student, she mentored me as a new faculty member, and a developing scholar. I frequently draw on the words, wisdom, and sincerely caring actions she shared with me as I began my professional journey.
I am thankful for the classmates, peers, and colleagues with whom I had the privilege of working at each of these institutions. The discussions, collaborations, and experiences we shared have all shaped who I have become as an individual, nurse, educator, and scholar. My appreciation extends to the growing number of students with whom I have worked as a faculty member. They offer so much positive energy and an optimistic sense of what is possible related to improving healthcare, education, and the nursing profession.

My deepest gratitude is reserved for my family, whose support has transcended my educational pathway. To my parents, Ronald and Gail Lyman, who modeled the value of education, encouraged me to pursue my dreams, and believed in my potential to fulfill them. To my wife, Lori, who offered a listening ear, an endless supply of patience, and unconditional love as I dedicated so much time, energy, and money to this process. To my children, Carson, Brandon, Eric, and Jenna, who have offered a continual source of motivation to finish, so that we can have more time to play.
# TABLE OF CONTENTS

## CHAPTER

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Problem and Significance</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Purpose of Study</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Definitions</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Research Design</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Significance and Potential Contributions</td>
<td>11</td>
</tr>
<tr>
<td>II.</td>
<td>REVIEW OF THE LITERATURE</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Theoretical Frameworks for the Study</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Literature Review</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Limitations of Current Research</td>
<td>77</td>
</tr>
<tr>
<td>III.</td>
<td>METHODOLOGY</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Research Design</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Ethical Considerations</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Instrumentation</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Potential Limitations</td>
<td>91</td>
</tr>
<tr>
<td>IV.</td>
<td>RESULTS</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Demographics</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Instrument</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Current Practices in Magnet and Non-Magnet Hospitals</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Differences Between Magnet and Non-Magnet Hospitals</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>Influence of Hospital Characteristics</td>
<td>126</td>
</tr>
</tbody>
</table>
LIST OF TABLES

1. Leadership Development Specialist’s Background .......................... 96
2. Demographics of Magnet Hospital Sample .................................. 97
3. Demographics of Non-Magnet Hospital Sample ............................ 98
4. Internal Consistency ..................................................................... 100
5. Content Scale for Magnet Hospital Sample .................................. 105
6. Content Scale for Non-Magnet Hospital Sample ............................ 108
7. Pedagogy Scale for Magnet Hospital Sample ............................... 111
8. Pedagogy Scale for Non-Magnet Hospital Sample .......................... 113
9. Evaluation Methods Scale for Magnet Hospital Sample ............... 116
10. Evaluation Methods for Non-Magnet Hospital Sample .................. 118
11. Content Subscale Scores ............................................................. 120
12. Independent Sample t-tests for Content Variables ....................... 121
13. Pedagogy Subscale Scores ........................................................... 122
14. Independent Sample t-tests for Pedagogical Practices Variables ...... 123
15. Evaluation Methods Subscale Scores .......................................... 124
16. Independent Sample t-tests for Evaluation Methods Variables ...... 125
17. Influence of Hospital Characteristics on Content ......................... 128
18. Influence of Hospital Characteristics on Pedagogical Practices ..... 130
19. Influence of Hospital Characteristics on Evaluation Methods ....... 132
CHAPTER I

INTRODUCTION

Background

Nursing leadership is critical to the provision affordable, accessible, and high-quality healthcare. Effective nursing leadership improves patient safety (Anderson, Issel, & McDaniel, 2003; Boyle, 2004; Houser, 2003; Institute of Medicine [IOM], 2000, 2004; Pollack, Koch, & The NIH District of Columbia Neonatal Network [DCNN], 2003), reduces patient mortality (Houser, 2003), and increases patient satisfaction (Doran et al., 2004; McNeese-Smith, 1999). Nursing leadership also increases productivity, job satisfaction, organizational commitment within nursing staff (Chiok Foong Loke, 2001), and reduces the turnover of staff nurses within an organization (Failla & Stichler, 2008). In essence, nursing leadership improves the quality and efficiency of healthcare (McAlearney, 2008; Wong & Cummings, 2007).

Patient Safety and Mortality

Evidence strongly supports the need for improved patient safety within the healthcare system (IOM, 2000). Nursing leadership has been clearly identified as an essential factor in the creation of a work environment where nurses can deliver safe patient care (IOM, 2004). The influence of nursing leadership on patient safety has been well-documented in a variety of settings, including long-term care (Anderson, Issel, & McDaniel, 2003; Houser, 2003), neonatal intensive care (Pollack, Koch, & DCNN,
2003), and other acute care and community settings (Aroian, Meservey, & Crockett, 1996; Boyle, 2004; Houser, 2003; Laschinger & Leiter, 2006). In addition to reducing the number of adverse events and complications experienced by patients, nurse leaders may also indirectly reduce patient mortality rates (Houser, 2003). This may be explained, in part, by the positive correlation between leadership and healthcare staff’s engagement in quality improvement work (Nembhard & Edmonson, 2006), the ability of effective leaders to maintain a staff of nurses with valuable experience and expertise (Houser, 2003; Tourangeau, Giovannetti, Tu, & Wood, 2002), or creating a work environment where nurses can provide safe care and avoid burnout (Laschinger & Leiter, 2006).

**Patient Satisfaction**

Competition between hospitals within the United States requires constant attention to patient satisfaction. Nursing leadership has been positively correlated with increased patient satisfaction scores (Doran et al., 2004; McNeese-Smith, 1999).

**Influence on Staff**

The positive influence of nursing leadership on job satisfaction, retention, and organizational commitment in staff nurses is well-documented (Acree, 2006; Anthony et al., 2005; Chiong Foong Loke, 2001; Failla & Stichler, 2008; Kleinman, 2004a; McNeese-Smith, 1997, 1999; Raup, 2008; VanOyen-Force, 2005). Given the significant cost of nurse turnover (estimated between $62,100 and $67,100 per registered nurse), effective leadership is critical to the overall financial health of any healthcare organization (Jones, 2005). Evidence also suggests nursing leaders can enhance staff nurse productivity in a number of ways (Fox, Fox, & Wells, 1999; McNeese-Smith, 1997), particularly through their ability to create a productive work environment (Letvak
motivate nursing staff (Reed, 2007), and resolve the work life concerns of nurses (Brooks & Anderson, 2004).

**Shortage of Well-Prepared Nurse Leaders**

Nursing leadership has a significant influence on providing affordable, accessible, and high-quality healthcare. However, it has become clear that hospital restructuring initiatives during the 1980s and 1990s, the nursing shortage, changing contexts for nursing leadership, and new competencies for nurse leaders have resulted in a shortage of well-prepared nurse leaders.

**Hospital Restructuring Initiatives**

Throughout the 1980s and 1990s, a number of hospital restructuring initiatives were undertaken in response to changing reimbursement structures, competition among healthcare organizations, and an increased focus on patient-centered care. Although hospital restructuring initiatives were undertaken with the objective of reducing healthcare costs and improving organizational efficiency, they also had a significant influence on nursing staff and leadership (Bazzoli, LoSasso, Arnauld & Shalowitz, 2002; Clifford, 1998).

The majority (70%-91%) of hospital restructuring initiatives involved a reduction in nurse management positions through lay-offs or attrition (Aiken, Clarke, & Sloane, 2000; Sovie & Jawad, 2001). As a result of these reductions, the remaining nurse managers assumed an expanded scope of responsibilities, including managing additional patient care units (Clifford, 1998) and overseeing non-nursing staff (Sovie & Jawad,
Nurse managers did not always receive adequate educational preparation or skill training to fulfill these expanded responsibilities (Walston & Kimberly, 1997).

The insufficient quantity and inadequate preparation of nurse managers, along with their expanded set of responsibilities placed undue strain on staff nurses and nurse managers. Nurses reported decreasing levels of support from their managers and a decline in their nurse manager’s abilities between 1986 and 1998 (Aiken, Clarke, & Sloane, 2000). The reduction of nurse manager positions during this era of hospital restructuring continues to be credited for an ongoing shortage of nurses prepared for leadership roles (Wolf, Bradle, & Nelson, 2005).

**Nursing Shortage**

The current nursing shortage, compounded by the aging of the nursing workforce, a resulting increase in retirement rates for experienced nurses (Buerhaus, Staiger, & Auerbach, 2008), a shift of generational values in the pool of potential leaders (Coughlin, 2002), and a lack of interest in management roles (Rudan, 2002) has further fueled concerns about a shortage of well-prepared nursing leaders (Horton-Deutsch & Mohr, 2001; Shaffer, 2003; Sherman, 2005; Sherman, Eggenberger, Bishop, Karden, 2007).

**Changing Context of Nursing Leadership**

The changing context of nursing leadership is placing new demands on nurse leaders. Flattening organizational structures in healthcare organizations increase the complexity of managing hospital units. Changes and increased stringency in hospital finance and reimbursement practices create challenges for tracking and managing finances. The nursing shortage, changing demographics within the nursing workforce, and increased worker mobility require additional attention to nurse satisfaction and
retention, in addition to greater sensitivity and responsiveness to the individual needs of staff. Rapid advances in knowledge, technology, and information systems demand time dedicated to continual learning. Accountability for compliance with complex and continually changing government regulations, accreditation standards, and requirements of regulatory agencies create an additional burden on the time and energy of nurse leaders. Increasing patient acuity and decreasing length of stay, combined with a focus on patient safety, patient satisfaction, and cost-effective care, requires evidence-based, patient-focused care (Arnold & Nelson, 2004; Gallo, 2007; Garrison, Morgan, & Johnson, 2004; Golden, 2008; Kleinman, 2003; Laschinger & Leiter, 2006; Mahoney, 2001; Mathena, 2002; Nembhard & Edmonson, 2006; Parsons & Stonestreet, 2003; Porter-O'Grady, 2003a, 2003b; Sherman et al., 2007).

New Competencies for Nurse Leaders

Traditionally, promotion to a formal nursing leadership position involved being recognized for clinical expertise rather than educational credentials, leadership abilities, or management skills (Kleinman, 2003). However, in the current context of nursing leadership, a general consensus exists that nurse leaders need more than clinical expertise to function effectively in their roles (Gallo, 2007; Kleinman, 2003). A wide range of competencies have been identified as essential for the modern nurse manager, although the scope of research studies on the topic has been limited (Sherman et al., 2007) and complete agreement on what competencies are important has not been reached (Jennings, Scalzi, Rodgers, Keane, 2007). Nonetheless, several common themes regarding important competencies can be recognized in the literature.
The American Organization of Nurse Executives (AONE), in its Nurse Manager Leadership Collaborative Learning Domain Framework (NMLC; AONE, 2004), identifies three spheres of nurse manager leadership practices. These spheres are 1) The Science: Managing the Business, 2) The Art: Leading the People, and 3) The Leader Within: Creating the Leader in Yourself. The NMLC serves as a useful framework for classifying other competencies described in the literature.

Competencies needed to manage the business (AONE, 2004) are complex and varied. These competencies include financial management and budgeting, managing human resources, systems thinking, decision-making, problem solving, use of technology, and strategic management (AONE; Bradley, Maddox, & Spears, 2008; Care & Udod, 2003; Contino, 2004; Flesner, Scott-Cawiezell, & Rantz, 2005; Golden, 2008; Jennings et al., 2007; Kleinman, 2003; Oroviogoicoechea, 1996; Russell & Scoble, 2003; Scoble & Russell, 2003; Shaffer, 2003; Sherman et al., 2007).

Leading people effectively (AONE, 2004) also requires a broad set of competencies. These competencies include communication, conflict resolution, staff development and performance analysis, self-management, team building, networking, listening, valuing cultural and generational diversity, and shared decision-making (AONE; Bradley, Maddox, & Spears, 2008; Care & Udod, 2003; Contino, 2004; Flesner, Scott-Cawiezell, & Rantz, 2005; Hu, Herrick, & Hodgin, 2004; Jennings et al., 2007; Kleinman, 2003; Oroviogoicoechea, 1996; Russell & Scoble, 2003; Scoble & Russell, 2003; Shaffer, 2003; Sherman et al., 2007).

Competencies required for creating the leader within (AONE, 2004) are focused on improving the leader as a professional and as a person. The competencies include
continuing education, modeling professionalism, learning from personal experiences, reflective practice, stress management, and setting and achieving personal goals (AONE; Bradley, Maddox, & Spears, 2008; Care & Udod, 2003; Contino, 2004; Flesner, Scott-Cawiezell, & Rantz, 2005; Jennings et al., 2007; Oroviogoicoechea, 1996; Russell & Scoble, 2003; Scoble & Russell, 2003; Sherman et al., 2007).

**Current Leadership Development Practices in Nursing**

A review of published reports on leadership development practices in nursing reveals some commonalities and differences in the content, pedagogical practices, and the evaluation methods being used. A brief overview of the literature is offered here, but is described in more detail in Chapter 2.

Although not every published program report includes a specific description of teaching techniques used, those doing so reveal variety of pedagogical practices. The typical program is delivered over 2-5 days, and is structured as a workshop (Krugman & Smith, 2003; Tourangeau, Lemonde, Luba, Dakers, Alksnis, 2003; Werrett, Griffiths, & Clifford, 2002; Wessel-Krejci & Malin, 1997; Weston et al., 2008; Wolf, 1996).

Pedagogical practices used in short-term programs include the use of lecture, small group discussions, application exercises, and videos (George et al., 2002). Another program provides leaders with realistic management scenarios, which small groups of participants would discuss and present to the larger group and program faculty for feedback (Weston et al., 2008).

One long-term leadership development program described in the literature included ongoing workshops, coaching, feedback, and small group discussions over an 18-month period, all structured around an initial assessment of the individual’s needs.
In another program, participants designed their own program of activity, receiving guidance from a workbook and an assigned advisor (Cleary, Freeman, & Sharrock, 2005).

The evaluation of current leadership development programs tends to include pre- and post-testing. This may include self-report scales of leadership competency or practice (Cleary, Freeman, & Sharrock, 2005; Werrett, Griffiths, & Clifford, 2002; Wessel-Krejci & Malin, 1997; Wolf, 1996) or a combination of self- and observer-rating of the participant (Cunningham & Kitson, 2000b; George et al., 2002; Tourangeau et al., 2003; Weston et al., 2008). In addition to pre- and post-testing of leadership practices by the participants and their peers, the evaluation of one program included attempts to evaluate the impact of the leadership development program on patient satisfaction and staff satisfaction (Krugman & Smith, 2003). Changes in the tool used to evaluation patient satisfaction during the study period and significant influences (external to the study) on staff satisfaction scores precluded making meaningful conclusions about the impact of the program on these measures. Another report did not describe how the program was evaluated, but did include some qualitative feedback about the program from participants and the preceptors involved in the program (Conley, Branowicki, & Hanley, 2007).

Need for Evidence Based Leadership Development Programs

Nurse leaders are critical to the provision of accessible, affordable, high-quality health care. Their role has become incredibly complex. In part, this is due to the ever-changing context of healthcare. In spite of the challenging nature of the nurse leader’s role, it is the exception rather than the rule for front-line nurse leaders to receive adequate formal preparation (see, for example, Gould, Kelly, Goldstone, & Maidwell, 2001;
There is a need to develop an evidence base for leadership development strategies in nursing. Time and financial resources available for leadership development are not infinite, and must be allocated as wisely as possible. Published reports suggest a gap exists between the state of practice in leadership development and evidence-based recommendations found in the research literature.

Problem and Significance

A growing number of leadership development programs are being offered to help alleviate the shortage of well-prepared nursing leaders. Significant time, energy, and financial resources are being dedicated to leadership development, making it imperative that programs offered be effective and efficient at meeting the needs of the participants and the organization. This requires the design and delivery of these programs to be evidence-based. However, few programs articulate the evidence-base supporting their program content, pedagogical practices, and evaluation methods. Therefore, little is known about current practices in leadership development and how they relate to best-practices found in the research literature.

Purpose of Study

The purpose of this study was to evaluate current practices in leadership development in relation to best-practices in leadership development found in the research literature. The particular focus of this study will be on the content included in leadership development offerings, the pedagogical practices being used in leadership development,
and the methods being used to determine the effectiveness of leadership development programs in Magnet and non-Magnet hospitals.

Research Questions

The general research questions for this study were:

Q1 What are the current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States?

Q2 What differences exist between leadership development programs offered to front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

Q3 What characteristics of Magnet and non-Magnet hospitals influence the content, pedagogical practices, and evaluation methods incorporated into leadership development programs offered to front-line nurse managers?

Definitions

*Leadership* is defined as a process based on relationships and influence that helps individuals within an organization work toward common goals (Kouzes & Posner, 2007).

*Management* is defined as a process for allocating financial, material, and human resources in an orderly manner to facilitate the accomplishment of organizational objectives (Kouzes & Posner, 2007).

*Front-line nurse manager* is defined as a nurse leader with 24-hour per day, seven days per week accountability for the leadership and management responsibilities associated with one or more hospital units (American Nurses Association, 2004).

*Magnet hospital* is defined as a hospital that has been granted Magnet status. Magnet status is a designation granted by the American Nurses Credentialing Center for healthcare organizations demonstrating sustained excellence in five defined areas. These areas are: “transformational leadership; structured empowerment; exemplary professional
nursing practice; new knowledge, innovations, and improvements - all of which lead to empirical quality outcomes.” (Wolf, Triolo, & Ponte, 2008, p. 202).

Research Design

A non-experimental, quantitative descriptive, comparative, correlational design was selected for this study. The descriptive component of this study was designed to obtain detailed information regarding the current practices in leadership development in Magnet and non-Magnet hospitals. The comparative component of this study was designed to explore differences in leadership development practices in Magnet hospitals as compared to non-Magnet hospitals. The correlational component of this study was designed to evaluate the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals. The practices of interest for this study included: 1) program content, 2) pedagogical practices, and 3) evaluation methods. Each of these program components was be evaluated in relation to evidence-based recommendations for leadership development.

Significance and Potential Contribution

Health care benefits from strong nursing leadership in a number of ways. Many organizations invest significant resources in the development of nurse leaders. This research generates new understanding regarding how the state of practice in nursing leadership development relates to evidence-based recommendations. This understanding helps health care organizations identify strategies to improve the effectiveness and efficiency of their own leadership development programs.

The new knowledge generated through this research study also serves as a foundation for future research. The groundwork for future research must rest on clear
knowledge regarding the state of practice in nursing leadership development. As the state of practice becomes more clearly defined, research that is more systematic, experimental, and generalizable can be conducted to more accurately determine the value of specific practices in leadership development.

Summary

Nurse leaders are critical to the provision of accessible, affordable, high-quality healthcare. Hospital restructuring initiatives, the nursing shortage, lack of interest in formal positions of leadership, increasing complexities of health care and the nurse manager’s role, as well as inadequate formal and informal opportunities for leadership development has led to a shortage of well-prepared nursing leaders. Although leadership development programs are being offered, the program content, pedagogical practices, and evaluation methods of those programs are not always evidence-based. The importance of nursing leadership, the severity of the nursing leadership shortage, and the cost of leadership development initiatives demands efficiency and effectiveness in these programs. The purpose of this research was to identify the current state of practice in leadership development and evaluate it in relation to evidence-based recommendations found in the research literature.
CHAPTER II

REVIEW OF THE LITERATURE

In this chapter, the theoretical frameworks and research literature relevant to this study are presented. First, the three theoretical frameworks selected as the foundation for this study are described. Then, a thorough review of the relevant research literature is presented. A summary is provided at the conclusion of the chapter.

Theoretical Frameworks for the Study

The process of selecting a theoretical framework for any study is driven by the intent of the research (Houser, 2008). Because the intent of this research is to generate a broad description of current practices in leadership development for front-line nurse managers, it was necessary to draw from three theoretical frameworks. The frameworks selected for this study were 1) the Full Range Leadership Model (Avolio, 1999; Bass, 1996, 2008), 2) the Leadership Development Model (McCauley, Moxley, & Van Velsor, 1998; McCauley & Van Velsor, 2004), and 3) the Phillips (1997, 1998) Five-Level ROI Framework. In this section, the relevance and essential components of each theoretical framework will be described in detail.

*Full Range of Leadership Model*

The content included in leadership development programs is of vital interest in each of the three research questions. The theoretical framework selected to guide this portion of the study was the Full Range of Leadership Model (FRL) (Avolio, 1999; Bass,
The FRL has been criticized for being an incomplete model, neglecting the inclusion of some important leadership behaviors (Yukl, 1999). However, extensive research on the FRL and its associated research tool, the Multifactor Leadership Questionnaire (MLQ), have supported its validity as a measure of effective leadership behaviors and its generalizability to multiple contexts (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramanium, 1996; Rowold & Heinitz, 2007). In addition, the FRL and the MLQ have both been tested and supported for use in the context of nursing (Kanste, Kyngäs, Nikkilä, 2007; Kanste, Miettunen & Kyngäs, 2007; Vandenberghe, Stordeur, & D’hoore, 2002).

The FRL incorporates three meta-categories of leadership behaviors, 1) transactional, 2) transformational, and 3) laissez-faire. Each meta-category, and the corresponding subcategories, is described in more detail below.

**Transactional Leadership**

The conceptual foundation of transactional leadership is the exchange relationship between a leader and a follower. Each party engages in this relationship from the perspective of their own self-interest. In Bass’ (1985) original model, transformational leadership was composed of two factors, management-by-exception and contingent reward. The factor termed management-by-exception was subsequently split into two unique factors. Thus, in the most current version of the FRL (Bass, 1999), the transactional leadership model is composed of three factors, active management-by-exception, passive management-by-exception, and contingent reward.

*Active Management-by-Exception*. Active management-by-exception describes behavior by the leader that involves monitoring follower performance in relation to
defined standards. If the performance standard is not met, the leader takes corrective action (Bass, 2008). For example, a nurse manager sets the performance expectation that every nurse will document a physical assessment on each patient within 2 hours of beginning the shift. On a regular basis, the nurse manager audits the nursing documentation to ensure this standard is being met. Upon discovering that three nurses who work on the unit are not meeting the expectation for documentation, the manager meets with the nurses, reinforces the importance of timely documentation, and closely monitors their progress over the next several weeks.

*Passive Management-by-Exception.* This differs from passive management-by-exception, in which the leader does not actively monitor for problems. Instead, the leader waits for problems to arise before taking corrective action (Bass, 2008). Using the example above, a nurse manager demonstrating passive management-by-exception would not actively monitor the timeliness of nursing documentation. Rather, the nurse manager might learn of the problem when penalized for it by a federal agency or receiving a deficiency citation from an accrediting agency. Only after the crisis had already occurred would the nurse manager develop an action plan to help the nurses meet the documentation standards.

*Contingent Reward.* Contingent reward describes behavior in which the leader defines or models the effort expected of followers, and rewards followers as they meet those expectations (Bass, 2008). Continuing the example from above, a nurse manager demonstrating leadership behaviors consistent with contingent reward would clearly define the standard for documentation and reward all the nurses meeting that standard.
Rewards might include an end-of-year financial bonus, positive feedback, public recognition, a promotion, etc.

Transformational Leadership

Transformational leadership refers to leadership behaviors that move followers’ concerns beyond their own immediate self-interests and “[elevate] the follower’s level of maturity and ideals as well as concerns for achievement, self-actualizations, and the well-being of others, the organization, and society” (Bass, 1999, p. 11). Transformational leadership is composed of four factors, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1999).

Idealized Influence (Charisma). Charisma, the factor identified in Bass’ (1985) original model, was renamed idealized influence in a later revision of the model (Bass & Avolio, 1990). This change was triggered by a need to distinguish the concept from popular perceptions of charisma as “being celebrated, flamboyant, exciting, and arousing” (Bass, 2008, p. 620), conceptualizations of charisma created through media hype, and the attribution of charisma as Adolf Hitler’s mechanism of influencing the German people (Bass, 2008).

Idealized influence is closely related to the concept of charismatic leadership introduced by House (1977), in which leaders engender the trust, respect, obedience, and confidence of their followers through a variety of behaviors. Through their association with the leader, followers develop a sense of self-confidence and pride, and ultimately adopt the cause and the beliefs of the leader (House). The leadership behaviors associated with idealized influence included in the current model of transformational leadership include: expressing and modeling values and beliefs, considering moral and ethical
consequences of decisions, and emphasizing to followers the importance of having a sense of purpose and a collective sense of mission (Bass & Avolio, 2000).

Another aspect of idealized influence included in the current model of transformational leadership (Bass & Avolio, 2000) is the attribution of idealized influence to the leader. Based on the model, followers attribute idealized influence to leaders who instill a sense of pride in followers, prioritize the good of the group over their own self-interests, build respect from followers through their actions, and who display power and confidence (Bass & Avolio, 2000).

Inspirational Motivation. Inspirational motivation is a leadership behavior not included in the original model of transformational leadership (Yukl, 2006), but has been included in subsequent revisions (Bass & Avolio, 1990, 2000). In much the same way as charismatic leaders engender followers’ confidence in and loyalty to the leader (House, 1977), inspirational leaders help followers develop a sense of optimism and enthusiasm for a shared future vision. Followers of inspirational leaders feel their work is meaningful and feel an elevated sense of power related to their ability to accomplish goals associated with the vision (Bass, 2008).

Inspirational motivation, as an individual factor, has been the target of some criticism, primarily because it cannot be separated factorially from charismatic leadership (Bass, 2008). However, Bass & Avolio (2000) have maintained inspirational leadership as a separate factor because of its conceptual differences from idealized influence (charisma). Leadership behaviors associated with inspirational motivation include articulating a compelling vision for the future and expressing optimism about it, as well as speaking enthusiastically about what needs to be accomplished (Bass & Avolio, 2000).
**Intellectual Stimulation.** Intellectual stimulation refers to leadership behaviors intended to heighten followers’ level of intellectual engagement, creativity, and innovativeness in their work, particularly in relation to decision-making and problem-solving (Bass, 1985, 2008). Intellectually stimulating leaders seek new ideas and perspectives from their followers when solving problems, and encourage their followers to do the same. They prompt followers to consider problems from different perspectives and suggest new frames of reference from which followers can approach problems. Intellectually stimulating leaders re-examine the appropriateness of critical assumptions traditionally held within the organization (Bass, 2008; Bass & Avolio, 2000).

**Individualized Consideration.** Individualized consideration (Bass, 1985) is closely linked to the concepts of personal consideration (Stodgill & Coons, 1957) and employee-centered leadership (Likert, 1961) identified through research at the Ohio State University and the University of Michigan, respectively. Individualized consideration is undertaken with the objective of facilitating each follower’s personal achievement and growth (Bass, 2008; Bass & Avolio, 1990).

Leaders engaged in individualized consideration attend to and identify the specific needs and capabilities of individual followers. Using that information, the leader engages with each follower in a way that fills those needs and strengthens those capabilities (Bass & Avolio, 1990). Leadership behaviors associated with individualized consideration include facilitating the follower’s development of personal strengths through coaching, teaching, mentoring, and building the follower’s confidence in taking on greater responsibility - with personal development as the objective; and interacting with the
follower as an individual with unique needs, abilities, and aspirations, not just as a member of the group (Bass, 2008; Bass & Avolio, 1990; 2000).

*Laissez-Faire Leadership*

Laissez-faire leadership was not included in the model of transformational leadership (Bass, 1985), but has been included in subsequent versions of the FRL (Avolio, 1999; Bass, 1996, 2008). Although the term laissez-faire refers to one factor in the FRL, it can be considered a misnomer for a category of so-called “leadership” behaviors. Laissez-faire behaviors include delaying responses to or avoiding important questions and decisions, avoiding important issues, and being absent when needed (Bass & Avolio, 2000). These behaviors have been described as “the absence of effective leadership” (Yukl, 2006, p. 263) and “the absence of any leadership whatsoever” (Judge & Piccolo, 2004, p. 756).

*Leadership Development Model*

Also embedded in the three research questions for this study was the pedagogical practices used in leadership development programs for front-line nurse managers. The theoretical framework selected to guide this portion of the study is the Leadership Development Model (LDM). This model was developed by a team of scholars at the Center for Creative Leadership, based on experience in researching and consulting for leadership development over a period of 30 years (McCauley, Moxley, & Van Velsor, 1998; McCauley & Van Velsor, 2004). The LDM was designed to define and explain the relationship between critical elements of developmental experiences for leaders. The LDM was recently used as the guiding framework for an in-depth review of the six most prevalent leadership development practices in organizations (Day, 2000). Although the
LDM’s use in the context of nursing is not made explicit in the research literature, parallels can be found between the elements presented in the LDM and the few documented leadership development initiatives in nursing.

The Leadership Development Model incorporates three essential elements of effective leadership development experiences, 1) assessment, 2) challenge, and 3) support (McCauley & Van Velsor, 2004). Each of these components is described in more detail below.

Assessment

Assessment is a critical element of effective leadership development experiences. The information gained through an assessment provides clarity regarding how the leader’s performance relates to the ideal and how performance might be enhanced. Realizing the existence of a gap between current performance and the ideal can motivate the leader to narrow or close that gap. When current performance matches the ideal, the leader’s self-confidence may be increased (McCauley & Van Velsor, 2004).

Assessment data can come from a variety of sources. Formal sources of assessment data may include “performance appraisals, customer evaluations, 360-degree feedback, organizational surveys that measure employee satisfaction with managers, and assessments and recommendations from consultants” (McCauley & Van Velsor, 2004, p. 6). Assessment data may be obtained through informal sources as well. This may be accomplished by “asking a colleague for feedback, observing others’ reactions to one’s ideas or actions, being repeatedly sought out to help with certain kinds of problems, or receiving unsolicited feedback from the boss” (McCauley & Van Velsor, 2004, p. 6).
Day (2000) identified 360-degree feedback and coaching as two leadership
development practices that typically provide a sufficient amount of assessment data. Two
other leadership development practices, using challenging job assignments to develop
new leadership skills and action learning, were described as typically needing more
emphasis on assessment to be most effective. The use of mentoring and networks as
leadership development strategies were described as having little to no emphasis on the

Challenge

Challenge is another critical element of effective leadership development
experiences. Challenging situations, whether real or simulated, force leaders to think and
respond differently than would be typical in a comfortable situation. This motivates
leaders to discover and develop new strengths, and offers them an opportunity to do so.
In short, challenges present opportunities for leaders to learn (McCauley & Van Velsor,
2004).

Challenging situations can be characterized by novelty, difficult goals, conflict,
and failure. Novel situations do not allow the leader to rely on the skills and perspectives
that have proven successful in past situations. Instead, the leader must develop a new or
broader perspective and discover new skills to be successful in the novel situation.
Difficult goals may force the leader to work harder than before, as well as work
differently than before. Sometimes new behaviors or strategies are required to
successfully accomplish difficult goals. Conflict can also cause the leader to consider the
perspectives of others. Viewing the situation in a new way may be necessary to resolve
the conflict. Failure may trigger the leader to re-evaluate his or her weaknesses and sense
of meaning. Higher levels of resolve and new coping strategies may be needed to persevere through similar trials in the future (McCauley & Van Velsor, 2004).

Day (2000) identified the use of challenging job assignments, action learning, and coaching as three practices that typically offer sufficient challenge for leadership development. Mentoring is described as incorporating some degree of the challenge element. Networking and 360-degree feedback were described as having little to no emphasis on the element of challenge (Day).

**Support**

Support is the final critical element of effective leadership development experiences described in the LDM. Support provides the leader with encouragement and strength. This may be especially important when considering assessment data that are not positive, or when being stretched during a particularly challenging situation. With support, the leader may feel it is possible to overcome difficulties and that his or her efforts are valued. Support may also provide a sense of safety and confirmation as the leader attempts to develop new skills and close performance gaps (McCauley & Van Velsor, 2004).

Support can come from other people, “bosses, coworkers, family, friends, professional colleagues, coaches, and mentors” (McCauley & Van Velsor, 2004, p. 10). A leader’s peers can also be a source of support, as well as organizations in which support processes for learning and development are built-in as organizational norms (Van Velsor & McCauley).

The element of support is typically incorporated into the leadership development practices of mentoring, networking, coaching, and action learning (Day, 2000). Using
challenging job assignments for leadership development was described as occasionally including the element of support, and 360-degree feedback is typically weak in the area of support (Day).

*Phillips Five-Level ROI Framework*

The final element of the three questions in this research study was the evaluation methods being used to determine the effectiveness of leadership development programs for front-line nurse managers. The theoretical framework selected to guide this portion of the study was the Phillips Five-Level ROI Framework (PFL). This framework was developed as an expansion of an influential model for training program evaluation first described in a seminal work by Kirkpatrick (1959). Kirkpatrick’s (1959) four-level model of training program evaluation has been used as the foundation for hundreds of research studies (Kaufman & Keller, 1994) and continues to be widely accepted within the field of human resource development (Moseley & Larson, 1994; Phillips, 1998). However, Phillips (1997) felt a fifth level, return on investment (ROI), made the model more complete, relevant, and useful for modern organizations.

The PFL describes five levels of training program evaluation, 1) reaction and planned action, 2) learning, 3) job application or behavior change, 4) business results, and 5) return on investment (Phillips, 1997). Each of these levels is described in more detail below.

*Level 1: Reaction and Planned Action*

This level of evaluation is focused on how participants react to and plan to act as a result of the training program. Measures of the participants’ reaction to the program typically refer to general satisfaction with the program. Satisfaction may be based on
whether the program met the participants’ needs in terms of content, delivery format, accessibility, etc. Planned action refers to how the participant plans to act as a result of the program. For example, after the program, the participant may plan to use a different strategy for providing employee feedback, recognize employee contributions, or facilitate communication within the department. Evaluation at this level could be designed to capture any of these planned actions (Kirkpatrick, 1998, Phillips, 1998).

*Level 2: Learning*

Evaluation at the level of learning focuses on the skills, attitudes, and knowledge a participant develops as a result of the program (Phillips, 1998). Kirkpatrick (1998) emphasizes the difference between evaluating learning (level 2 evaluation) and job application or behavior change (level 3 evaluation). He postulates that learning can occur without the accompanying behavior change, possibly because of constraints within the work environment, limitations set by a superior, etc. Thus, measurement of learning is not accomplished through actual observation of behavior in the workplace. Instead, pre-and post-testing and/or the use of a control group may be used to evaluate changes in knowledge and attitudes, and performance testing may be used to determine the learning of skills (Kirkpatrick). For example, a training program designed to improve knowledge about effective communication could be evaluated by testing the participant’s knowledge of effective communication strategies before and after the training to determine if learning occurred.

*Level 3: Job Application or Behavior Change*

This level of evaluation is designed to determine if the training resulted in observable changes in behavior (Phillips, 1998). Changes in behavior may be self-
reported, observed by subordinates, supervisors, or any other individual (e.g. a client) who may have knowledge about the participant’s behavior(s) (Kirkpatrick, 1998).

Continuing the example from above, evaluating the behavior change of an individual who participated in a training program focused on effective communication may involve asking his or her supervisor and subordinates whether the communication strategies included in the training are being used.

**Level 4: Business Results**

Evaluating at the level of business results is challenging, but may be necessary to justify the resources devoted to leadership development. At this level, evaluation is focused on changes in organizational outcomes as a result of the training provided. Outcomes of interest may include the quality of services or products, productivity, employee turnover, client satisfaction, etc. This level of evaluation may require significant work to isolate the effects of training to determine its impact on outcomes at the organizational level. Pre-testing, post-testing, control groups, and a significant waiting period may be needed to evaluate the business results associated with training (Kirkpatrick, 1998).

**Level 5: Return on Investment**

Although this level of evaluation was specifically embedded within Kirkpatrick’s model (1959, 1998), Phillips (1997, 1998) added ROI as a distinct fifth level, perhaps to place a stronger emphasis on the need to justify the expenses associated with training. Evaluating the ROI of a training program involves creating a model to operationally describe the impact of a training program in an organization. This impact is calculated as a function of complex relationships between the financial and non-financial costs and
benefits associated with the training program. An ROI analysis should include data from
the four previously described levels of analysis (Phillips, 1998).

Several important points should be made about the PFL. First, the levels of
evaluation are not causally linked. For example, positive results at the reaction level of
evaluation does not necessarily mean the participants have learned and will change their
behaviors, or that improved business results and a positive return on investment will be
realized. Second, negative performance at one level of evaluation does not necessarily
mean the same findings will be found at other levels of evaluation. For example,
participants in a training program may still learn, even if they do not react positively to a
program. Conversely, a lack of behavioral change in participants does not necessarily
mean they did not learn or enjoy the training. Third, no level of evaluation in this model
is inherently better than another. Program evaluation should be customized to fit the
objectives of the program and the needs of the organization (Stufflebeam, 2001).

Literature Review

The leadership literature is marked with ongoing debate about whether leadership
exists (Washbush, 2005), what leadership is (Day, 2000; Rost, 1993), whether it is
important (Hogan & Kaiser, 2005; Kaiser, Hogan, & Craig, 2008; Pfeffer, 1977), how it
relates to formal positions of authority or power (Barker, 1997; Jennings et al., 2007),
how it is best practiced (Yukl, 2006), whether it can be measured (Washbush, 2005), and
from where it originates (Doh, 2003; Ilies, Gerhardt, & Le, 2004). A thorough review of
the leadership literature reveals a plethora of definitions regarding what leadership
actually is and very little consensus among the definitions found. A great deal of
argument has occurred regarding whether leadership is a set of skills and abilities,
attributes, a social relationship, and/or a social process (Barker, 1997; Rost, 1993). Although some have taken the position that leadership is not necessarily associated with a position of power or influence, the design of many leadership studies either implicitly or explicitly suggest it is (for example, see Kaiser, Hogan, & Craig, 2008). Discussions regarding the importance of leadership are further complicated by research that has primarily been descriptive and/or of poor quality (Vance & Larson, 2002).

Although leadership and management have sometimes been differentiated in the literature, a recent literature review suggests leadership and management share many competencies (Jennings et al., 2007). This lack of consensus has supported the argument that leadership cannot be defined, understood, or studied in any meaningful way (Washbush, 2005). In spite of this controversy, some common themes regarding what leadership is, what leaders do, and what influence leaders have on the success of organizations.

This review of the literature includes information about the historical foundations of leadership, followed by a specific focus on transformational leadership in organizations and nursing in particular. A review of practices in leadership development and leadership development evaluation is also provided, with each followed by more specific applications of these concepts to nursing.

**Historical Foundations of Leadership**

Leadership has been theorized, conceptualized, and defined in many ways by many people. In the fourth edition of his seminal, comprehensive reference work on leadership, Bass (2008) provides an overview of the major classifications into which these definitions could be placed. The historical perspective of his overview offers insight
into the changing context of leadership definitions over the past century and serves as a foundation for understanding current perspectives on leadership.

Bass’ (2008) overview, supplemented with other important writings on leadership, is briefly summarized here, and is concluded with a broad definition of leadership that will be used as the basis for this study. However, it should first be noted that the concepts of leadership, authority, and management have historically been treated as interchangeable (Safferstone, 2005), a practice which is clearly apparent in this review.

**Hero Leadership and Authoritarianism**

Bass (2008) begins his overview by describing concepts of leadership from ancient Greece, Rome, Egypt, and China, many of which were depicted in the form of stories or were conveyed to rulers as instruction from their advisors. Early concepts of leadership were notably diverse, some referring to the need for authoritarian rule and distance between the ruler and the ruled. Others described the importance of virtue, moral responsibility, and justice. A general theme of heroic leadership and/or authoritarianism could be found in many of these ancient writings. The theme of authoritarianism was continued by Machiavelli (1532/1959), counseling princes to, when necessary, rule by fear, disempower others who may threaten the prince’s authority, and to injure dissenters severely enough to ensure no recourse would be possible.

**Trait Leadership and Productivity**

Although leadership theories advanced in the early 20th century were more tempered than Machiavelli’s (1532/1959) and less hero-focused than leadership writings in the 19th century (Carlyle, 1841), many were still unidirectional, focused on the actions or traits of the leader that differentiated them from followers (Bass, 2008). For example,
leadership was described by several scholars as a particular set of personality traits or characteristics that distinguished the leader from the followers in the group (for example, see Bowden, 1926). Other scholars at this time were defining leadership as the ability of the leader to induce followers to conform to the will of the leader (for example, see Moore, 1927).

Research and publications referring to leadership during this era reflected a focus on efficiency and productivity, as well as a depersonalized workplace (Weber, 1925/1997). For example, Taylor (1911) used a stopwatch to determine the most efficient means of performing duties in a steel factory. Gilbreth (1911) and Ford (1923) described their means of improving worker efficiency through the use of assembly lines. A characteristic theme in the leadership writings of the early 20th century was the prioritization of efficient production over job satisfaction, employee engagement, and retention. However, it should be noted that Mary Parker Follett (1941) was already considering the importance of human relations in the workplace at this time.

Unfortunately, many of her scholarly contributions to the field were not recognized until after her death (Tonn, 2003).

**Persuasion and the Beginnings of Personal Consideration**

Unidirectional conceptualizations of leadership began to give way to definitions of leadership as influencing or persuading followers through a reciprocal, interactive process (for example, see Tead, 1935 or Haiman, 1951). These definitions represented a broadening focus for leadership, one with consideration for the needs, desires, and motivations of followers. The leader’s ability to influence others was no longer
characterized by an ability to direct or control followers, but was expanded to include the use of persuasion, reward, and reinforcement (Bass, 2008).

The expanding considerations for human factors in leadership can be seen in the Hawthorne experiments, conducted by Mayo (1933) and his team in the late 1920s and early 1930s. The team’s original intent was to study the relationship between working conditions (i.e. lighting, duration of shifts, duration and frequency of rest periods, provision of refreshments, etc.) and fatigue and productivity. However, during the course of the experiment, the researchers shifted their focus to include the importance of effective supervision, particularly the need for personal consideration from supervisors, employee participation in group decision-making, and open conversations between the supervisor and employees (Mayo, 1933). Although the research methods used and the interpretations made by Mayo’s research team have generated significant controversy, they also opened a new era of research in industrial relations and front-line supervision (Merrett, 2006).

*Beyond Personal Traits, Toward Empowerment*

The mid-1940s through 1960 marked a time of progressive definitions of leadership, as well as research that challenged traditional understandings of leadership. A comprehensive survey of leadership research (Stodgill, 1948) helped advance the concept that leadership is more than a collection of personal traits held by the leader (Bass, 2008). Stodgill (1948) noted that personal characteristics, such as intelligence, knowledge, persistence, adaptability, and social status were positively correlated with various measures of leadership, but also argued the leader’s personal characteristics must have relevance to the particular situation.
The traditional concept of leadership as a unidirectional phenomenon was further eroded by new writings about the need for leaders to share power with their employees. The concept of power-sharing was characterized by employees setting their own goals, managing their own work, having input in determining their rewards (Whyte, 1955) and participating in decision-making processes (Vroom, 1964). These writings were consistent with the then-current thoughts on human motivation (Maslow, 1954), particularly how leaders can create organizational structures in which employees meet their individual needs by fulfilling the mission of the organization (McGregor, 1960).

Conceptualizations of leadership continued to include the importance of leaders providing structure and built on the concept of considering the needs of employees (Stodgill & Coons, 1957). Researchers at Ohio State University used questionnaire research to identify two broad functions of leaders, and labeled these functions personal consideration and initiating structure (Yukl, 2006). Personal consideration involved encouraging, empowering, and listening to employees. Initiating structure involved developing processes, making assignments, and coordinating efforts to ensure necessary work was completed (Bass, 2008).

In parallel with the research being conducted at the Ohio State University, researchers at the University of Michigan used field studies of leaders to identify leadership behaviors (Yukl, 2006). The leadership behaviors identified included relation-oriented behaviors, task-oriented behaviors, and participative leadership. Relation-oriented behaviors and task-oriented behaviors are nearly identical to personal consideration and initiating structure, respectively. Participative leadership is characterized by a decentralized structure, in which the manager empowers employees
who use group processes to make decisions, resolve conflicts, and promote cooperation with in their work group. The distinction between employee-centered (personal consideration) and production-centered (initiating structure) leadership styles (Katz, Maccoby, & Morse, 1950) served as a primary foundation for research on leadership effectiveness for the next several decades (Yukl, 2006).

Publications based on research conducted during the 1940s and 1950s continued to highlight the need to adapt leadership to the context of the situation (Argyris, 1964; Fiedler, 1967; Katz, Maccoby, & Morse, 1950; Likert, 1961). This conceptual trajectory was continued in the form of contingency theories of leadership, in which it was suggested that situational variables (e.g. subordinate satisfaction, maturity, and abilities; resource availability; group dynamics; characteristics of the work being done) may modify the effects of particular leader traits or behaviors. Research on this trajectory continued to be common throughout the 1970s and 1980s (Yukl, 2006).

Challenges to Contingency Theory and Leadership as a Whole

Contingency theories of leadership, which incorporate situational variables as mediators and moderators of the effectiveness of a leader’s particular traits and behaviors, continued to become increasingly complex (Hunt, 1999). For this reason, the contingency theories were challenged for their perceived lack of applicability to the realities of managerial practice. The ability of a manager to modify his or her approach to leadership to best match every situation was considered unrealistic (McCall, 1977). In spite of their complexity, the contingency models of leadership have been criticized for ambiguity in their theoretical propositions (Yukl, 2006). This ambiguity, coupled with weak research designs and questionable accuracy in measurement (Schreisheim & Kerr,
1977), made it difficult to empirically test the major propositions of the contingency theories (Yukl, 2006).

Challenges to the contingency theories of leadership, some of the most prominent leadership theories at that time, and challenges to the concept of leadership in general (Calder, 1977; Kerr & Jermier, 1978; McCall & Lombardo, 1978; Mintzberg, 1983; Pfeffer, 1977) coincided with a widespread sense of concern about and dissatisfaction with the field of leadership as a whole (Hunt, 1999). Criticism for the field of leadership continued throughout the early 1980’s, until the concept of transformational leadership arose as the new and viable basis for a new trajectory in leadership research and practice (Hunt, 1999).

Transformational Leadership

Origins of Transformational Leadership

The origins of current theories of transformational leadership can be traced to conceptualizations of charismatic leadership (Berlew, 1974; Downton, 1973; House, 1977; Weber, 1925/1947) and transforming leadership (Burns, 1978). This section provides a brief summary of how transformational leadership emerged as a concept through the late 1970s and through the 1980s.

Charismatic Leadership. Robert House, a scholar of contingency theories of leadership, played an important role in resolving disillusionment with the leadership theories of the 1970s and 1980s. During a leave to the Florida International University in 1975, he studied the sociological and political literature on charisma, concepts not commonly addressed in the management literature at that time (Hunt, 1999). One product
of his leave (House, 1977) included an introductory theory of charismatic leadership in organizations.

Charismatic leaders model beliefs and values they want their followers to adopt, create a positive image for themselves, articulate idealistic goals for their followers, maintain high expectations for followers, and communicate confidence in the followers’ ability to meet those expectations. Charismatic leaders inspire trust, acceptance, obedience, enthusiasm, and self-confidence in their followers. Followers adopt the cause and the beliefs of the charismatic leader (House, 1977).

House (1977) presented his theory as a starting point for the formal study of charismatic leadership, with testable propositions that he anticipated would be challenged and changed into a progressively better theory. In spite of efforts by previous scholars (Berlew, 1974; Downton, 1973; Weber, 1925/1997) and House (1977), charismatic leadership was not a widely accepted theory in its own right (Hunt, 1999). However, in retrospect, the importance of charismatic leadership as a foundational component of transformational leadership is clear (Bass, 2008).

Transforming Leadership. Near the same time House (1977) published his work on charismatic leadership, Burns (1978) advanced the conceptual difference between traditionally defined leadership practices (transactional leadership) and what he felt was a more powerful form of leadership (transforming leadership). Transactional leadership has been described as an exchange relationship between a leader and follower in which each party attempts to maximize the benefit they receive (Downton, 1973). As such, leaders distribute punishments and rewards to motivate the efforts and productivity of followers (Downton).
Burns (1978) also described transactional leadership as an exchange relationship between the leader and the follower that met a need (e.g. financial, psychological, or political) for each of the parties involved. Because the transactional relationship is based on the potential for personal gain through the exchange process, no mutual purpose exists to maintain the relationship once the exchanges cease. This lack of a higher purpose, as well as the potential for unprincipled, manipulative leader-follower relations distinguished Burns’ (1978) conceptualization of transactional leadership from his theory of transforming leadership.

In contrast, transforming leadership is characterized by the leader and followers mutually engaged in a shared purpose, elevating each other to progressively higher levels of motivation and morality. Burns (1978) specifically refers to Maslow’s (1954) Hierarchy of Needs to illustrate changes in leader and follower motivation through transforming leadership. Although the leader-follower relationship may initially serve to meet basic human needs (i.e. physiological needs, safety, love, and belonging), the motivation of both parties eventually becomes a desire to achieve self-actualization. Burns (1978) refers to Kohlberg’s (1963) theory of moral development to describe the evolution of leader and follower moral reasoning through transforming leadership. The leader-follower relationship progresses from concern with punishment and reward toward a concern for liberty, dignity, equality, justice, and human rights (Burns, 1978).

The leader facilitates this progression of motivation and moral development in two ways. First, the leader gratifies the motivations of followers, facilitating their ability to focus on higher needs. Second, the leader demonstrates a level of moral development higher than that of the followers, modeling an approach to moral reasoning to which
followers can aspire. This interaction between the leader and followers is transforming. Over time, the followers themselves develop into leaders, and the leader becomes a moral agent (Burns, 1978). For Burns (1978), the moral basis of transforming leadership set it distinctly apart from the sometimes manipulative and unprincipled transactional leadership.

*Emergence of Transformational Leadership.* Synthesizing components of House’s (1977) charismatic leadership and Burns’ (1978) transforming leadership, Bass (1985) proposed transformational leadership as a new breakthrough in leadership theory. Similar to Burns (1978), Bass (1985) described the majority of previous leadership theories as focused on leader-follower exchanges in which the leader exchanges punishments or rewards (e.g. financial, social, psychological, etc.) for specified follower behaviors and performances. These leadership theories were categorized as transactional, in which each party engaged in the transaction with the objective of meeting his or her own self-interests.

Bass (1985) criticized these theories for their inability to explain variance in productivity, efficiency, productivity, motivation, etc. He was also critical of their focus on the “first order of change” (p. 4), or superficial changes in effort or productivity that are not necessarily accompanied by changes in values and beliefs. Bass (1985) argued that higher orders of change, and that revolutionary, quantum leaps in improved performance were possible with a different approach to leadership. He described this new approach to leadership as transformational leadership. More details regarding the theoretical structure of transformational leadership will be provided later in the chapter.
In much the same way Mayo’s (1933) introduction of personal consideration served as a pivotal event in the trajectory of leadership research, Bass’ (1985) concept of transformational leadership triggered significant interest among leadership scholars and significantly changed the focus of leadership research. Leadership researchers began to give more attention to charisma, vision, inspiration, and values as aspects of leadership, as well as how followers responded emotionally to these aspects (Bass, 2008; Hunt, 1999).

The emerging theory of transformational leadership became an accepted theory of leadership as both upcoming and established leadership scholars focused their research on the concepts advanced in Bass’ (1985) theory (Hunt, 1999). Since its introduction, transformational leadership has become one of the most researched theories of leadership in history (Judge & Piccolo, 2004). The degree of change in the leadership field associated with the introduction of transformational leadership is reflected in language found in the literature (Hunt, 1999). It has become common to see the terms “new” (Bryman, 1992) and “neocharismatic” (House & Aditya, 1997) used to describe theories founded on these aspects of leadership, and the term “traditional leadership” (Schermershorn, Hunt, & Osborn, 2000) used to describe theories introduced prior to the introduction of transformational leadership.

Transformational Leadership

Bass (1985) originated transformational leadership theory in response to the popular leadership theories at the time, which he criticized for their inability to explain variance in measurable leadership outcomes and their focus on first order of change. By focusing his research on influential leaders, he hoped to identify the underlying behaviors
and attitudes associated with truly transformational leadership. Although his is not the only existing version of transformational leadership theory, it is the most empirically researched version (Yukl, 2006).

The first model of transformational leadership was generated from qualitative interview data gathered from 70 South African executive leaders. These individuals were asked to describe how they had been influenced by an influential leader they had encountered in their career. Using statements collected through these interviews and a review of the literature, 142 questionnaire items, each representing an attitude or behavior associated with transactional or transformational leadership, were generated (Bass, 1985).

A panel of 11 graduate student judges reviewed these items and categorized them as describing either transactional or transformational leadership. Items the graduate students were not consistent in categorizing into either form of leadership, and items the graduate students could not categorize at all, were removed from the questionnaire. In total, 73 behavioral or attitudinal items were included in the first version of the questionnaire. Additional questions were then added to collect demographic data and perceptions regarding the unit’s effectiveness, the superior’s effectiveness as a leader, and the subordinate’s satisfaction with the superior. The questionnaire was then administered to 104 senior officers in the U.S. Army. The officers were asked to indicate, on a five-point Likert-type scale, how often their most recent superior displayed the behavior or attitude represented by each item. Later, an additional 72 officers were added to the sample (Bass, 1985).

A factor analysis was performed on the data generated from these samples and five factors were identified, 1) charismatic leadership, 2) contingent reward, 3)
individualized consideration, 4) management-by-exception, and 5) intellectual stimulation. Charismatic leadership, individualized consideration, and intellectual stimulation were identified as factors associated with transformational leadership. Contingent reward and management-by-exception were identified as factors associated with transactional leadership (Bass, 1985).

A higher-order factor analysis was performed, which generated two higher-order factors, active-proactive leadership and passive-reactive leadership. All three factors associated with transformational leadership loaded on the active-proactive dimension of leadership. One transactional leadership factor, contingent reward, also loaded on the active-proactive dimension of leadership, and the other, management-by-exception, loaded on the passive-reactive dimension of leadership (Bass, 1985).

Several of the questionnaire items were considered dependent variables and were grouped into two scales, extra effort and inspirational leadership. Both variables were considered important measures of transformational leadership, particularly because the transformational leader was conceptualized as one who could inspire followers to go beyond what was originally expected of them (Bass, 1985).

The results of this factor analysis served as the basis for Bass’ (1985) first model of transformational leadership. Since then, the model has been modified to more precisely reflect the results of subsequent studies, and to convey the meaning of specific factors more clearly. Bass’ model of transformational leadership is now incorporated into the FRL (Avolio, 1999; Bass, 1996, 2008), which has been described in detail above.
Transformational Leadership in Organizations

Transformational leadership has consistently been linked to positive outcomes in organizations (Wong & Cummings, 2007). Selected, relevant meta-analyses and published reports of research are described in this section.

Meta-Analyses. Lowe, Kroeck, & Sivasubramaniam (1996) conducted a meta-analysis of 39 studies in which the MLQ (Bass & Avolio, 1990) was used. Correlations between scores on selected scales from the MLQ and ratings of leadership effectiveness were calculated. It was found that charisma (now idealized influence), individualized consideration, intellectual stimulation, and contingent reward were all significantly and positively related to ratings of leadership effectiveness. Although the correlation between management-by-exception and leadership effectiveness was also positive, its associated confidence interval included zero, making its relationship with leadership effectiveness equivocal.

DeGroot, Kiker, & Cross (2000) designed a series of meta-analyses to determine the relationship between the charismatic component of transformational leadership and five organizational outcomes, 1) leader effectiveness, 2) subordinate effectiveness (job performance), 3) subordinate effort, 4) subordinate satisfaction, and 5) subordinate commitment. First, analysis of 36 samples supported the hypothesis that charisma has a positive relationship with effectiveness of the leader. Then, 11 samples were analyzed to determine that a positive relationship exists between charismatic leadership and subordinate effectiveness. The third and fourth analyses, comprised of 12 and 14 samples respectively, tested for the presence of a positive relationship between charismatic leadership and subordinate effort, as well as subordinate satisfaction. The data did not
support the existence of such a relationship. Three samples served as the basis for a fifth analysis. This analysis supported the hypothesis that charismatic leadership is positively related to subordinate satisfaction (DeGroot, Kiker, Cross).

*Published Reports of Research.* Barling, Weber, Kelloway (1996) used a pretest-posttest, control-group design to study the effects of leadership in a large Canadian bank. Managers at twenty of the bank’s branch locations were assigned to either a control group (n=11) or an experimental group (n=9) to receive a leadership training intervention. Two weeks before the training intervention, subordinates at each of the branches were given a questionnaire designed to determine their level of organizational commitment and a modified version of the MLQ-Form 5 (Bass & Avolio, 1990) to determine their perceptions of the managers’ leadership behaviors. This questionnaire was given again five months after the completion of the training intervention. The number of credit card sales and personal loan sales were also tracked prior to and after the completion of the training intervention.

As rated by their subordinates, leaders in the experimental group were perceived to demonstrate higher levels of several leadership behaviors after the completion of the training intervention. A statistically significant increase was also seen in the subordinates’ levels of organizational commitment and the number of personal loans and credit cards sold. This correlation supports the hypothesis that leadership can have a positive impact on organizational commitment among employees and the financial performance of an organization (Barling, Weber, & Kelloway, 1996).

Another study (Bass, Avolio, Jung, & Berson, 2003) was designed to evaluate the relationship between leadership and the performance (defined in this study as cohesion
and potency) of military units. Measures of transformational leadership were obtained via the MLQ-5X (Avolio & Bass, 2002). Potency was measured using an established eight-item scale and cohesion was measured via a three-item researcher, generated scale. Light infantry combat soldiers in 72 platoons rated the transformational leadership of their platoon sergeant or platoon leader, or rated the cohesion and potency of their platoon. Soldiers were randomly selected to complete different instruments, and to do so in different orders to control for the effects of same-source ratings and order effects. The field performance of each platoon during 11 simulated combat missions was evaluated by three trained evaluators, who rated how well the platoon accomplished its mission and compared the platoon’s performance to the performance of other platoons.

The data supported the hypothesis that ratings of transformational leadership would positively predict unit performance. Transformational leadership was found to positively predict unit performance through both direct and indirect (mediated by unit potency and cohesion) effects. Transactional leadership positively predicted unit performance to the same extent as transformational leadership. It had been hypothesized that transformational leadership would be predictive of unit performance, but would do so to a lesser extent than transformational leadership. Evidence was found to support the existence of an augmentation effect, with transformational leadership augmenting transformational leadership in predicting platoon performance. Passive or non-leadership behaviors were supported as negatively predictive of platoon performance.

Lim & Ployhart (2004) studied the influence of leadership on the performance of military teams. Members and leaders of 39 combat teams, superiors of these teams, and assessment center personnel were included in the total sample (n=276). For each team,
two performance measures were collected, typical performance and maximum performance. Typical performance was an evaluation of the teams’ general performance over the course of a three-month training course, rated by superiors. Maximum performance was an evaluation of the teams’ performance in a one-day assessment of combat proficiency, rated by personnel associated with an assessment center. Ten weeks into the three-month training course, members of each military team rated their leader’s transformational leadership using the MLQ-5X (Avolio, Bass, & Jung, 1999). Typical and maximum performance were significantly related to transformational leadership (r=0.32, p<0.05) and (r=0.60, p<0.05) respectively, supporting the hypothesis that transformational leadership may lead to better performance of teams, especially in demanding situations (Lim & Ployhart, 2004).

Transformational Leadership in Nursing

The study of transformational leadership in nursing is not new. Transformational leadership has been relatively well established as effective practice for nurse managers (Bowles & Bowles, 2000; Chiok Foong Loke, 2001; Gull & Gerstle, 2004; Kleinman, 2004b, 2004c; Larrabee et al., 2003; McDaniel & Stumpf, 1993; McNeese-Smith, 1993, 1995, 1997; Morrison, Jones, & Fuller, 1997; Ohman, 2000; Raup, 2008; Stordeur, D’hoore, & Vandenberghe, 2001). The relevant meta-analyses and published reports of research are described in this section.

Published Reports of Research. McNeese-Smith (1993) evaluated the relationship between leader behaviors and employee effectiveness in the hospital setting. Employees (n=471) rated their managers’ (n=41) leadership behaviors using Kouzes & Posner’s Leadership Practices Inventory (LPI), a 5-factor scale which measures dimensions related
to transformational leadership (Bass & Riggio, 2006). Three outcome measures, employee productivity, job satisfaction, and organizational commitment were also measured. The managers’ rating on each of the five scales, as well as the total score, were found to have statistically significant, positive correlations with productivity, job satisfaction, and organizational commitment. It is important to note that, for this study, about half of the participants were employed in nursing departments. Others included in the sample were from clinical and non-clinical departments.

McNeese-Smith (1995) replicated this study with another sample of nurse managers (n=19) and nurses (n=221). As in the previous study, a statistically significant, positive correlation was found between the nurse managers’ leadership behaviors and employee productivity, job satisfaction, and organizational commitment.

Medley & Larochelle (1995) studied the relationship between nurse managers’ leadership behaviors and job satisfaction in staff nurses, using the MLQ (Bass, 1985) and a work satisfaction questionnaire. A response rate of 43.8% (n=122) was achieved. A principle component analysis (PCA) on the MLQ data collected for this study. The PCA resulted in a two-factor model of leadership, with transformational and transactional leadership as the factors identified. The components included in the transformational leadership factor were: charisma (now idealized influence), individual consideration, intellectual simulation and contingent reward (historically categorized as a transactional leadership behavior). The only component of transactional leadership was management by exception (no distinction between active and passive management-by-exception had been made in the MLQ version used). This two-factor model explained 85.1% of the variance within her sample, providing additional validation for the use of the FRL as a
framework for this study. Medley & Larochelle also found a positive, statistically significant relationship between job satisfaction and the transformational leadership factor identified in the PCA described above.

McNeese-Smith (1997) continued her exploration of manager influence on nurse job satisfaction, productivity, and organizational commitment with a qualitative study. Thirty nurses, five from each of six different units were recruited to participate in semi-structured interviews about manager behaviors that influenced each of these factors. Participants were recruited from among the sample included in an earlier study (McNeese-Smith, 1995). Data generated through the interviews inform valuable insight into the influence of nurse manager behaviors. Job satisfaction was reported to be most positively influenced by the nurse manager giving recognition and thanks to nurses, as well as meeting their personal needs. Productivity was also positively influenced by the nurse manager providing recognition and thanks, as well as creating a positive climate on the unit. Organizational commitment was increased through the nurse managers’ use of leadership behaviors, such as being “visionary, creating a positive influence, using open communication, and role modeling” (p. 52).

A study by Morrison, Jones, & Fuller (1997) was designed to evaluate the relationships between nurse manager leadership behaviors (transformational and transactional), empowerment, and job satisfaction. The researchers used the MLQ to collect information about leadership behaviors, and other instruments to measure job satisfaction and empowerment. The sample included staff with a variety of different backgrounds, including nurses at various levels in the organization, nursing assistants, and non-clinical, administrative staff. A response rate of 64% (N=275) was achieved.
Transformational and transactional leadership each had a positive, significant correlation with job satisfaction. Transformational leadership was positively and significantly correlated with empowerment, but transactional leadership was not. This relationship has also been supported in the findings of other studies (see, for example, Larrabee et al., 2003).

Morrison, Jones, & Fuller (1997) also found empowerment to have a significant, positive correlation with job satisfaction. A systematic review of the literature (Pearson et al., 2007) identified empowerment as being positively related to job satisfaction, employee accountability, work effectiveness, organizational commitment, and trust. Empowerment was also identified as being negatively related to job tension (Pearson et al.).

Stordeur, D’hoore, & Vandenberghe (2001) studied the relationship between nursing leadership, organizational stress, and emotional exhaustion among nurses working in the hospital setting. Staff nurses were asked to complete the MLQ, to rate the leadership behaviors of their manager, a stress instrument (including scales of physical, psychological, and social stress), and an emotional exhaustion scale. Measures of role ambiguity and role conflict were also collected. A 39.2% response rate was achieved. Each of the transformational leadership scales and the contingent reward scale had a significant, negative correlation with stress (all types), role ambiguity, role conflict, and emotional exhaustion. Passive management-by-exception had a significant, positive correlation with stress, role ambiguity, role conflict, and emotional exhaustion. Active management by exception had a significant, positive correlation with social stress, role conflict, and emotional exhaustion. Interestingly, the transformational leadership scales,
contingent reward, and active management-by-exception all correlated positively with role conflict, while passive management-by-exception was negatively correlated with role conflict. Overall scores on leadership behaviors explained 9% of the variance in emotional exhaustion, although transformational leadership and contingent reward did not individually influence emotional exhaustion.

Chiok Foong Loke (2001) studied the relationship between the leadership behaviors of nurse managers and job satisfaction, productivity, and organizational commitment. Twenty nurse managers and 100 of their staff nurses were invited to participate in the study. A 100% response rate from managers and 97% response rate from the managers resulted in 20 nurse managers and 97 staff nurses in the final sample. The LPI was completed by nurse managers and staff nurses to rate the leadership behaviors of the managers. The LPI has been described as an instrument which measures dimensions related to transformational leadership (Bass & Riggio, 2006). Staff nurses also completed a job satisfaction survey, a scale of self-described productivity, and an organizational commitment scale (Chiok Foong Loke). Leadership behaviors explained a significant amount of the variance in the three dependent variables, explaining 29.2% of the variability in job satisfaction, 21.8% in organizational commitment, and 8.8% of productivity.

A study designed by Doran et al., (2004) was designed to evaluate the influence of nurse managers’ leadership styles and span of control on nurse job satisfaction, patient satisfaction, and nurse turnover. The sample included nurse managers (N=41), staff nurses (N=717), and patients (N=680) from 51 hospital units. All nurse managers who were contacted agreed to participate in the study. No response rate was reported for staff
nurses or patients. Nurse managers completed a Nurse Manager Questionnaire, which included a measure of span of control (the number of staff, in full-time equivalents, who report directly to the manager). Staff nurses completed the Modified MLQ, the McCloskey Mueller Satisfaction Scale, and a demographic questionnaire. Patients completed a patient satisfaction questionnaire.

Transformational leadership (comprised of behavioral and attributed idealized inspiration, intellectual stimulation, individualized consideration, and inspirational motivation) was positively related to nurses’ job satisfaction and negatively related to nurse turnover. However, increasing nurse manager span of control decreased the positive effect of transformational leadership on both nurse and patient satisfaction. Transactional leadership (comprised of contingent reward items) was positively related to nurse job satisfaction and patient satisfaction. The positive effects of transactional leadership were negatively influenced by wide span of control. Management by exception (passive and active) and laissez-faire leadership were negatively correlated with both nurse and patient satisfaction. This negative correlation was augmented in the presence of wide span of control. As an independent variable, wide span of control decreases patient satisfaction and increases nurse turnover (Doran et al., 2004).

It should be noted that the management-by-exception and contingent reward factors were considered as representing transactional leadership behaviors (Bass, 1985). In more recent studies, contingent reward has been considered to be consistent with transformational leadership behaviors, particularly when the rewards are psychological in nature (Goodwin, Wofford, & Whittington, 2001). The structure of transformational and transactional leadership in Doran et al., (2004) are not consistent with the original
structures (Bass, 1985), the current FRL (Bass & Avolio, 2000), or other structures found in the literature. In fact, the positive effects of transactional leadership supported by this study would be attributed to transformational leadership in more current conceptualizations of transformational leadership (Goodwin, Wofford, & Whittington).

Kleinman (2004c) studied the relationship between managers’ self-perceptions of their leadership behavior and how staff nurses perceived the leadership behaviors of their managers. Demographic data about the nurse managers was also collected, as well as information from staff nurses about their interactions with their nurse manager, their intent to leave their current position, and their perceptions regarding important leadership skills for nurse managers. It appears turnover data for the hospitals studied from the 6-month period immediately preceding the study was also collected. Kleinman achieved a response rate of 25% for staff nurses (N=79) and 62% for nurse managers (N=10). Managers rated themselves significantly higher than did staff nurses in the factors of idealized influence (attributed and behavioral), intellectual stimulation, individual consideration, and contingent reward. Managers also rated themselves higher in leadership effectiveness, ability to generate extra effort among staff, and staff satisfaction with the managers’ leadership. This discrepancy between self- and other-reports of leadership behaviors is common (see, for example, McGuire & Kennerly, 2006).

The only factor in the MLQ found to have a statistically significant correlation with turnover (r = 0.26, p=0.3) was active management by exception. However, nurses who perceived their manager as demonstrating behaviors characteristic of transformational leadership had fewer thoughts about leaving the hospital. The amount of
time staff nurses saw or interacted with their nurse manager was negatively related to staff perceptions that the manager practiced laissez faire leadership (Kleinman, 2004c).

Research conducted by McGuire & Kennerly (2006) was designed to evaluate the relationship between the leadership behaviors of nurse managers and the organizational commitment of staff nurses. Nurse managers were recruited from 21 hospitals to participate in this study. Staff nurses working on the nurse managers’ hospital units were asked to rate their managers’ leadership behaviors using the MLQ and complete an organizational commitment questionnaire. In order for a nurse manager’s data to be used, at least five staff nurses from their unit also had to participate in the study. The final sample included 63 nurse managers and 500 staff nurses from 11 hospitals. All of the transformational leadership factors on the MLQ, and contingent reward, had a significant, positive relationship with organizational commitment. There was no significant correlation between active management-by-exception and organizational commitment. McGuire & Kennerly report that the range of correlations found ranged from $r = 0.393$ to $-0.202$, but did not specify which factor(s) were negatively correlated with organizational commitment. Based on other data reported, it can be inferred that the factor(s) negatively correlated with organizational commitment may have been passive management-by-exception and/or laissez-faire leadership. This finding would have been consistent with other research using the MLQ to relate leadership behaviors to organizational commitment (see, for example, Doran et al., 2004; McNeese-Smith 1995).

Raup (2008) examined the relationship between transformational leadership behaviors in emergency department nurse managers and patient satisfaction and nurse turnover. The MLQ was administered to nurse managers ($N=15$), who used the MLQ to
rate their leadership behaviors and a researcher-generated survey to collect data about their respective emergency departments. For each manager, two of their staff nurses (N=30) used the MLQ to rate their manager’s leadership behaviors. In relation to patient satisfaction and staff turnover, there was no statistically significant difference between the units with transformational versus transactional nurse managers. A trend toward lower turnover was noted in hospitals where the manager was considered a transformational leader.

The research findings summarized above provide support for the importance of transformational leadership in nurse managers. Statistically significant, positive correlations were found between transformational leadership and staff satisfaction, productivity, empowerment, and organizational commitment. Statistically significant negative correlations were found between transformational leadership, organizational stress, job tension, emotional exhaustion, role ambiguity, role conflict, and nurse turnover. Some of these positive effects were also attributed to contingent reward behaviors, which have become more commonly linked to transformational leadership. In general, management-by-exception (active and passive) and laissez faire leadership behaviors were correlated with less desirable outcomes in the areas described above.

Each of these outcome measures are important variables in nursing. Correlation, whether negative or positive, between these variables and the leadership behaviors represented in the FRL (and rated using the MLQ) validates the importance of the behaviors represented in the model. This provides additional justification for using the FRL as a theoretical framework in this study.
Leadership Development

Background

Literature relevant to leadership development in the context of front-line nurse managers is presented in this section. In general, research and theories currently associated with leadership development seem to have originated from the broader field of personnel training and development. As such, the training and development literature will be reviewed first, to provide context for the leadership development literature. The leadership development literature related to organizations will then be presented, followed by a review of the literature related to leadership development in nursing.

In what has become a seminal work, Campbell (1971) published an extensive review of the literature on personnel training and development. He described the training and development literature reviewed as “voluminous, nonempirical, nontheoretical, poorly written, and dull . . . it is faddish to an extreme” (p. 565). Campbell described a common cycle he noted with each fad. Each fad would be described as successful by a group of advocates, followed by another group who would attempt to modify the original idea and possibly begin testing it through empirical research. Although the fads were not typically supported by the research, they continued to be widely accepted. As a fad became more popular, it would become the target of criticism. However, the criticism was rarely founded in actual data either. Despite criticism, the fads often persisted until the next fad began progressing through the same cycle. Campbell criticized the empirical research in training and development for a lack of focus on outcomes associated with particular leadership development experiences. He presented several reasons research in the area of training and development had not resulted in a body of significant and useful
information. These reasons included a “full scale retreat from the fundamental task of defining what is to be learned” (p. 594), and a lack of external motivation for scholars to develop and evaluate theoretical models of training and development. Campbell recommended more empirical analysis of training and development at the systems level be performed, and evaluating training strategies in terms of behavioral and organizational outcomes.

Goldstein (1980) and Wexley (1984) also reviewed the training and development literature and had similar findings. Research in the field was not based on theory. Anecdotal reports were common, and empirical research was relatively rare. Both authors determined that more research was needed to guide and support theory and practice in managerial training and development.

In order to determine the effectiveness of different managerial training strategies, Burke & Day (1986) performed a meta-analysis on data from 70 published reports on the topic. The results of their analysis provided statistical support for the effectiveness of managerial training in general. In addition, 12 of the 17 managerial training strategies studied, including behavioral modeling, sensitivity training, and lecture, were supported as somewhat generalizable across situations. Although this meta-analysis represented a major advance in the field of training and development (Collins & Holton, 2004), Burke & Day (1986) also documented their concerns with the state of research in the field. The studies they found were not always well-designed or reported in their entirety, making it difficult to perform an adequate analysis. An insufficient number of sound, empirical studies on some concepts precluded the analysis of some important theoretical linkages. The authors called for the “completion of well-designed, thoroughly reported empirical
studies…for more refined meta-analysis of managerial training and training in general” (p. 243).

A quarter-century after the publication of Campbell’s critical review of the training and development literature, and one decade after the publication of Burke & Day’s (1986) meta-analysis, Fiedler (1996) described the field of leadership and management development as essentially unchanged. In general, management training practices persisted without empirical validation. Some practices were only validated in terms of how well participants enjoyed the experience. This critique was followed by another review, in which Day (2000) also described the “dearth of scholarly research” on the topic of leadership development (p. 582).

Even more recently, Tharenou, Saks, & Moore (2007) criticized research on training for a number of shortcomings. Specific areas of criticism included: 1) a lack of attention to causal direction between training and outcomes and links between micro- and macro-level outcomes, 2) weak research designs, small sample sizes, and inadequate response rates, 3) a lack of theoretical linkages between specific training interventions and organizational outcomes, and 4) the questionable reliability and validity of instruments used to evaluate training and organizational outcomes.

Although the field of leadership development has been heavily criticized for its lack of theoretical development and rigorous empirical research, progress has been made in recent years with certain concepts in leadership development. One such concept is learning leadership through developmental experiences. Fiedler (1996) advanced the argument that leadership development must be learned in the context of practice, and argued for the use of situational leadership training. The importance of situational
leadership training is based, in part on the idea that “leadership of groups and organizations is a highly complex interaction between an individual and the social and task environment” (p. 243). Fielder claimed leader intelligence and experience, developed outside the context in which leadership is practiced, has the potential to be non-beneficial or even detrimental in some situations.

Day (2000) built upon Fiedler’s (1996) concept of leadership as a highly complex interaction. Day introduced his argument by first making a distinction between leader development and leadership development. Leader development programs were characterized as being focused on the development of an individual’s personal knowledge, skills, and abilities, with the intent of making an investment in that individual’s human capital. While acknowledging the need for developed inter- and intra-personal skills in the formal leader, he described the importance of a relational approach to development of leadership within organizations and termed this approach leadership development. Leadership development was described as “helping people understand how to relate to others, coordinate their efforts, build commitments, and develop extended social networks by applying self-understanding to social and organizational imperatives” (Day, 2000, p. 586). Leadership development is a shared approach to leader development, with the intent of building the social capital and leadership capacity of all employees within the organization (Day). Van Velsor & McCauley (2004) continued to advance the concept of shared leadership development, describing leadership development as building the leadership capacity of teams, groups, and communities within the organization as well. These notions of leadership development are well-aligned with the theories of
transforming (Burns, 1978) and transformational (Bass, 1985) leadership, in which followers become leaders over time.

Day (2000) also emphasized the need for development to occur within the context of an individual’s work, replacing the “outdated notion that leadership development only occurs in programs held in particular locations” by “helping people learn from their work rather than taking them away from their work to learn” (p. 586). However, he also cautioned that process of embedding leadership development within the organization’s work must done with attention to “intentionality, accountability, and evaluation” (p. 586).

Van Velsor & McCauley’s Leadership Development Model (LDM) provides a structured model to ensure these critical elements are integrated into developmental experiences. As described previously in this chapter, the three essential elements of comprehensive and effective leadership development experiences include 1) assessment, 2) challenge, and 3) support (McCauley & Van Velsor, 2004; McCauley, Moxley, & Van Velsor, 1998).

Leadership Development in Organizations

Leadership development has been linked to positive outcomes for individuals, teams, and organizations (Aguinis & Kraiger, 2009). Selected, relevant meta-analyses and published reports of research are described in this section. The findings are presented in the context of the LDM, with attention to elements of assessment, challenge, and support incorporated into leadership development efforts.

Assessment. As described earlier in this chapter, assessment is a critical element of effective leadership development experiences. One of the most innovative and widely used methods for assessing an individual’s leadership skills is the multi-source or multi-source feedback, commonly called 360-degree feedback (Chappelow, 2004). Multi-
source feedback consists of feedback about the leader’s practice from multiple individuals who supervise, follow, observe, or otherwise interact with the leader. Gathering multiple perspectives of the leader’s practice can result in a more complete and thorough assessment than may be obtained through single sources. Data collected through multi-source feedback are often used for developmental purposes. Individuals commonly receive a summary of the feedback data for their review. Sometimes, the data are reviewed with a facilitator, who helps interpret the results of the assessment and may also guide the individual in creating a personal development plan based on the feedback results (Chappelow).

Smither, London, & Reilly (2005) conducted a meta-analysis on the effectiveness of multi-source feedback as a leadership development strategy. Their analysis included 24 studies in which multi-source feedback was the only intervention used for leadership development. In general, their findings supported the existence of a small but significant positive relationship between multi-source feedback and ratings of the leaders’ practice. In an earlier meta-analysis, Arthur, Bennett, Edens, & Bell (2003) attempted to determine the relationship between needs assessment and training effectiveness. Their findings were equivocal. Some assessment practices resulted in a significant effect, but only when certain outcome measures were used. In some cases, the findings were contradictory to the outcomes that would have been expected. However, due to a limited number of data points available for inclusion in the analysis, the authors recommend caution in interpreting their results.

In a recent review of the research literature (Atwater, Brett & Cherise-Charles, 2007), a number of factors were identified as moderating the effects of multisource
feedback. Major factors identified include: 1) individual differences among leaders, 2) the characteristics of the feedback, and 3) organizational support. Individual leader differences that positively influenced the acceptance of and response to feedback included a positive attitude and few negative emotions, high self-esteem and self-efficacy, extroversion, an internal locus of control, and a learning goal orientation rather than a performance goal orientation. The influence of characteristics of the feedback is less clear. Positive ratings resulted in positive perceptions about the multi-source feedback process. Negative ratings initially resulted in anger and disappointment, but ultimately resulted in higher motivation and goal-setting behaviors. This was especially true when the leader’s self-ratings were significantly higher than those from direct reports. Perhaps most importantly was the influence organizational support had on the acceptance of and response to feedback. Organizational support, primarily provided through training and development opportunities and coaching, resulted in improved leaders’ perceptions of the multi-source feedback process, increased satisfaction with employers, and higher leadership ratings from others (Atwater, Brett, & Cherise-Charles).

Hezlett (2008) also suggests four sets of possible explanations for the small effect on leadership development associated with the multi-source feedback. These include the 1) design of existing studies, 2) psychometrics of instruments used for multi-source feedback, 3), missteps in implementing multi-source feedback, and 4) the role of assessment as only one of multiple elements that are critical to leadership development.

Hezlett (2008) noted the processes researchers used to assess the development of leaders included potential sources of bias, may not have been sensitive enough to identify leaders’ improvements, did not include the use of control groups, and may not have
measured improvement over an optimum time period. The psychometrics of instruments used for multi-source feedback also present challenges to achieving adequate inter-rater reliability, discriminant validity, and criterion-related validity. Hezlett described the process of implementing the use of multi-source feedback in an organization as complex, and notes that improper implementation of the process may result in little or no leadership development. Perhaps most importantly, Hezlett presented the argument that assessment is only one component of a complete leadership development program. Although the usefulness of assessment as the lone element in a leadership development program may be minimal (Arthur et al., 2003; Smither, London, & Reilly, 2005), this finding should be interpreted in the context of the possible explanations described by Hezlett.

Another perspective from which to consider the value of assessment is provided by Collins & Holton (2004). Collins & Holton performed a meta-analysis of managerial training research conducted between 1982 and 2001. The analysis was designed to determine the effectiveness of managerial training, with attention to knowledge, performance, and expertise at the individual, group, and organizational level. A total of 83 studies were included in the analysis. In general, findings from the study support the effectiveness of managerial training. However, not all programs are equally effective. The range of effect sizes ranged widely, with some having a very large, positive effect, others with no effect, and others a large, negative effect. Collins & Holton suggest this wide variation may be due to organizations failing to conduct an adequate needs analysis (if conducted at all) prior to implementing the training. With a proper needs analysis, they conclude managerial training has the potential to have significant effects on a manager’s
knowledge and skills. The meta-analysis was limited by the small available sample of studies available for inclusion in the analysis, particularly on managerial training programs involving “on-the-job assignments, coaching, mentoring, or feedback interventions” (p. 239). Other limitations included small sample sizes, the strength of research designs used, and inappropriate aggregation of subjective outcomes with objective outcomes, as well as system and financial outcomes in research reports.

As can be inferred from Collins & Holton (2004) the effect of assessment should also be considered in light of its role as one component of a complete leadership development program (Atwater, Brett, & Cherise-Charles, 2007; Hezlett). These findings add further support models like the LDM (Van Velsor & McCaley, 2004), in which assessment is used to generate the development of challenge experiences appropriate to the individual’s strengths, weaknesses, and needs (Collins & Holton, 2004). Selected, relevant literature related to leadership development through challenge experiences is summarized in the next section of this chapter.

Challenge. Challenging experiences force leaders to think and respond differently than would be typical in a comfortable situation. Through these experiences, leaders develop new skills, knowledge, and attitudes (McCauley & Van Velsor, 2004). When learning occurs through contextual work experience, it is simultaneously integrated into the leader’s practice and facilitates the leader’s progression from novice status to an expert state (Lord & Hall, 2005). Day (2000) describes the use of job assignments and action learning as two methods for providing leadership development through challenge experiences. Job assignments provided for leadership development should offer challenges well-matched to the assessed strengths, weaknesses, and needs of the leader.
Action learning should also be designed to meet the needs of the individual leader and help with the accomplishment of the organization’s strategic plan. Both of these approaches offer leaders an opportunity to develop through challenges relevant to their personal situation and to their organization.

Twenty-five years ago, Davies & Easterby-Smith (1984) noted that little research had been published regarding the “learning and developmental processes within the context of their normal work” (p. 170). Davies & Easterby-Smith interviewed 60 managers from five different to determine how their past experiences had led to their development as managers. The three companies with the highest percentage of managers describing developmental experiences were those operating in turbulent and rapidly changing business environments. In companies functioning in less dynamic environments, certain managers more frequently reported developmental experiences than others. The managers more frequently reporting developmental experiences were those who functioned in recently established departments and/or in roles that involved interaction with more dynamic entities than those with whom the other departments interacted. Managers also reported having developmental experiences when moving from one job to another job when the new job 1) was completely new or contained a significant, new element, 2) required creating something from the ground, up, 3) required the manager to undergo a major change in perspective, and/or 4) involved heightened responsibility to take action within the organization.

Developmental experiences also occurred for managers who stayed within their current jobs, but received new responsibilities, freedoms, or assignments (Davies & Easterby-Smith, 1984). The common theme among all of these developmental
experiences is the challenge each presents to the managers’ current sets of skills, abilities, and knowledge. Davies & Easterby-Smith recommend encouraging ongoing development through initiatives and opportunities that will sufficiently challenge the manager. Coping with and navigating through developmental challenges might be facilitated by a mentor or tutor, and an organizational culture where development is valued and supported.

McCauley, Ruderman, Ohlott, & Morrow (1994) identified a growing interest in the value and prevalence of job experience as an approach to leadership development. Within one decade of the study by Davies & Easterby-Smith (1984), McCauley et al., (1994) had developed an instrument (the Developmental Challenge Profile, or DCP) to evaluate the development components of managerial jobs. Research on the importance of challenging job situations for managerial development served as a foundation for the instrument. However, the authors note the importance of organizational and personal support for the individual working within a challenging situation, as well as the use of assessment data to provide feedback and guidance throughout the development process. Characteristics determined to contribute to developmental experiences included: 1) job transitions – assuming new responsibilities or direction, and having to prove one’s self, 2) task-related characteristics – having to create change, assume a high level of responsibility, particularly without a high level of authority, and 3) obstacles – challenges arising from a supervisor, the organizational climate, or inadequate personal support. Each of these characteristics was determined to enhance motivation and/or opportunity for the manager to develop. The influence of this framework can be seen in later articles with a focus on managerial learning (see, for example, Van der Sluis, Williams, & Hoeksema, 2004). Later versions of the DCP also included support – support from the
supervisor and colleagues, as a fourth characteristic determined to contribute to developmental experiences.

There is a growing body of literature supporting the use of challenge experiences (through job assignments and action learning) for leadership development. In fact, action learning has been characterized as cutting-edge and an important part of comprehensive, organizational-level leadership development efforts (Day & Harrison, 2007). It should be noted that some research results do not provide clear support for learning through work. This may be the result of challenges related to measurement, theoretical understanding of the relationship between developmental experiences and learning, possible negative effects of challenging job situations (particularly when an accurate needs assessment and adequate support are lacking), and variation in individual responses to challenge experiences (Poell, Van Dam, & Van den Berg, 2004). Perhaps the best support for using challenge experiences for leadership development is its widespread acceptance and use within some of the largest and most successful corporations in the world (McCauley & Van Velsor, 2004; Wick, 1989).

Support. The need for support in the process of receiving feedback and development through challenge has been made clear. A leader’s acceptance of and response to feedback may be significantly better when personal and organizational support are perceived (Atwater, Brett, & Cherise-Charles, 2007; Goodstone & Diamente, 1998). Receiving support throughout challenging developmental assignments can provide a sense of safety and encouragement during times when vulnerability and frustration may be present (McCauley & Van Velsor, 2004; McCauley, 1994), and help prevent negative
outcomes that may occur as a result of the developmental experience (Poell, Van Dam, & Van den Berg, 2004).

Thach (2002) conducted a study designed to determine the impact of executive coaching and multi-source feedback on leadership effectiveness. The sample included executives and managers designated as having high potential. Although no indication of participate rate is provided, a total of 281 individuals participated in the study. After development and pilot testing of a multi-source feedback instrument, the tool was completed by 168 participants, as well as their supervisor, peers, and direct reports. Several coaching sessions were provided over the following six months, the first session to review the multi-source feedback and create a development plan and subsequent sessions to follow up on the participant’s progress and to modify the plan as necessary. Six months after the initial data collection with the multi-source feedback instrument, another set of data was collected with a shortened version of the same instrument. A second phase of the study was carried out with 113 participants, who essentially followed the same process of receiving multi-source feedback and coaching support over the next six months. As with the first group, multi-source feedback was collected at the completion of the program. Participants’ self-ratings increased 52% and 56% for the first and second groups, respectively. Leadership effectiveness ratings from supervisors, peers, and direct reports were even more positive. Ratings increases of 55% and 60% were achieved by the first and second group, respectively. The authors acknowledge several limitations of the study. The most relevant in this review is the difficulty associated with separating the effect of the multi-source feedback and the executive
coach. However, it is encouraging that both strategies used together had such a positive effect.

Using a quasi-experimental approach, Smither, London, Flutt, Vargas, & Kucine (2003) studied the influence of using an executive coach on multi-source feedback ratings. A group of 1361 senior managers received multi-source (self, direct reports, peers, supervisors) feedback, 29.7% (N=404) of whom began working with external executive coach at that time and 70.3% (N=957) of whom did not. Participants in the study were asked to complete a survey designed to collect information about the developmental goals participants had set in response to the feedback. Participants who were coached returned the survey with a response rate of 99% (N=400) and those who were not coached had a response rate of 86.6% (N=829). Participants who were coached received between 5 and 7 hours of time with an executive coach, who reviewed the multi-source feedback and met 2-3 times with the participant over the next year. Near the end of the year-long coaching period, coached participants were asked to complete a survey about their satisfaction with and use of the coach. After the year was completed, another set of multi-source feedback was collected. It was determined that coaching had a small (d=0.17), but statistically significant effect on multi-source feedback ratings. The authors concluded that this effect, although small, may have practical significance for managers. They also identified the potential for better criteria for evaluating the impact of executive coaching, and the possibility of other relevant variables to consider in future research on effective coaching.
Leadership Development in Nursing

Few studies on leadership development in the context of nursing have been published (Cummings et al., 2008). However, those that have been published may give insight regarding the state of the science in this field. Published reports of leadership development in nursing are summarized below. Each is reviewed critically for completeness in relation to the LDM that has been selected as a theoretical framework for this study.

Wolf (1996) evaluated the effectiveness of a 4-day training program for nurse managers. A 20-person advisory panel, a needs assessment, and a literature were used as a basis for the development of the program, which occurred 10 years prior to the study. Situational leadership was used as the theoretical foundation for the course, which included content in managed care and continuous quality improvement. In situational leadership, the leader must consider the maturity of the subordinates and determine which of four primary communication styles will be most effective in influencing the subordinates. Because the leader must select the communication style based on the context of the situation, the ability of the manager to adapt his or her communication style to fit the situation is critical. Immediately prior to and after the program, participants (N=144) used a self-report instrument to determine their primary leadership style, their adaptability, and their leadership effectiveness. The percentage of participants ranking themselves as high in adaptability rose from 20% on the pre-test to 47% on the post-test. Those ranking moderate in adaptability decreased from 68% before the intervention to 47% afterwards. The mean adaptability rating of the sample increased significantly over the course of the program. Further analysis revealed 42% of participants increased their
adaptability scores over the course of the program, while the scores of 56% did not change and 3% decreased. Changes in leadership style were also noted. However, the nature of situational leadership is such that one particular style of leadership is not necessarily more advantageous than another. Changes in leadership effectiveness were not reported. The use of self-report scores in evaluating leadership practices or effectiveness has been widely criticized, as self-report scores are often significantly higher than scores from external raters (i.e. subordinates, peers, supervisors) (Hunter, Bedel-Avers, Mumford, 2007).

For some managers, this program was effective in terms of increasing their self-reported adaptability. For others, there was either no improvement or a decrease in adaptability (Wolf, 1996). A critique of this program, in light of the LDM, would be its apparent lack of an initial needs assessment, elements that challenged participants, and support. It is possible that the content included in the program did not meet the needs of the participants. Without the element of challenge, the participants may not have been stimulated to develop new skills, knowledge, and attitudes. Participants not feeling adequately supported may have felt unsafe or reluctant to adapt new behaviors. Although the findings support the program as somewhat effective, more dramatic results may have been possible with a more comprehensive approach to leadership development.

Wessel-Krejci & Malin (1997) evaluated the effectiveness of a 3-day workshop on the development of leadership competencies in nurses functioning in management positions (N=28). The content of the program was based on a review of the nursing and management literature, as well as the expertise of the researchers. Program content included information on the managed care environment and implications for health care
organizations; leverage of nurses to improve outcomes in a cost-effective manner; systems thinking and overcoming oppressed group behaviors that often become obstacles for nurses; planned change, communication, conflict, and group dynamics. Systems theory and oppressed group behaviors theory were used as the theoretical foundations for the workshop. Participants in the program used a researcher developed instrument to rate their understanding and ability in 12 competencies. The instrument was completed by 80 of the 87 participants (response rate of 92%) before and immediately after the workshop. Significant increases in self-report scores were found in all 12 competencies and on the overall instrument. Three months after the program, the instrument was sent to participants again to determine whether the improvements were sustained. A 29% (N=23) was achieved. Self-reports of understanding and ability were not significantly different between the post-test and the 3-month follow-up.

As a result of this study, participants scored significantly higher on measures of leadership knowledge and ability (Wessel-Krejci & Malin, 1997). However, given potential bias associated with self-reports (Hunter, Bedel-Avers, Mumford, 2007), these results should be interpreted with caution. Wessel-Krejci & Malin do not provide details about the processes used within the 3-day leadership development workshop, precluding critique of the process in context of the LDM.

Cunningham & Kitson (2000a, 2000b) evaluated the effectiveness of an action-research-based, 18-month leadership development program for clinical leaders. The program was based in the context of the leaders’ work and was focused on problems identified by the participants and/or their coaches. Personal development plans, based on multi-source feedback, were developed for each participant. Participants engaged in
workshops, mentoring, networking activities, and group sharing experiences throughout the program. Ongoing feedback from patients and external observers was used to guide the course of the program for each participant. A coach was provided for each participant to evaluate the initial and ongoing feedback, as well as develop and monitor progress within personal development plans. Pre- and post-testing was conducted with the use of the MLQ, and organization of care tool, a satisfaction with nursing scale, and a tool to evaluate team effectiveness. Patient feedback was also incorporated into the evaluation. Self- and follower- ratings on the MLQ increased over the course of the study. Improvements in factors associated with transformational leadership were seen, along with decreases in factors associated with transactional leadership. Organization of care was also significantly improved, and patient feedback was positive.

The results of the intervention were very positive, and were validated by the participant, followers, and patients (Cunningham & Kitson, 2000a, 2000b). In the context of the LDM, this project incorporated the elements of assessment (initial multi-source feedback, ongoing feedback from patients and external observers), challenge (development plans were constructed to be enacted in the work context), and support (group sharing programs, mentorship, and coaching). Given its consistency with the LDM, this program could be described as comprehensive and would be expected to be effective at promoting leadership development.

Werrett, Griffiths, & Clifford (2002) evaluated a 3-day leadership program for nurses and other health professional staff in management positions. The authors do not provide information about the content, evidence basis, or pedagogical processes associated with the program. A researcher developed scale was given before and 3
months after the program. The scale was designed to evaluate the perceived importance of 33 dimensions of leadership and the participants’ use of each dimension in practice. Of the 1,050 nurses participating in the program, 550 (52.4%) completed the pre-test questionnaire and 33% (N=181) of those returned the post-test questionnaire. A principal component analysis was used to identify factors within the larger scale. Five factors were identified, 1) team issues (e.g. team building, addressing conflict), 2) management issues (e.g. priority-setting, time management), 3) staff support and development (e.g. delegation, mentorship of staff), 4) self-development (e.g. identifying personal strengths and weaknesses, using reflective practice), and 5) creative management/assertiveness (e.g. problem-solving, assertiveness in a clinical setting). Perceptions of how important the selected leadership dimensions were did not change significantly between the pre- and post-test. However, the use of four factors of leadership dimensions was significantly higher in the post-test compared to the pre-test. These factors were: team issues, management issues, staff support & development, and creative management/assertiveness.

As a result of the intervention, participants self-rated their use of four factors of leadership dimensions significantly higher 3 months after the completion of the program (Werrett, Griffiths, & Clifford, 2002). However, given potential bias associated with self-reports (Hunter, Bedel-Avers, Mumford, 2007), these results should be interpreted with caution. Werrett, Griffiths, & Clifford do not provide details about the processes used within the 3-day leadership development workshop, precluding critique of the process in context of the LDM.
George et al., (2002) studied the effects of implementing a shared leadership model in nursing practice. Kouzes & Posner’s model of leadership practices was used as a basis for the development of the program. Ford’s motivational systems theory and Bandura’s self-efficacy theory were used as a theoretical basis for the program. A special emphasis was placed on empowerment, accountability, facilitation, negotiation, and systems thinking. The program consisted of four eight-hour modules, which included lecture, videos, small group discussion, and application exercises. At times, small groups worked together, and then reported to the larger group throughout the day. Three studies were completed to evaluate this program. The first study involved a sample of 30 proficient and expert nurses who participated in the shared leadership program, and a control group of 15 nurses who did not. The leadership behaviors (the measurement used was not specified by the authors) of the control and experimental groups were not significantly different before or after participation in the program. The leadership practice scores for the experimental group, however, significantly increased from the pre-test to the post-test. It should be noted that just over one-quarter of participants had a negative change in their leadership practice scores. In the second study, 140 of 412 nurses who participated in the shared leadership program provided self- and observer-ratings of leadership practice (using the LPI) before and 6 months following the program. Self- and observer-ratings of all five leadership practices on the LPI were significantly higher 6 months after the program than they were before the program. In the third study, qualitative data were generated through interviews with 24 nurses. Reports from the nurses suggested the program was valuable for improving their leadership practices and, as a result, improving patient outcomes. Nurses described factors in their workplace that
served as barriers and facilitators to implementing the newly learned leadership practices into their work.

The results of the shared leadership program were positive, and were validated by multiple quantitative sources of information (self- and other-ratings of leadership practice) and qualitative reports from 24 of the participants (George et al., 2002). In the context of the LDM, this project incorporated the elements of challenge (application exercises) and possibly support (work performed in small groups). However, the findings from the first study suggest a substantial negative outcome as a result of the shared leadership program. This could be the result of response shift bias (Rohs & Langone, 1997), or possibly the lack of the assessment element of comprehensive development programs (Collins & Holton, 2004).

Krugman & Smith (2003) designed a leadership development program for charge nurses, whose role included managerial responsibilities. The first year the program was implemented, it consisted of a 2-day training program and two continuing education sessions during the first year. The program was modified in future years to formalize the program and to better prepare nurses for the charge nurse role. The theoretical basis for the program was the leadership theory by Kouzes & Posner. The program content included the role of the charge nurse, leadership theory, effective communication, delegation, conflict resolution, and stress management. The LPI self and observer scales were used to determine changes in leadership performance. Over the course of the study, charge nurses’ self-rating of their leadership performance increased significantly. However, leadership practice ratings from others (staff nurses, in this case) decreased significantly. Although not related to the leadership development program, the authors
offer anecdotal information about the use of better processes to improve unit functioning. Patient satisfaction was tracked to determine how it may have been influenced by the leadership development program, but the tools used to track patient satisfaction changed during the study, precluding any meaningful interpretation of patient satisfaction score changes over time. Another outcome tracked for this study was nurse job satisfaction. Wide variation was seen in staff nurse job satisfaction from year-to-year, with significant increases in some years and significant decreases in other years. The authors describe several significant factors external to the study that may confound the interpretation of staff job satisfaction scores. However, charge nurses’ scores increased on several aspects of a job satisfaction scale, satisfaction with schedule, praise and recognition, and control and responsibility.

The outcome data collected in this study (Krugman & Smith, 2003) are suspect and should be interpreted with caution. The data presented on unit improvements are purely anecdotal. The patient satisfaction data were unusable due to a change in the vendor providing this tracking service, and the staff satisfaction data are confounded by significant factors external to the study. If the leadership practices data are reliable, it is concerning that charge nurses perceived improvements in their leadership practices, while the individuals they “led” had the opposite impression. The Kouzes and Posner (2007) model of leadership includes leadership practices such as modeling, inspiring, sharing a vision, encouraging, and challenging established processes. Who better than followers to determine whether they feel encouraged or inspired, or that a vision has been shared with them?
It is not clear that the results of this leadership program for charge nurses (Krugman & Smith, 2003) were positive, and it is possible that the results were negative. In the context of the LDM, it is not clear that this program incorporated any the elements of assessment, challenge, or support. The lack of a comprehensive leadership development program may help explain the results obtained.

Tourangeau (2003) implemented a leadership development intervention to for nurse managers. The intervention consisted of a 5-day residency, followed by a follow-up session three months later. An advisory team developed a theoretical framework for this intervention. The framework incorporated the concepts of nursing practice, the business of healthcare, leadership practices, and the use of self. Content included in the intervention included leadership theory, the profession of nursing, and the business of healthcare. During the intervention, participants had theoretical and experiential opportunities to develop knowledge and skills in leadership practices. They often worked in dyads, with one experienced and one aspiring nurse leader. Opportunities for self-reflection were also incorporated into the intervention.

Tourangeau et al., (2003) reported the evaluation results of the intervention. The LPI (self- and observer versions) was used for pre-testing prior to the intervention, and post-testing immediately after the follow-up session 3 months later. Dyad partners, supervisors, and participant-selected peers completed the LPI-observer scales. Leader self-reports of leadership practices did not improve significantly between the pre- and post-test. Leadership practices, as rated by the dyad partner, increased significantly on two of the five LPI subscales (challenging the process and inspiring a shared vision). Supervisor ratings of leadership practices also reflected significant increases on these two
subscales. Peer ratings of leadership practices increased significantly on all five LPI subscales.

The results of this leadership development intervention were positive, with participants’ improvement in leadership practices noted by dyad partners, supervisors, and peers (Tourangeau et al., 2003). However, the participants’ ratings of themselves did not reflect a significant improvement in leadership practices. Again, this may be due to response shift bias (Rohs & Langone, 1997) or the absence of an effect attributable to the intervention. In the context of the LDM, this project incorporated the elements of challenge (experiential opportunities) and support (dyad pairs and opportunities for coaching). The use of an assessment to guide the challenge element of the program was not made explicit by the authors, and may have improved the already positive results of the program.

In general, a growing body of research literature supports the effectiveness of leadership development programs for nurse managers (Cummings et al., 2008). Current practices in measurement and research design in this area may be allowing the actual benefits (or detriments) of these programs to remain undiscovered. More theoretical development and research are needed to advance the leadership development practices for nurse managers. The LDM represents one possible framework for leadership development programs that are comprehensive and effective.

*Evaluation of Leadership Development*

*History of Leadership Development*

*Evaluation*

One of the most influential moments in the field of corporate training was the introduction of Kirkpatrick’s four-level model of training (Kaufman & Keller, 1994). In
an attempt to contribute structure to the relatively ambiguous concept of evaluation, Kirkpatrick (1959) introduced a model for evaluating training programs. The first of Kirkpatrick’s levels is the affective outcome of the program. Second, is the effect the program has had on the participant’s beliefs. Third is the program’s effect on the participant’s behaviors. Fourth is the effect of the program on systems-level outcomes. Although the model has been criticized (Phillips, 1998), it continues to be widely accepted within the field of human resource development (Moseley & Larson, 1994; Phillips, 1998).

More recent iterations of the model have included a fifth level, return on investment (ROI). Phillips (1997) added this level to make the model more complete, relevant, and useful for modern organizations. This new five-level model has gained in popularity since its introduction to the field (Phillips, 1998).

*Leadership Development Evaluation in Organizations*

Arthur et al. (2003) conducted a meta-analysis to determine the design and evaluation features of organizational training initiatives. Kirkpatrick’s (1998) framework was used to categorize the level of evaluation being conducted within the training initiatives. Of the studies included in the analysis, over 60% targeted their evaluation at the reaction and/or learning level. Less than 31% of all the evaluations studied were designed to generate any information about actual behavioral changes associated with the training, and less than 7% evaluated how the training influenced organizational performance. As dire as these numbers appear, the actual evaluations designed to target behavioral and outcome measures are likely to be even smaller. A national study indicated that “72% of the organizations surveyed used reaction measures, compared with
32%, 19%, and 7% for learning, behavioral, and outcome results, respectively” (Arthur et al., p. 241).

Leadership Development Evaluation in Nursing

Research on the state of evaluations for leadership development programs is severely lacking. Of the seven nurse manager focused leadership development programs reviewed earlier in this chapter, three (43%) included an evaluation of learning outcomes, five (71%) involved evaluating behavioral outcomes, and two (29%) included an evaluation of organizational outcomes. While an initial glance at these numbers may be encouraging, it is important to note that weak designs and measurement strategies used in these evaluations may not have produced the quality of data that would normally be desired in an evaluation.

Limitations of Current Research

Current research in leadership development for front-line nurse managers does not offer a clear understanding of what is being taught in leadership development programs, how the content is being taught, or what methods are being used for evaluation. The research does, however, clearly show that improvements can be made in all three of these areas. This research study was designed to more accurately describe current practices in leadership development from front-line nurse managers so more systematic efforts can be made to study and improve leadership development practices.
CHAPTER III

METHODOLOGY

The historical, theoretical, and research literature reviewed in the previous chapter supports the need for effective leadership development programs for front-line nurse managers. It is also clear that little is known about the current leadership development programs offered in acute care hospitals in the United States. The objective of this study was to generate descriptive data to illuminate current practices of leadership development for front-line nurse managers and serve as a foundation for future research in the field.

This chapter provides information about the methodology used for this study. The information presented in this chapter includes the research questions, research design, research methods, ethical considerations, data collection procedures, and procedures for data analysis. The concepts of reliability and validity are also addressed. The chapter concludes with a brief summary of the proposed research.

Research Questions

The general research questions for this study were:

Q1 What are the current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States?

Q2 What differences exist between leadership development programs offered to front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?
What characteristics of Magnet and non-Magnet hospitals influence the content, pedagogical practices, and evaluation methods incorporated into leadership development programs offered to front-line nurse managers?

Research Design

A non-experimental, quantitative, descriptive, comparative, correlational design was selected for this study. The descriptive component of this study was designed to obtain detailed information regarding the current practices in leadership development in Magnet and non-Magnet hospitals. The comparative component of this study was designed to explore differences in leadership development practices in Magnet hospitals as compared to non-Magnet hospitals. The correlational component of this study was designed to evaluate the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals.

Setting

This study was conducted nationally, using the telephone to establish initial contact with hospitals, electronic mail for the distribution of a web-based survey, and a web-browser to gather publically available hospital demographic data. The selection of a national setting was important for this study, particularly for the descriptive component. A well-selected national sample provided the most comprehensive description of current practices in leadership development, and subsequently, the most generalizable findings. A sample drawn only from selected regions of the nation would have resulted in findings only generalizable to the region(s) selected.

Population

The population for this study was formal leadership development programs offered to front-line nurse managers employed in Magnet hospitals and comparable non-
Magnet hospitals. This particular population was selected because transformational leadership is one of five key components characterizing Magnet hospitals (American Nurses Credentialing Center [ANCC], 2008). Because of the importance placed on transformational leadership in these hospitals, it was anticipated that initiatives to promote transformational leadership among front-line nurse managers would be prevalent. Little information existed regarding the current leadership development practices in non-Magnet hospitals, which further supported the importance of this study. Informal leadership development programs were excluded from this study because the characteristics and availability of these opportunities may have varied widely depending on contextual factors and individual circumstances.

**Sampling Procedure**

A stratified random sampling technique was used to determine which Magnet-designated hospitals to contact. This technique was selected for its ability to generate a sample in which all sizes of Magnet hospitals would be represented in proportion to their prevalence in the population (Houser, 2008). A complete listing of Magnet hospitals was collected via the ANCC (2009) website. Each Magnet hospital’s bed size was collected through the American Hospital Directory (2010) website. The bed size ranges used by the American Hospital Association were used to stratify the listing of Magnet hospitals. The proportion of Magnet hospitals falling within each bed size range was determined. A computer-generated list of random numbers was used to guide the selection of a proportionate number of hospitals from each strata. Bed size was chosen as the characteristic on which stratification would be based because of its presumed influence.
on leadership development practices (i.e. the scale of large hospitals may allow greater resource allocation toward leadership development programs).

For each Magnet hospital included in the sample, it was planned that a matched, non-Magnet hospital was selected. Matched hospitals were selected based on having characteristics similar to the randomly-selected Magnet hospitals. The primary characteristics used to make the matching determination were bed size and geographical region. These characteristics were selected as the primary matching criteria because of their presumed influence on leadership development practices. When multiple non-Magnet hospitals with similar bed size within the same geographic region existed, control status and status as a teaching or non-teaching hospital were used, respectively, to determine which non-Magnet hospital was sampled. The purpose of matching based on these criteria was to control for several potentially extraneous variables, allowing more precise study of the effect of Magnet and non-Magnet status on leadership development practices.

A number of different procedures are available for determining the appropriate sample size for a particular study (see, for example, Bartlett, Kortlik, & Higgins, 2001; Cohen, 1992; Green, 1991; Maxwell, Kelly, & Rausch, 2008). Selecting the appropriate formula to determine sample size requires the consideration of multiple factors, including the level of confidence desired (α=0.01, 0.05, 0.10, etc.), the statistical analyses being performed (t-test, ANOVA, MANOVA, multiple regression, etc.), the purpose of determining the sample size (ensuring sufficient power and confidence in the findings, ensuring accuracy in estimating certain parameters of the population, etc.). The size of the population, the number and type of variables being studied, and the variance of the
variable of interest within the target population may also require consideration. Each of
these factors can result in a substantial change in the needed sample size (Bartlett,
Kortlik, & Higgins; Cohen; Green; Maxwell, Kelly, & Rausch).

Sample size determination for a descriptive study involves setting an acceptable
margin of error for the mean, within a given confidence interval (Bartlett, Kotrlik, &
Higgins, 2001). Cohen’s (1977) formula for determining sample size includes the
researcher-set level of $\alpha$ (0.05, with a corresponding $t$-value of 1.96 for this study), the
acceptable margin of error for the mean (3%, by Cochran’s convention for continuous
variables), and the estimated variance deviation for the selected scale (estimated by
dividing the range of the scale by six standard deviations, representing approximately
98% of the possible scores on the scale). In this study, the largest range for any scale was
10. This value was used for sample size determination to provide the most conservative
estimate of the needed sample size, ensuring similar or even smaller margins of errors for
all of the other scales. The calculation is:

$$n_0 = \frac{(t)^2 \cdot (s)^2}{(d)^2} = \frac{(1.96)^2 \cdot (2)^2}{(10 \cdot 0.03)^2} = 51.22 \text{ Hospitals}$$

When the calculated sample size is greater than 5% of the total population, a correction
formula should be used (Cochran, 1977). In this case, the calculated sample size was
nearly 16% of the total Magnet hospital population ($51 \div 320 \approx 16\%$). The calculation
using the correction formula is:

$$n = n_0 = \frac{51}{1 + n_0} \cdot \frac{1}{\text{Population}} = \frac{51}{1 + 51} \cdot \frac{1}{320} = 44 \text{ Hospitals}$$
The comparative component of this study involved using t-tests to compare mean scores on each scale and subscale of interest for Magnet and non-Magnet hospitals. Using Cohen’s (1992) convention for a medium effect size (0.50) and \( \alpha=0.05 \), the minimum required sample size to attain adequate power was \( n=64 \) for each group.

Sample size determination in a study involving regression can be particularly difficult if little is known about the target population. Although conventions are not recommended for use when the population is well understood, it may be necessary in some situations (Green, 1991). A power analysis is often conducted to ensure the sample size is adequate to identify a difference in the sample when a difference actually exists. Cohen’s (1992) conventions for psychological and educational research include setting the desired power at 0.80 (representing an 80% chance that a difference would be detected, provided a difference exists), and the \( \alpha \) at 0.05 (representing a 5% chance that a relationship will be found when no relationship exists). For multiple regressions, Cohen set the medium effect size at \( f^2 = 0.15 \). Given these numbers and considering the maximum number of independent variables that would be used in any given multiple regression in this study (8), a sample size of 107 Magnet hospitals and 107 non-Magnet hospitals was determined to be sufficient for adequate power. The overall sample size target of 214 would have allowed adequate power if multiple regressions were performed within the Magnet hospital group, within the non-Magnet hospital group, and with the entire data set.

Ethical Considerations

This study was designed to provide a description of the practices used in leadership development programs for front-line nurse managers, make comparisons
between leadership development practices in Magnet and non-Magnet hospitals, and explore relationships between hospital characteristics and the leadership development practices in Magnet and non-Magnet hospitals. Programs, not individuals, were the focus of this research. Thus, the individuals providing information about these programs were not asked or expected to reveal any information that was personal or sensitive. These individuals were asked, however, to provide up to 10 minutes of their time to complete the survey. One step taken to minimize this imposition of time was providing the opportunity to respond online at a time that was convenient for them.

Another ethical consideration was the possibility that this research would reveal practices in leadership development that are inconsistent with practices recommended in the research literature. It was possible that making this information public would create a negative perception of current practices in leadership development practices for front-line nurse managers. However, it was also possible that current practices in leadership development were well-aligned with recommendations in published research. Regardless, procedures were in place (see section on Data Management, below) to prevent tracing any of the data collected to the associated leadership development program. Institutional Review Board approval for this study was obtained through the University of Northern Colorado’s Sponsored Programs and Academic Research Center.

Instrumentation

No specific instruments could be found in the literature to assess the current practices in leadership development for front-line nurse managers. Thus, a survey was developed by the researcher to collect and generate relevant information regarding these practices. Several sources were used to guide the development of the quantitative
questions included in the survey. Questions pertaining to the content of leadership development programs were based on the Full Range of Leadership Model (Avolio, 1999; Bass, 1990, 2008), and its associated research instrument, the Multi-Factor Leadership Questionnaire (MLQ). These questions can be found on the first page of the survey (Appendix A). Questions 1-3 were based on the concept of contingent reward. Questions 4-6 are based on the concept of idealized influence. Questions 7-9 were based on the concept of inspirational motivation. Questions 10-12 were based on the concept of intellectual stimulation. Questions 13-15 were based on the concept of individual consideration.

Questions regarding pedagogical practices were based on recommendations made by Day (2000) in a meta-analysis of leadership development practices. These questions can be found on the second page of the survey. Questions 1-3 pertained to the assessment component of a leadership development experience. Questions 4-5 pertained to the challenge component of a leadership development experience. Questions 6-8 pertained to the support component of a leadership development experience.

Questions pertaining to evaluation methods were developed from a theoretical model developed by Phillips & Phillips (2007), which expanded on a seminal publication on evaluating training programs by Kirkpatrick (1959). These questions can be found on the third page of the survey. Questions 1 and 2 referred to the reaction level of evaluation. Questions 3 and 4 referred to the learning level of evaluation. Questions 5 and 6 referred to the behavior change level of evaluation. Questions 7 and 8 referred to the business results level of evaluation. Question 9 referred to the return on investment level of evaluation.
Participants were asked to respond to each item using a Likert-type scale with four possible response options. Although using so few response options creates a relatively coarse scale (Aguinis, Pierce, & Culpepper, 2009), the somewhat exploratory nature of this study precludes the use of an instrument with finer levels of discrimination. Possible responses for each item were, 1 = Rarely or Never, 2 = Sometimes, 3 = Usually, and 4 = Frequently or Always. In research on attitudes and preferences, the practice of excluding the neutral response option has received some criticism. Excluding the neutral response disallows respondents from expressing their true attitudes (potentially including indifference or ambivalence (Nowlis, Kahn, & Dahr, 2002). Whereas the focus of this study was actual practices in leadership development (rather than attitudes or preference), it was felt that this criticism would not apply. Also, it has been suggested that the neutral response option can be tempting for its convenience. Rather than considering the question thoroughly, a respondent may simply choose the neutral response option (Nowlis, Kahn, & Dahr, 2002). The use of a four-point scale was also chosen in order to maintain consistency with the FRL instrument (Avolio, 1999; Bass, 1996, 2008) that was used to guide the development of the instrument for this study.

Open ended questions were included at the end of each section of the survey. These questions were designed to collect additional information about leadership development practices. It was anticipated that the survey questions would not represent the full scale of possible practices currently provided for the leadership development of front-line nurse managers. Responses to these questions provided supplementary data for this study, and will guide future revision of the survey for future studies.
In order to learn more about the hospital characteristics that may influence practices in leadership development, participants were asked to indicate whether there was a leadership development specialist in their organization. Those answering in the affirmative were also asked to indicate the experiential and educational background of the leadership development specialist. It was anticipated that the some hospitals may chosen to employ an individual with specific responsibilities related to facilitating leadership development, and that the experiential and educational background of that individual could potentially influence the leadership development practices within the organization.

Procedures

Data Collection

Data collected for this study were primarily quantitative in nature. The data collection methods chosen for this study were based on Dillman’s (2007) Tailored Design Method (TDM). The TDM was designed to reduce sampling, coverage, measurement, and nonresponse error associated with survey methods. This design’s evidence-based approach to improving response rate is particularly important for this study, in which the total population of Magnet hospitals was relatively small (N=320), yet the required sample size for adequate power was relatively large (n=107, or approximately 1/3 of the total population). While the need to minimize the potential for error is important for any study, the presence of a descriptive component within this study made it particularly important.

Initial contact with each organization occurred through telephone. The researcher attempted to initiate contact with the individual directly responsible for administering the leadership development opportunities provided to front-line nurse managers. Once
contact was initiated, the researcher verified that the individual contacted was the most appropriate person available to answer questions about the leadership development offerings. During this conversation, the researcher obtained an appropriate electronic mailing address for the individual contacted. Per the TDM, a brief and personalized prenotice regarding the forthcoming, web-based survey was given. This telephone conversation was made in lieu of a prenotice letter.

Within three days of the prenotice contact, an electronic mail message was sent to the contacted individual with the appropriate cover letter, and a link to the survey. One week after the survey link has been sent, a second message was sent via e-mail to the individual. This second message included a statement informing the individual that a survey had been sent to them during the previous week, thanking them for completing it, and reminding them to complete and return the survey if they had not yet done so. The second message also included the appropriate cover letter and a link to the survey.

Individuals who did not respond to the second message within one week received a third message, reminding them how important it was for them to complete and return the survey before the end of the data collection period. As with the previous messages, the third message included the appropriate cover letter and a link to the survey. Upon completion and submission of the survey, all individuals saw a brief message on their computer screen with an expression of gratitude for their time and assistance with the study.

The research data on leadership development, available through research in the fields of business, political science, organization science, personnel development, and psychology, were used to guide the creation of a survey to determine current leadership
development practices in nursing. As described in the section on instrumentation, the survey was composed of questions focused on the specific content, pedagogical practices, and evaluation methods incorporated into leadership development programs for front-line nurse managers. Open-ended questions were also used to generate additional information regarding current practices in leadership development. This information supplemented the quantitative data collected, and will also be used to guide revisions of the survey for future studies.

The hospital demographic data used for this study were collected from publically accessible websites. The primary websites used were the ANCC (2009) website, which includes a listing of all the current Magnet hospitals. The American Hospital Directory (2010) was used as a source of hospital demographic data. This website includes hospital demographic information gathered from federal and non-governmental sources on over 6,000 hospitals in the United States. It also includes web addresses and telephone contact information for many of the hospitals. Individual hospital websites were also accessed for additional information, particularly when the needed information was unavailable through the American Hospital Directory.

Data Management

Data collected for this study were collected through publically available sources (i.e. websites) and a survey distributed to individuals. The data collected through publically available sources were compiled in a spreadsheet file. As survey data were collected, they were exported into the same spreadsheet file. To help protect the identity of the organizations associated with the leadership development programs being studied, a unique code was generated for each organization. Any data that would link the
information to any specific organization were deleted or otherwise destroyed. Only the transcribed data, without unique, potentially identifying information, were shared with the remainder of the research team.

Data Analysis

The design for this study involved a description of current leadership development practices for front-line nurse managers in Magnet and non-Magnet hospitals, a comparison of these practices in Magnet and non-Magnet hospitals, and an evaluation of correlational relationships between hospital demographics and leadership development practices in Magnet and non-Magnet hospitals. For the descriptive component of this study, summary statistics, such as frequencies, percentages, and means were calculated to provide descriptive information about the prevalence and distribution specific practices in leadership development for front-line nurse managers. The comparative component of this study involved using t-tests to compare mean scores on each scale and subscale of interest for Magnet and non-Magnet hospitals.

Bivariate linear regressions were chosen for the correlational component of this study. Regressions were used systematically to explore potential relationships between each of the independent variables (both categorical and continuous) and each of the dependent variables. This allowed patterns in the correlations to be identified, which was important in an exploratory study such as this. Data collected through the open-ended questions in the survey were thoroughly reviewed to identify any potential trends and patterns. These data were used as a supplement to the quantitative data collected, helping guide interpretation of the findings. These data will also be used to guide revisions of the survey for future studies.
Potential Limitations

Validity

As with any study, threats to the internal and external validity of this study did exist. However, some were limited or would not be expected to have significant effects as a result of the study design being used. Possible threats to internal validity typically include historical effects, maturation effects, testing effects, instrumentation effects, treatment and multiple treatment effects, selection effects, and experimental mortality (Houser, 2008). The relatively brief time frame over which data collection occurred should have minimized historical and maturation effects, as well as experimental mortality. Because this study did not include a treatment, it was not anticipated that any treatment effect would occur. The single administration of the survey for each leadership development program was expected to limit testing effects. The stratified random sampling method used for this study should have reduced selection effects as well. The use of a web-based survey, rather than a telephone or face-to-face survey, should have also helped reduce any instrumentation effect.

Possible threats to the external validity of this study included selection effects, time effects, the novelty effect, and an experimenter effect (Houser, 2008). The simple random sampling strategy used for this study should have minimized selection effects. The relatively brief time frame over which data collection occurred was expected to reduce time effects. Because the survey was designed to evaluate a cross-section of
current leadership development practices, the novelty effect was not a likely threat to the internal validity of this project. There was a potential for an experimenter effect in this study, particularly if the individuals surveyed had concerns about the adequacy of their programs, felt threatened, or were otherwise motivated to respond inaccurately to the researcher’s questions. This threat was minimized by ensuring the cover letter clarified that procedures were in place to protect the participant’s privacy and that of the institution.

Several experts in nursing staff development reviewed the survey for face validity and clarity of the items. Comments from these reviews generally supported the face validity and clarity of the instrument. The expert reviewers also provided some helpful suggestions for strengthening and clarifying the language used for several items. These suggestions were incorporated into the version of the instrument that was used for this study.

The data collected through open-ended questions in the survey were also expected to add to, clarify, and possibly validate the quantitative results. The use of this data was expected to enhance the overall validity of the research findings (Houser, 2008), and will serve as a foundation for future revisions of the survey.

Reliability

The reliability of the survey being used for this study had not previously been established. Current theoretical and empirical literature was used as a foundation for the survey’s design. This theoretical and empirical grounding should have contributed to the overall reliability of the survey. As was described previously, the leadership development literature continues to have limitations. It is possible that these limitations extended into
the survey and threatened its reliability. It was anticipated that the data collected through open-ended questions would also give insight regarding the reliability of the survey.

Summary

The objective of this study was to generate descriptive data to illuminate current practices of leadership development for front-line nurse managers and serve as a foundation for future research in the field. A non-experimental, quantitative descriptive, comparative, correlational design was selected for this study. Summary statistics were used to describe current practices in leadership development for front-line nurse managers. The comparative component of this study involved using t-tests to compare mean scores on each scale and subscale of interest for Magnet and non-Magnet hospitals. Bivariate linear regressions were used to systematically explore relationships between hospital characteristics and the leadership development practices in Magnet and non-Magnet hospitals.
CHAPTER IV

RESULTS

Although nursing leadership has been identified as a critical component of providing affordable, accessible, and high-quality healthcare, relatively little is known about current efforts to promote leadership development for front-line nurse managers in the hospital setting. This non-experimental, quantitative descriptive, comparative, correlational design was designed to detail information regarding the current practices in leadership development in Magnet and non-Magnet hospitals, explore differences in leadership development practices in Magnet hospitals as compared to non-Magnet hospitals, and evaluate the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals.

Reported in this chapter are the research questions, a description of the sample, including demographics of participating hospitals, descriptive data regarding current practices in leadership development programs (quantitative and open-ended questions), comparative data regarding differences between the two samples, and correlational data illustrating the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals.
Research Questions

The research questions for this study were:

Q1 What are the current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States?

Q2 What differences exist between leadership development programs offered to front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

Q3 What characteristics of Magnet and non-Magnet hospitals influence the content, pedagogical practices, and evaluation methods incorporated into leadership development programs offered to front-line nurse managers?

Demographics

In general, the participating hospitals represented a range of diversity in bed size, total patient revenue, control structures, regions of the United States, teaching hospital status, affiliation with a hospital system, urban versus rural status, and the presence of a leadership development specialist. Overall, participating hospitals were typically non-profit corporations governed by a voluntary or church-based board (n=121, 71.6% and n = 18, 11.6% respectively), situated in an urban setting (n=143, 92.3%), and affiliated with a hospital system (n=97, 62.6%). The majority (n=108, 69.7%) were designated as teaching hospitals. Participating hospitals were most commonly located in the Middle Atlantic or East North Central U.S. Census Divisions (n=34, 21.9% and n=32, 20.6% respectively). The average bed size was 386 beds with an average of $1.18 billion in annual patient revenue. The majority of participating hospitals employed a leadership development specialist (n =121, 73.8%). The leadership development specialists had a variety of educational and experiential backgrounds (see Table 1).
Table 1

*Leadership Development Specialist’s Background*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree in Nursing</td>
<td>42</td>
<td>34.71</td>
</tr>
<tr>
<td>Degree in Human Resources</td>
<td>30</td>
<td>26.44</td>
</tr>
<tr>
<td>Degree in Organizational</td>
<td>69</td>
<td>57.02</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience as a Nurse Leader</td>
<td>41</td>
<td>33.88</td>
</tr>
<tr>
<td>Experience in Human Resources</td>
<td>49</td>
<td>40.5</td>
</tr>
<tr>
<td>Experience in Organizational</td>
<td>103</td>
<td>85.12</td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Because the educational and experiential backgrounds of some leadership development specialists span multiple categories, the cumulative percentage of these frequencies is greater than 100%.

Demographic characteristics specific to the Magnet and non-Magnet samples are summarized in Tables 2 and 3 respectively.
Table 2

*Demographics of Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Bed Size (n=109)</th>
<th>Total Patient Revenue (n=108)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong> 410.52</td>
<td><strong>Mean</strong> $1.35 billion</td>
</tr>
<tr>
<td><strong>St Dev</strong> 253.18</td>
<td><strong>St Dev</strong> 1.20 billion</td>
</tr>
<tr>
<td><strong>Median</strong> 368</td>
<td><strong>Median</strong> $1.04 billion</td>
</tr>
<tr>
<td><strong>Range</strong> 60-1000+</td>
<td><strong>Range</strong> $0.11 billion-6 billion+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control / Governance (n=109)</th>
<th>Region (n=109)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Non-Profit, Church</td>
<td>New England</td>
<td>3</td>
</tr>
<tr>
<td>Voluntary Non-Profit, Other</td>
<td>Middle Atlantic</td>
<td>27</td>
</tr>
<tr>
<td>Government Hospital District</td>
<td>East North Central</td>
<td>24</td>
</tr>
<tr>
<td>Governmental, State</td>
<td>West North Central</td>
<td>10</td>
</tr>
<tr>
<td>Governmental, County</td>
<td>South Atlantic</td>
<td>16</td>
</tr>
<tr>
<td>Governmental, City</td>
<td>East South Central</td>
<td>1</td>
</tr>
<tr>
<td>Governmental, Other</td>
<td>West South Central</td>
<td>11</td>
</tr>
<tr>
<td>Proprietary, Corporation</td>
<td>Mountain</td>
<td>9</td>
</tr>
<tr>
<td>Proprietary, Partnership</td>
<td>Pacific</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part of a Hospital System (n=109)</th>
<th>Teaching Hospital (n=109)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 71</td>
<td>Yes 82</td>
</tr>
<tr>
<td>No 38</td>
<td>No 27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural (n=109)</th>
<th>Leadership Development Specialist (n=118)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 6</td>
<td>Yes 92</td>
</tr>
<tr>
<td>No 103</td>
<td>No 26</td>
</tr>
</tbody>
</table>

97
Table 3

Demographics of non-Magnet Hospital Sample

<table>
<thead>
<tr>
<th>Bed Size (n=46)</th>
<th>Total Patient Revenue (n=46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean 328.37</td>
<td>Mean $0.81 billion</td>
</tr>
<tr>
<td>St Dev 199.69</td>
<td>St Dev 0.92 billion</td>
</tr>
<tr>
<td>Median 274</td>
<td>Median $0.5 billion</td>
</tr>
<tr>
<td>Range 25-895</td>
<td>Range $4.17 million-5 billion+</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control / Governance (n=46)</th>
<th>Region (n=46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary Non-Profit, Church 4 8.7</td>
<td>New England 3 6.5</td>
</tr>
<tr>
<td>Voluntary Non-Profit, Other 31 67.4</td>
<td>Middle Atlantic 7 15.2</td>
</tr>
<tr>
<td>Government Hospital District 4 8.7</td>
<td>East North Central 8 17.4</td>
</tr>
<tr>
<td>Governmental, State 1 2.2</td>
<td>West North Central 7 15.2</td>
</tr>
<tr>
<td>Governmental, County 2 4.3</td>
<td>South Atlantic 9 19.6</td>
</tr>
<tr>
<td>Governmental, City 0 0</td>
<td>East South Central 1 2.2</td>
</tr>
<tr>
<td>Governmental, Other 1 2.2</td>
<td>West South Central 5 10.9</td>
</tr>
<tr>
<td>Proprietary, Corporation 1 2.2</td>
<td>Mountain 2 4.3</td>
</tr>
<tr>
<td>Proprietary, Partnership 1 2.2</td>
<td>Pacific 4 8.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part of a Hospital System (n=46)</th>
<th>Teaching Hospital (n=46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 26 56.5</td>
<td>Yes 26 56.5</td>
</tr>
<tr>
<td>No 20 43.5</td>
<td>No 20 43.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural (n=46)</th>
<th>Leadership Development Specialist (n=46)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 6 13.0</td>
<td>Yes 29 63.0</td>
</tr>
<tr>
<td>No 40 87.0</td>
<td>No 17 37.0</td>
</tr>
</tbody>
</table>

Instrument

No specific instruments could be found in the literature to assess the current practices in leadership development for front-line nurse managers. Thus, a survey was developed by the researcher to collect and generate relevant information regarding these practices. Several sources were used to guide the development of the quantitative questions included in the survey.

Questions pertaining to the content of leadership development programs were based on the Full Range of Leadership Model (Avolio, 1999; Bass, 1990, 2008), and its associated research instrument, the Multi-Factor Leadership Questionnaire (MLQ). These
questions formed the Content scale of the instrument, which includes five subscales, 1) Contingent Reward, 2) Idealized Influence, 3) Inspirational Motivation, 4) Intellectual Stimulation, and 5) Individualized Consideration.

Questions regarding pedagogical practices were based on the work of scholars at the Center for Creative Leadership (McCauley, Moxley, & Van Velsor, 1998; McCauley & Van Velsor, 2004), as well as recommendations made by Day (2000) in a meta-analysis of leadership development practices. These questions formed the Pedagogy scale of the instrument, which includes three subscales, 1) Assessment, 2) Challenge, and 3) Support.

Questions pertaining to evaluation methods were developed from a theoretical model developed by Phillips & Phillips (2007), which expanded on a seminal publication on evaluating training programs by Kirkpatrick (1959). These questions formed the Evaluation scale of the instrument, which includes five subscales, 1) Evaluation of Reaction / Planned Response, 2) Evaluation of Learning, 3) Evaluation of Behavior Change, 4) Evaluation of Business Results, and 5) Evaluation of Return on Investment.

Reliability coefficients were calculated for each of the scales and corresponding subscales to evaluate their reliability, or internal consistency (see Table 4). Cronbach’s alpha values greater than 0.7 indicate moderate reliability, and values greater than 0.9 indicate strong reliability (Houser, 2008). Calculated values of Cronbach’s alpha for the Content, Pedagogy, and Evaluation scales ranged from 0.88-0.95. Reliability scores for the subscales ranged in consistency from 0.72-0.91, indicating that all of the scales and subscales have moderate to strong reliability. A reliability coefficient was not calculated for the Return on Investment subscale because it was comprised of only one item.
Table 4

**Internal Consistency**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>Subscale</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Content</td>
<td>0.95</td>
<td>Contingent Reward 0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Idealized Influence 0.82</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inspirational Motivation 0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Intellectual Stimulation 0.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individualized Consideration 0.87</td>
<td></td>
</tr>
<tr>
<td>Pedagogy</td>
<td>0.88</td>
<td>Assessment 0.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Challenge 0.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support 0.88</td>
<td></td>
</tr>
<tr>
<td>Evaluation</td>
<td>0.90</td>
<td>Reaction/Response 0.91</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning 0.80</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Behavior Change 0.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Business Results 0.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Return on Investment N/A</td>
<td></td>
</tr>
</tbody>
</table>

**Current Practices in Magnet and Non-Magnet Hospitals**

The first research question for this study was, “What are the current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States?” Leadership development practices were operationally defined as the content, pedagogical practices, and evaluation methods associated with formal leadership development opportunities offered to front-line nurse managers. This operational definition lends itself to the generation of six subquestions:

1.1 What content is included in formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?

1.2 What content is included in formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?
1.3 What pedagogical practices are used in formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?

1.4 What pedagogical practices are used in formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?

1.5 What methods are used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?

1.6 What methods are used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?

As described previously, survey items related to content, pedagogy, and evaluation methods were created. Each item represented a specific leadership development practice. Respondents were asked to indicate how frequently the practice was incorporated into the formal leadership development for nurse managers in the organization with which they were affiliated. Possible responses for each item were, 1 = Rarely or Never, 2 = Sometimes, 3 = Usually, and 4 = Frequently or Always.

In order to more precisely describe the leadership development practices in Magnet and non-Magnet hospitals, the general sample was divided into smaller samples, one comprised of Magnet hospitals and the other comprised of non-Magnet hospitals. A mean score and standard deviation was calculated for each item, each subscale, and scale. The results of these analyses, depicted in Tables 5-10, are discussed in the following sections.

Open ended questions were included at the end of each section of the survey to collect additional information about leadership development practices, provide supplementary data for this study, and guide revision of the survey for future studies.
Responses to the open-ended questions were reviewed and categorized according to patterns identified by the researcher. These results are described in the following sections.

Content

Transformational leadership is the most studied and empirically supported approach to leadership for nurse managers and is a key characteristic of Magnet-designated hospitals. Thus, the survey items for this study were created to evaluate how frequently the core elements of transformational leadership, as defined in the FRL were included in formal leadership development opportunities for front-line nurse managers. Survey items were grouped into five subscales, each representing one of the five core elements of transformational leadership, contingent reward, idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. An open-ended question asking about other content included in formal leadership development opportunities for front-line nurse managers was used to generate information regarding relevant content not included in the survey questions.

Research Question 1.1

Research question 1.1 asked “What content is included in formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean subscale scores for the Magnet hospital sample ranged from 3.17 to 3.50 on the subscales of the Content scale. These scores suggest that, on average, Magnet hospitals “Usually” include each of the specified content areas in formal leadership development opportunities for front-line nurse managers. The lowest mean subscale score was associated with Intellectual Stimulation, and the highest mean subscale score was
associated with Contingent Reward. Detailed results for the subscales comprising the Content scale can be seen in Table 5.

Responses to the open-ended question were obtained from 116 Magnet hospitals. Overall, the responses fit well within the three spheres of nurse manager leadership practices described in the AONE’s (2004) NMLC Learning Domain Framework. However, not all of the three spheres were well-represented in the responses. As described in Chapter 1, the three spheres in this framework are, 1) The Science: Managing the Business, 2) The Art: Leading the People, and 3) The Leader Within: Creating the Leader in Yourself.

*Managing the Business.* Responses from nearly all of the sampled Magnet hospitals described including content on Managing the Business in their leadership development opportunities for nurse managers. Content on financial management, budgeting, and human resource-related policies was especially common. Although less common, a number of responses included content on the requirements of accreditation and regulatory agencies, initiatives for quality and safety improvement, increasing productivity, time management, conducting effective meetings, problem-solving, decision-making, and the use of computer software. Only a few hospitals reported including content related to systems thinking or strategy in their leadership development opportunities for nurse managers.

*Leading People Effectively.* Responses from nearly all of the sampled Magnet and non-Magnet hospitals also included content on Leading People Effectively in their leadership development opportunities for nurse managers. Communication, crucial conversations, team building, motivation, conflict management, maintaining physician
relationships, and employee performance reviews/feedback were particularly common among the responses. Less commonly included in responses were cultural and generational diversity, mentoring and coaching, creating a healthy work environment, and listening. Responses from only a few hospitals indicated that they included content on shared governance and shared decision-making.

*Creating the Leader Within.* A response from only one of the sampled Magnet hospitals included content clearly associated with the sphere of Creating the Leader Within in their leadership development opportunities for nurse managers. Specifically, that hospital described facilitating nurse managers in learning how to maintain a work/life balance. Content on the importance of continuing education was not explicitly included in any of the responses, but several responses did indicate that continuing education opportunities are provided for the nurse managers.
Table 5

*Content Scale for Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through formal leadership development opportunities, nurse managers are taught how to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>3.50</td>
<td>.67</td>
</tr>
<tr>
<td>Communicate to subordinates what is expected of them</td>
<td>3.58</td>
<td>.72</td>
</tr>
<tr>
<td>Communicate to subordinates what rewards or recognition can be expected if performance goals are achieved</td>
<td>3.43</td>
<td>.77</td>
</tr>
<tr>
<td>Communicate satisfaction with subordinates when expectations are met</td>
<td>3.48</td>
<td>.77</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>3.37</td>
<td>.69</td>
</tr>
<tr>
<td>Establish trust with subordinates</td>
<td>3.41</td>
<td>.78</td>
</tr>
<tr>
<td>Model their own beliefs and values for subordinates</td>
<td>3.43</td>
<td>.83</td>
</tr>
<tr>
<td>Consider the moral and ethical consequences of their decisions</td>
<td>3.26</td>
<td>.86</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>3.45</td>
<td>.65</td>
</tr>
<tr>
<td>Help subordinates develop optimism and enthusiasm about a shared future vision</td>
<td>3.40</td>
<td>.76</td>
</tr>
<tr>
<td>Help subordinates realize the value of their work responsibilities in contributing to the overall success of the team, unit, or hospital</td>
<td>3.55</td>
<td>.70</td>
</tr>
<tr>
<td>Help subordinates feel empowered to accomplish their goals</td>
<td>3.40</td>
<td>.71</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>3.17</td>
<td>.73</td>
</tr>
<tr>
<td>Seek new ideas and perspectives from subordinates</td>
<td>3.32</td>
<td>.81</td>
</tr>
<tr>
<td>Encourage subordinates to consider problems from different perspectives</td>
<td>3.22</td>
<td>.80</td>
</tr>
<tr>
<td>Re-examine commonly held assumptions within the organization</td>
<td>2.97</td>
<td>.89</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>3.37</td>
<td>.68</td>
</tr>
<tr>
<td>Identify the specific needs and capabilities of individual subordinates</td>
<td>3.30</td>
<td>.82</td>
</tr>
<tr>
<td>Facilitate the development of the subordinate through coaching or mentoring</td>
<td>3.38</td>
<td>.80</td>
</tr>
<tr>
<td>Interact with subordinates as individuals, not just members of the group</td>
<td>3.43</td>
<td>.76</td>
</tr>
</tbody>
</table>
Research Question 1.2

Research question 1.2 asked “What content is included in formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean subscale scores for the non-Magnet hospital sample ranged from 2.83 to 3.12, suggesting that the Magnet hospitals “Usually” include each of the specified content areas in formal leadership development opportunities for front-line nurse managers. As found in the Magnet hospital sample, the lowest mean subscale score was associated with Intellectual Stimulation, and the highest mean subscale score was associated with Contingent Reward. Detailed results for the subscales associated with the Content scale can be seen in Table 6.

Responses to the open-ended question were obtained from 45 non-Magnet hospitals. In several instances, responses explicitly indicated that the hospital does not offer formal leadership development opportunities for their front-line nurse managers. However, the AONE’s (2004) NMLC Learning Domain Framework provides a useful structure for categorizing the remaining responses to the open-ended question.

Managing the Business. Responses in this sphere from the non-Magnet hospitals were very similar to the responses from the Magnet hospitals. Nearly all of the sampled hospitals described including content on Managing the Business in their leadership development opportunities for nurse managers. One notable difference is that approximately one-third of the narrative responses from non-Magnet hospitals included only content from this sphere (to the exclusion of content from the other two spheres).
**Leading People Effectively.** Responses from approximately two-thirds of the sampled non-Magnet hospitals included content on Leading People Effectively in their leadership development opportunities for nurse managers. The responses from non-Magnet hospitals were very similar to those of the Magnet hospitals, including content on communication, crucial conversations, team building, motivation, conflict management, and employee performance reviews/feedback. Less commonly included in responses were diversity, mentoring and coaching, and creating a positive, respectful work environment. None of the responses indicated that they included content on shared governance and shared decision-making.

**Creating the Leader Within.** Responses from two of the sampled non-Magnet hospitals had responses that could be categorized as content on Creating the Leader Within in their leadership development opportunities for nurse managers. One non-Magnet hospital described facilitating the nurse managers in developing skill in reflection and another mentioned including content on stress management. As with the Magnet sample, content on the importance of continuing education was not explicitly included in any of the responses, but several responses indicated that opportunities for continuing education are provided for the nurse managers.
Table 6  
*Content Scale for non-Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through formal leadership development opportunities, nurse managers are taught how to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>3.12</td>
<td>.92</td>
</tr>
<tr>
<td>Communicate to subordinates what is expected of them</td>
<td>3.26</td>
<td>.93</td>
</tr>
<tr>
<td>Communicate to subordinates what rewards or recognition can be expected</td>
<td>2.98</td>
<td>1.06</td>
</tr>
<tr>
<td>if performance goals are achieved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate satisfaction with subordinates when expectations are met</td>
<td>3.15</td>
<td>.92</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>2.99</td>
<td>.89</td>
</tr>
<tr>
<td>Establish trust with subordinates</td>
<td>3.09</td>
<td>.96</td>
</tr>
<tr>
<td>Model their own beliefs and values for subordinates</td>
<td>2.91</td>
<td>1.03</td>
</tr>
<tr>
<td>Consider the moral and ethical consequences of their decisions</td>
<td>2.87</td>
<td>1.09</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>3.02</td>
<td>.90</td>
</tr>
<tr>
<td>Help subordinates develop optimism and enthusiasm about a shared future vision</td>
<td>2.89</td>
<td>1.08</td>
</tr>
<tr>
<td>Help subordinates realize the value of their work responsibilities in</td>
<td>3.17</td>
<td>.88</td>
</tr>
<tr>
<td>contributing to the overall success of the team, unit, or hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help subordinates feel empowered to accomplish their goals</td>
<td>3.00</td>
<td>.99</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>2.83</td>
<td>.89</td>
</tr>
<tr>
<td>Seek new ideas and perspectives from subordinates</td>
<td>3.02</td>
<td>.95</td>
</tr>
<tr>
<td>Encourage subordinates to consider problems from different perspectives</td>
<td>2.80</td>
<td>1.02</td>
</tr>
<tr>
<td>Re-examine commonly held assumptions within the organization</td>
<td>2.61</td>
<td>.98</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>3.09</td>
<td>.89</td>
</tr>
<tr>
<td>Identify the specific needs and capabilities of individual subordinates</td>
<td>3.02</td>
<td>.93</td>
</tr>
<tr>
<td>Facilitate the development of the subordinate through coaching or mentoring</td>
<td>3.07</td>
<td>.98</td>
</tr>
<tr>
<td>Interact with subordinates as individuals, not just members of the group</td>
<td>3.28</td>
<td>.96</td>
</tr>
</tbody>
</table>
Pedagogical Practices

The Leadership Development Model (LDM) was developed by a team of scholars at the Center for Creative Leadership, based on experience in researching and consulting for leadership development over a period of 30 years (McCauley, Moxley, & Van Velsor, 1998; McCauley & Van Velsor, 2004). The LDM was designed to define and explain the relationship between critical elements of developmental experiences for leaders. The Leadership Development Model incorporates three essential elements of effective leadership development experiences, 1) assessment, 2) challenge, and 3) support (McCauley & Van Velsor, 2004).

The survey items for this study were created to evaluate how frequently these three essential elements of effective leadership development experiences were included in formal leadership development opportunities for front-line nurse managers. Survey items were developed and grouped into three subscales to represent the assessment, challenge, and support elements of the LDM. An open-ended question asking about other methods used to facilitate leadership development in for front-line nurse managers was used to generate information regarding relevant content not included in the survey questions.

Research Question 1.3

Research question 1.3 asks, “What pedagogical practices are used in formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean scores on the Pedagogy subscale for Magnet hospitals ranged from 2.96 to 3.19. Mean subscale scores for Challenge and Support were higher than 3, suggesting that the formal leadership development programs for front-line nurse managers in Magnet hospitals “Usually” include challenge and support as components of their leadership
development programs. While the mean score for the Assessment subscale is only slightly below 3, it is notable that a markedly lower score in an item representing receiving support from a consultant indicates this is only “Sometimes” used to facilitate leadership development in front-line nurse managers. Detailed results for the subscales associated with the Pedagogy scale can be seen in Table 7.

Responses to the open-ended question were obtained from 116 Magnet hospitals. Three hospitals reported not using any teaching methods beyond those identified in the survey items. Approximately one half of the hospitals described facilitating formal or online classes on leadership, encouraging nurse managers to pursue formal degree programs, and/or sending nurse managers to “Boot Camps”, conferences, retreats, and workshops.

The other half of the responses reflected pedagogical approaches to leadership development aligned with the three essential elements of effective leadership development experiences described in the LDM. Most commonly, hospitals reported incorporating two of the three elements in their leadership development programs. Typically, these two elements were assessment and support (e.g. the program included providing the nurse manager with assessment data generated through a 360-degree assessment and support through an assigned mentor and facilitated peer network group). It was also relatively common for a hospital to incorporate one essential element in their leadership development programs, and only two hospitals described leadership development programs that incorporated all three of the essential elements.
Table 7

*Pedagogy Scale for Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through formal leadership development opportunities, nurse managers develop their leadership skills by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>2.96</td>
<td>.64</td>
</tr>
<tr>
<td>Reviewing feedback from their supervisor, peers, and/or subordinates</td>
<td>3.15</td>
<td>.93</td>
</tr>
<tr>
<td>Reviewing the results of employee satisfaction surveys</td>
<td>3.66</td>
<td>.69</td>
</tr>
<tr>
<td>Receiving feedback from a consultant</td>
<td>2.08</td>
<td>.98</td>
</tr>
<tr>
<td>Challenge</td>
<td>3.06</td>
<td>.75</td>
</tr>
<tr>
<td>Being given challenging job assignments</td>
<td>3.06</td>
<td>.79</td>
</tr>
<tr>
<td>Working toward challenging goals within a current job assignment</td>
<td>3.27</td>
<td>.80</td>
</tr>
<tr>
<td>Support</td>
<td>3.19</td>
<td>.71</td>
</tr>
<tr>
<td>Receiving support from a mentor or coach</td>
<td>2.78</td>
<td>.94</td>
</tr>
<tr>
<td>Receiving support from professional colleagues</td>
<td>3.08</td>
<td>.82</td>
</tr>
<tr>
<td>Receiving support from a supervisor</td>
<td>3.41</td>
<td>.69</td>
</tr>
</tbody>
</table>

*Research Question 1.4*

Research question 1.4 asks, “What pedagogical practices are used in formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean Pedagogy subscale scores for the non-Magnet sample ranged from 2.67 to 2.81. Of the eight total items in the scale, two items has mean scores greater than 3, indicating that these practices were “Usually” incorporated into leadership development opportunities for front-line nurse managers. These two items were related to reviewing
patient satisfaction scores and receiving support from a supervisor. Similar to the Magnet hospital sample, the Assessment subscale received the lowest mean score, and was negatively affected by a low mean item score related to receiving feedback from a consultant. The item score was 1.8, indicating the practice is used less frequently than “Sometimes” in leadership development opportunities for nurse managers. Detailed results for the subscales associated with the Pedagogy scale can be seen in Table 8.

The open-ended question was responded to by 45 non-Magnet hospitals. Three hospitals from this sample also reported not using any teaching methods beyond those identified in the survey items. Similar to the Magnet hospital sample, approximately half of the hospitals described facilitating formal or online classes on leadership, encouraging managers to join professional organizations, read books or magazines on leadership topics, and/or sending nurse managers to formal degree programs, conferences, retreats, and workshops.

The other half of the responses reflected pedagogical approaches to leadership development aligned with the three essential elements of effective leadership development experiences described in the LDM. Of these hospitals, most reported incorporating one of the three elements in their leadership development programs. Typically, this element was support (e.g. a mentor, coach, or internal networking group).

Several hospitals incorporated two elements in their leadership development programs, specifically assessment and support. None of the narrative responses described incorporating all three of the essential elements of an effective leadership development experience.
Table 8

*Pedagogy Scale for Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through formal leadership development opportunities, nurse managers develop their leadership skills by:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewing feedback from their supervisor, peers, and/or subordinates</td>
<td>2.89</td>
<td>.97</td>
</tr>
<tr>
<td>Reviewing the results of employee satisfaction surveys</td>
<td>3.26</td>
<td>.93</td>
</tr>
<tr>
<td>Receiving feedback from a consultant</td>
<td>1.80</td>
<td>.86</td>
</tr>
<tr>
<td>Challenge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being given challenging job assignments</td>
<td>2.63</td>
<td>.83</td>
</tr>
<tr>
<td>Working toward challenging goals within a current job assignment</td>
<td>2.89</td>
<td>.97</td>
</tr>
<tr>
<td>Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving support from a mentor or coach</td>
<td>2.48</td>
<td>1.07</td>
</tr>
<tr>
<td>Receiving support from professional colleagues</td>
<td>2.91</td>
<td>.94</td>
</tr>
<tr>
<td>Receiving support from a supervisor</td>
<td>3.15</td>
<td>.84</td>
</tr>
</tbody>
</table>

*Evaluation Methods*

Kirkpatrick’s (1959) four-level model of training program evaluation has been used as the foundation for hundreds of research studies (Kaufman & Keller, 1994) and continues to be widely accepted within the field of human resource development (Moseley & Larson, 1994; Phillips, 1998). Phillips (1997) made the model more complete, relevant, and useful for modern organizations by adding a fifth level, return on investment (ROI). The PFL describes five levels of training program evaluation, 1) reaction and planned action, 2) learning, 3) job application, 4) business results, and 5)
return on investment (Phillips, 1997). Survey items were created and grouped into subscales representing the five levels of the PFL.

*Research Question 1.5*

Research question 1.5 asks, “What methods are used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean score on the Evaluation subscale for Magnet hospitals ranged from 2.25 to 3.47, with only the Reaction/Planned Response and Business Results subscales scoring greater than 3, suggesting that the formal leadership development programs for front-line nurse managers in Magnet hospitals “Usually” incorporate these methods into evaluations of their leadership development program. The lowest mean subscale score was associated with Return on Investment. The mean subscale score of 2.25 suggests return on investment is calculated little more than “Sometimes” as a means of evaluating leadership development programs for nurse managers. Detailed results for the subscales associated with the Evaluation scale can be seen in Table 9.

Responses to the open-ended question were obtained from 116 Magnet hospitals. Approximately one-third of hospitals reported that they did not use any additional methods for evaluating leadership development opportunities, other than those included in the survey, and several hospitals specifically described evaluation as an area of opportunity for improvement. The majority of the responses are best categorized as evaluation of business results, with the most common responses related to unit performance measures, such as patient satisfaction, employee engagement, nurse turnover, physician satisfaction, and financial performance.
Evaluation at the Reaction/Planned Response level was described by several hospitals. In these hospitals, nurse managers complete an evaluation of the course or describe how they anticipate applying the new information in their role. Reports of evaluation at the Learning level were fairly rare, with only a few hospitals administering pre- and post-tests to determine what was learned in the leadership development program. Several hospitals reported evaluation at the level of Behavior Change, whether through 360 degree feedback, evaluation by a supervisor, or employee surveys. No hospitals reported evaluating leadership development programs at the level of Return on Investment. Several hospitals described evaluating leadership development efforts by reviewing leadership application projects completed by the nurse managers.
Table 9

*Evaluation Methods Scale for Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal leadership development opportunities for nurse managers are evaluated by:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction / Planned Response</td>
<td>3.47</td>
<td>.75</td>
</tr>
<tr>
<td>Asking the extent to which participants enjoyed the experience</td>
<td>3.44</td>
<td>.85</td>
</tr>
<tr>
<td>Asking whether participants feel they learned</td>
<td>3.49</td>
<td>.78</td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing the participants to evaluate their learning</td>
<td>2.28</td>
<td>.99</td>
</tr>
<tr>
<td>Asking participants to describe what they learned</td>
<td>2.86</td>
<td>.96</td>
</tr>
<tr>
<td><strong>Behavior Change</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observing or having someone else observe whether the participant's behavior has changed</td>
<td>2.48</td>
<td>.99</td>
</tr>
<tr>
<td>Collecting ratings of the participant's performance from peers, subordinates, and/or supervisors</td>
<td>2.78</td>
<td>1.12</td>
</tr>
<tr>
<td><strong>Business Results</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring an organizational outcome (e.g. patient satisfaction, unit productivity, staff turnover, etc.)</td>
<td>3.43</td>
<td>.85</td>
</tr>
<tr>
<td>Measuring the financial impact of the experience (e.g. increases in profitability, decreased expenditures, etc.)</td>
<td>2.84</td>
<td>1.09</td>
</tr>
<tr>
<td><strong>Return on Investment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculating the return-on-investment associated with the program (i.e. the financial benefit of the program in relation to its cost)</td>
<td>2.25</td>
<td>1.09</td>
</tr>
</tbody>
</table>
Research Question 1.6

Research question 1.6 asks, “What methods are used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in non-Magnet hospitals in the United States?” The quantitative and narrative results are presented below.

Mean Evaluation subscale scores for the non-Magnet hospital sample ranged from 2.24 to 3.14, with only the Reaction/Response and Business Results subscales scoring greater than 3. As was the case with the Magnet hospital sample, the lowest mean subscale score was associated with Return on Investment and the highest mean subscale score was associated with the Reaction/Planned Response subscale. Detailed results for the subscales associated with the Evaluation scale can be seen in Table 10.

Responses to the open-ended question were obtained from 45 non-Magnet hospitals. As with the Magnet hospital sample, approximately one-third of hospitals reported that they did not use any additional methods for evaluating leadership development opportunities, other than those included in the survey.

The majority of the responses are best categorized as evaluation of business results, with the most common responses related to unit performance measures, such as patient satisfaction, employee engagement, nurse turnover, physician satisfaction, and financial performance. Several hospitals described evaluation of leadership development programs at the Reaction/Planned Response level. Several others evaluated Behavior Change. No hospitals reported evaluating leadership development at the Learning or Return on Investment level.
Table 10

*Evaluation Methods Scale for non-Magnet Hospital Sample*

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal leadership development opportunities for nurse managers are evaluated by:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction / Planned Response</td>
<td>3.14</td>
<td>.94</td>
</tr>
<tr>
<td>Asking the extent to which participants enjoyed the experience</td>
<td>2.98</td>
<td>1.14</td>
</tr>
<tr>
<td>Asking whether participants feel they learned</td>
<td>3.30</td>
<td>.94</td>
</tr>
<tr>
<td><strong>Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing the participants to evaluate their learning</td>
<td>2.02</td>
<td>.88</td>
</tr>
<tr>
<td>Asking participants to describe what they learned</td>
<td>2.59</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Behavior Change</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observing or having someone else observe whether the participant's behavior has changed</td>
<td>2.30</td>
<td>.96</td>
</tr>
<tr>
<td>Collecting ratings of the participant's performance from peers, subordinates, and/or supervisors</td>
<td>2.39</td>
<td>1.08</td>
</tr>
<tr>
<td><strong>Business Results</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring an organizational outcome (e.g. patient satisfaction, unit productivity, staff turnover, etc.)</td>
<td>3.30</td>
<td>1.11</td>
</tr>
<tr>
<td>Measuring the financial impact of the experience (e.g. increases in profitability, decreased expenditures, etc.)</td>
<td>2.85</td>
<td>1.25</td>
</tr>
<tr>
<td><strong>Return on Investment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculating the return-on-investment associated with the program (i.e. the financial benefit of the program in relation to its cost)</td>
<td>2.24</td>
<td>.99</td>
</tr>
</tbody>
</table>
Differences Between Magnet and Non-Magnet Hospitals

The second research question for this study was, “What differences exist between leadership development programs offered to front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?” Leadership development practices were operationally defined as the content, pedagogical practices, and evaluation methods associated with formal leadership development opportunities offered to front-line nurse managers. This operational definition lends itself to the generation of three subquestions:

2.1 What differences exist in the content included in formal leadership development opportunities for front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

2.2 What differences exist in the pedagogical practices employed in formal leadership development opportunities for front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

2.3 What differences exist in the methods used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

Independent-samples t-tests were conducted to identify differences between leadership development practices in Magnet versus non-Magnet hospitals. The independent samples t-test is robust to unequal sample variances when sample sizes are equal. When sample sizes are not equal, heterogeneous variance can dramatically influence the probability of committing type I error (Glass & Hopkins, 1996). Because the difference between the Magnet (n=120) and non-Magnet (n=46) subsamples in this study was large, Levene’s test for equality of variances was performed to test the equality-of-variance assumption for each variable. An evaluation of the F-statistics and corresponding significance levels revealed that the equality-of-variance assumption was violated for several of the variables. Thus, the $t$ value for unequal variances was used.
Research Question 2.1

Research question 2.1 asked “What differences exist in the content included in formal leadership development opportunities for front-line nurse managers in Magnet hospitals in the United States?” The Full Range of Leadership Model (Avolio, 1999; Bass, 1990, 2008), and its associated research instrument, the Multi-Factor Leadership Questionnaire (MLQ) were used to identify five components of the Content scale, 1) Contingent Reward, 2) Idealized Influence, 3) Inspirational Motivation, 4) Intellectual Stimulation, and 5) Individualized Consideration. Mean scale and subscale scores and standard deviations for the Magnet and non-Magnet hospitals are reported in Table 11.

Table 11
Content Subscale Scores

<table>
<thead>
<tr>
<th>Content Subscales</th>
<th>Magnet Hospitals</th>
<th>Non-Magnet Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent Reward</td>
<td>3.50</td>
<td>3.12</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>3.37</td>
<td>2.99</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>3.45</td>
<td>3.02</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>3.17</td>
<td>2.83</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>3.37</td>
<td>3.09</td>
</tr>
<tr>
<td>Content Scale</td>
<td>3.37</td>
<td>3.01</td>
</tr>
</tbody>
</table>

The mean score on the content scale and all subscales was higher for Magnet than non-Magnet hospitals. The results of the independent samples t-test suggest the difference was statistically significant for the Contingent Reward, Idealized Influence, Inspirational Motivation, and Intellectual Stimulation subscales, as well as the overall Content scale. The difference for the Individualized Consideration subscale was not statistically significant. Detailed results can be seen in Table 12.
Table 12
Independent Sample t-tests for Content Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean Difference</td>
</tr>
<tr>
<td>Contingent Reward</td>
<td>8.03</td>
<td>.01</td>
<td>-2.50</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>4.86</td>
<td>.03</td>
<td>-2.86</td>
</tr>
<tr>
<td>Inspirational Motivation</td>
<td>7.83</td>
<td>.01</td>
<td>-2.92</td>
</tr>
<tr>
<td>Intellectual Stimulation</td>
<td>4.08</td>
<td>.05</td>
<td>-2.41</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>3.77</td>
<td>.05</td>
<td>-1.70</td>
</tr>
<tr>
<td>Content Scale</td>
<td>6.99</td>
<td>.01</td>
<td>-2.68</td>
</tr>
</tbody>
</table>

Note: * p < .05 (two-tailed)
Research Question 2.2

Research question 2.2 asked “What differences exist in the pedagogical practices employed in formal leadership development opportunities for front-line nurse managers in Magnet hospitals versus non-Magnet hospitals in the United States?” The Leadership Development Model (LDM) was used to identify three components of the Pedagogy scale, 1) Assessment, 2) Challenge, and 3) Support. The mean subscale scores and standard deviations for the Magnet and non-Magnet hospitals are reported in Table 13.

Table 13

<table>
<thead>
<tr>
<th>Pedagogy Subscale Scores</th>
<th>Magnet Hospitals</th>
<th>Non-Magnet Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogy Subscales</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Assessment</td>
<td>2.96</td>
<td>.64</td>
</tr>
<tr>
<td>Challenge</td>
<td>3.06</td>
<td>.75</td>
</tr>
<tr>
<td>Support</td>
<td>3.19</td>
<td>.71</td>
</tr>
<tr>
<td>Pedagogical Practices Scale</td>
<td>3.07</td>
<td>.60</td>
</tr>
</tbody>
</table>

The mean score on all of the pedagogy subscales was higher for Magnet hospitals than non-Magnet hospitals. The results of the independent samples t-test suggest this difference was statistically significant at alpha = 0.05 for the Assessment and Challenge subscales as well as the pedagogy scale. The difference for the Support subscale was not statistically significant. Detailed results of the t-test can be seen in Table 14.
Table 14

Independent Sample t-tests for Pedagogical Practices Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>P</td>
<td>t</td>
</tr>
<tr>
<td>Assessment</td>
<td>1.21</td>
<td>.27</td>
<td>-2.56</td>
</tr>
<tr>
<td>Challenge</td>
<td>.93</td>
<td>.34</td>
<td>-2.82</td>
</tr>
<tr>
<td>Support</td>
<td>1.32</td>
<td>.25</td>
<td>-1.73</td>
</tr>
<tr>
<td>Pedagogical Practices Scale</td>
<td>.74</td>
<td>.39</td>
<td>-2.73</td>
</tr>
</tbody>
</table>

Note. *p < .05 (two-tailed)
Research Question 2.3

Research question 2.3 asked “What differences exist in the methods used to evaluate the effectiveness of formal leadership development opportunities for front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?” The Phillips Five-Level ROI Framework (PFL) was used to define five levels of evaluation for this study, 1) reaction and planned action, 2) learning, 3) job application (behavior change), 4) business results, and 5) return on investment. The mean subscale scores and standard deviations for the Magnet and non-Magnet hospitals are reported in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Evaluation Methods Subscale Scores</th>
<th>Magnet Hospitals</th>
<th>Non-Magnet Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluation Subscales</strong></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Reaction/ Planned Action</td>
<td>3.47</td>
<td>.75</td>
</tr>
<tr>
<td>Learning</td>
<td>2.57</td>
<td>.83</td>
</tr>
<tr>
<td>Behavior Change</td>
<td>2.63</td>
<td>.87</td>
</tr>
<tr>
<td>Business Results</td>
<td>3.13</td>
<td>.88</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>2.25</td>
<td>1.09</td>
</tr>
<tr>
<td>Evaluation Scale</td>
<td>2.81</td>
<td>.62</td>
</tr>
</tbody>
</table>

The mean score on all of the pedagogy subscales was higher for Magnet hospitals than non-Magnet hospitals. The results of the independent samples t-test suggest this difference was statistically significant at alpha = 0.05 for the Reaction/Planned response subscale. The differences for the Learning, Behavior Change, Business Results, or Return on Investment subscales, or the Evaluation scale were not statistically significant. Detailed results of the t-test can be seen in Table 16.
Table 16

*Independent Sample t-tests for Evaluation Methods Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>P</td>
<td>t</td>
</tr>
<tr>
<td>Reaction / Planned Response</td>
<td>4.84</td>
<td>.03</td>
<td>-2.10</td>
</tr>
<tr>
<td>Learning</td>
<td>.19</td>
<td>.66</td>
<td>-1.86</td>
</tr>
<tr>
<td>Behavior Change</td>
<td>.20</td>
<td>.66</td>
<td>-1.91</td>
</tr>
<tr>
<td>Business Results</td>
<td>4.51</td>
<td>.04</td>
<td>-.32</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>1.55</td>
<td>.22</td>
<td>-.06</td>
</tr>
<tr>
<td>Evaluation</td>
<td>.87</td>
<td>.35</td>
<td>-1.60</td>
</tr>
</tbody>
</table>

Note. * p < .05 (two-tailed)
Influence of Hospital Characteristics

The second research question for this study was, “What characteristics of Magnet and non-Magnet hospitals influence the content, pedagogical practices, and evaluation methods incorporated into leadership development programs offered to front-line nurse managers?” Leadership development practices were operationally defined as the content, pedagogical practices, and evaluation methods associated with formal leadership development opportunities offered to front-line nurse managers. This operational definition lends itself to the generation of three subquestions:

3.1 What characteristics of Magnet and non-Magnet hospitals influence the content included in formal leadership development opportunities offered to front-line nurse managers in the United States?

3.2 What characteristics of Magnet and non-Magnet hospitals influence the pedagogical practices employed in formal leadership development opportunities offered to front-line nurse managers in the United States?

3.3 What characteristics of Magnet and non-Magnet hospitals influence the methods used to evaluate the effectiveness of formal leadership development opportunities offered to front-line nurse managers in the United States?

Linear regressions were performed to evaluate potential relationships between each of the dependent and independent variables. R-squared change values of 2.2% were associated with F-change values statistically significant at the 0.05 level, so 103 of 196 linear regressions resulted in statistically significant R-squared change value. However, the exploratory nature of this study necessitates the cautious interpretation of relationships between variables. To ensure the relationships have clinical significance (in addition to statistical significance), only relationships between independent and dependent variables with R-squared change values greater than 0.10 (10%) will be
reported here. An exception was made for the Content subscales for reasons described in the corresponding section of the paper.

*Research Question 3.1*

Research question 3.1 asked, “What characteristics of Magnet and non-Magnet hospitals influence the content included in formal leadership development opportunities offered to front-line nurse managers in the United States?” Characteristics included as independent variables in the analyses included: bed size, total patient revenue, status as a teaching hospital, control or governance structure, geographic region, urban versus rural designation, affiliation with a hospital system, designation as a Magnet hospital, and employment of a leadership development specialist. The educational and experiential background of the leadership development specialist (see Table 1) was also included as a characteristic in the analyses.

No independent variable explained more than 10% of the variance in the subscales of the Content scale. However, a clear pattern was apparent in the results, suggesting clinical significance. One independent variable, having a leadership development specialist with experiential background in organizational development, had the highest predictive value for all subscales in the Content scale. The specific predictive values for this variable were: Contingent Reward, 5.4%; Idealized Influence, 4.0%; Inspirational Motivation, 9.5%; and Intellectual Stimulation; 7.0%.; Individualized Consideration, 9.7%. Detailed results of the linear regression analyses can be seen in Table 17.
### Table 17

*Influence of Hospital Characteristics on Content*

<table>
<thead>
<tr>
<th>IV</th>
<th>DV</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
<th>Change Statistics</th>
<th>Change of R Square</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Significance of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDSEOD</td>
<td>CR</td>
<td>.232</td>
<td>.054</td>
<td>.048</td>
<td>.75461</td>
<td></td>
<td>.054</td>
<td>9.701</td>
<td>1</td>
<td>171</td>
<td>.002</td>
</tr>
<tr>
<td>LDSEOD</td>
<td>II</td>
<td>.201</td>
<td>.040</td>
<td>.035</td>
<td>.76160</td>
<td></td>
<td>.040</td>
<td>7.208</td>
<td>1</td>
<td>171</td>
<td>.008</td>
</tr>
<tr>
<td>LDSEOD</td>
<td>IM</td>
<td>.308</td>
<td>.095</td>
<td>.089</td>
<td>.72221</td>
<td></td>
<td>.095</td>
<td>17.894</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>LDSEOD</td>
<td>IS</td>
<td>.264</td>
<td>.070</td>
<td>.064</td>
<td>.76913</td>
<td></td>
<td>.070</td>
<td>12.829</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>LDSEOD</td>
<td>IC</td>
<td>.311</td>
<td>.097</td>
<td>.091</td>
<td>.72339</td>
<td></td>
<td>.097</td>
<td>18.271</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note.* LDSEOD=Leadership development specialist has experiential background in organizational development; CR=Contingent reward; II=Idealized influence; IM=Inspirational motivation; IS=Intellectual stimulation; IC=Individualized consideration
Research Question 3.2

Research question 3.2 asked, “What characteristics of Magnet and non-Magnet hospitals influence the pedagogical practices employed in formal leadership development opportunities offered to front-line nurse managers in the United States?” As was done in the previous analysis, characteristics included as independent variables were: bed size, total patient revenue, status as a teaching hospital, control or governance structure, geographic region, urban versus rural designation, affiliation with a hospital system, designation as a Magnet hospital, and employment of a leadership development specialist. The educational and experiential background of the leadership development specialist (see Table 1) was also included as a characteristic in the analyses.

Designation as a Magnet hospital was the only independent variable explaining more than 10% of the variance in the subscales of the Pedagogical Practices scale. The specific predictive values for this variable were: Challenge, 15.3%; Support, 12.1%; Assessment, 10.6%. Detailed results of the linear regression analyses can be seen in Table 18.
Table 18

*Influence of Hospital Characteristics on Pedagogical Practices*

<table>
<thead>
<tr>
<th>IV</th>
<th>DV</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
<th>Change Statistics</th>
<th>Significance of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnet</td>
<td>PC</td>
<td>.391</td>
<td>.153</td>
<td>.148</td>
<td>.82843</td>
<td>.153</td>
<td>30.774</td>
</tr>
<tr>
<td>Magnet</td>
<td>PS</td>
<td>.348</td>
<td>.121</td>
<td>.116</td>
<td>.81532</td>
<td>.121</td>
<td>23.633</td>
</tr>
<tr>
<td>Magnet</td>
<td>PA</td>
<td>.326</td>
<td>.106</td>
<td>.101</td>
<td>.74722</td>
<td>.106</td>
<td>20.289</td>
</tr>
</tbody>
</table>

*Note.* Magnet = Designation as a Magnet hospital; PC = Challenge used as a pedagogical practice; PA = Assessment used as a pedagogical practice; PS = Assessment used as a pedagogical practice.
Research Question 3.3

Research question 3.3 asked, “What characteristics of Magnet and non-Magnet hospitals influence the methods used to evaluate the effectiveness of formal leadership development opportunities offered to front-line nurse managers in the United States?” As was done in both of the previous analyses, characteristics included as independent variables were: bed size, total patient revenue, status as a teaching hospital, control or governance structure, geographic region, urban versus rural designation, affiliation with a hospital system, designation as a Magnet hospital, and employment of a leadership development specialist. The educational and experiential background of the leadership development specialist (see Table 1) was also included as a characteristic in the analyses.

Four independent variables were identified as explaining more than 10% of the variance in one or more subscales of the Evaluation Methods scale. Designation as a Magnet hospital explained more than 10% of the variance in all five of the subscales, with predictive values ranging between 14.1% and 37.2%. Designation as an urban hospital also explained more than 10% of the variance in all five of the subscales, with predictive values ranging between 13% and 20.6%. Affiliation with a hospital system explained more than 10% of the variance in all five of the subscales, with predictive values ranging between 10.6 and 14.1%. Status as a teaching hospital explained more than 10% of the variance in three of the Evaluation Methods subscales, with predictive values ranging between 10.1% and 12.1%. Detailed results of the linear regression analyses can be seen in Table 19.
### Table 19

**Influence of Hospital Characteristics on Evaluation Methods**

<table>
<thead>
<tr>
<th>IV</th>
<th>DV</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Significance of F change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnet</td>
<td>ER</td>
<td>.610</td>
<td>.372</td>
<td>.368</td>
<td>.93664</td>
<td>.372</td>
<td>101.283</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Magnet</td>
<td>EBC</td>
<td>.529</td>
<td>.280</td>
<td>.276</td>
<td>.93806</td>
<td>.280</td>
<td>66.535</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Magnet</td>
<td>EL</td>
<td>.527</td>
<td>.278</td>
<td>.274</td>
<td>.91394</td>
<td>.278</td>
<td>65.909</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Magnet</td>
<td>EBR</td>
<td>.513</td>
<td>.263</td>
<td>.259</td>
<td>1.05918</td>
<td>.263</td>
<td>61.055</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>EBR</td>
<td>.454</td>
<td>.206</td>
<td>.202</td>
<td>1.09925</td>
<td>.206</td>
<td>44.445</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>EROI</td>
<td>.435</td>
<td>.190</td>
<td>.185</td>
<td>1.10512</td>
<td>.190</td>
<td>39.998</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>EBC</td>
<td>.406</td>
<td>.165</td>
<td>.160</td>
<td>1.01015</td>
<td>.165</td>
<td>33.842</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>ER</td>
<td>.391</td>
<td>.153</td>
<td>.148</td>
<td>1.08778</td>
<td>.153</td>
<td>30.873</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>System</td>
<td>EBR</td>
<td>.376</td>
<td>.141</td>
<td>.136</td>
<td>1.14337</td>
<td>.141</td>
<td>28.138</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Magnet</td>
<td>EROI</td>
<td>.376</td>
<td>.141</td>
<td>.136</td>
<td>1.13770</td>
<td>.141</td>
<td>28.085</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
<tr>
<td>Urban</td>
<td>EL</td>
<td>.360</td>
<td>.130</td>
<td>.125</td>
<td>1.00347</td>
<td>.130</td>
<td>25.522</td>
<td>1</td>
<td>171</td>
<td>.000</td>
</tr>
</tbody>
</table>

*Note.* ER = Evaluation of response / planned reaction; EL = Evaluation of learning; EBC = Evaluation of behavior change; EBR = Evaluation of business results; EROI = Evaluation of return on investment
Table 19 (continued)

*Influence of Hospital Characteristics on Evaluation Methods*

<table>
<thead>
<tr>
<th>IV/DV</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Standard Error of the Estimate</th>
<th>Change Statistics</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>System</td>
<td>EBC</td>
<td>.361</td>
<td>.130</td>
<td>.125</td>
<td>1.03124</td>
<td>.130</td>
</tr>
<tr>
<td>System</td>
<td>EL</td>
<td>.351</td>
<td>.123</td>
<td>.118</td>
<td>1.00714</td>
<td>.123</td>
</tr>
<tr>
<td>Teaching</td>
<td>EL</td>
<td>.348</td>
<td>.121</td>
<td>.116</td>
<td>1.00868</td>
<td>.121</td>
</tr>
<tr>
<td>System</td>
<td>EROI</td>
<td>.336</td>
<td>.113</td>
<td>.107</td>
<td>1.15636</td>
<td>.113</td>
</tr>
<tr>
<td>System</td>
<td>ER</td>
<td>.326</td>
<td>.106</td>
<td>.101</td>
<td>1.11738</td>
<td>.106</td>
</tr>
<tr>
<td>Teaching</td>
<td>EBR</td>
<td>.320</td>
<td>.102</td>
<td>.097</td>
<td>1.16904</td>
<td>.102</td>
</tr>
<tr>
<td>Teaching</td>
<td>EBC</td>
<td>.317</td>
<td>.101</td>
<td>.095</td>
<td>1.04845</td>
<td>.101</td>
</tr>
</tbody>
</table>

*Note.* ER = Evaluation of response / planned reaction; EL = Evaluation of learning; EBC = Evaluation of behavior change; EBR = Evaluation of business results; EROI = Evaluation of return on investment
Summary

This chapter included a review of the research questions, a description of the sample, including demographics of participating hospitals, descriptive data regarding current practices in leadership development programs (quantitative and open-ended questions) for the Magnet and non-Magnet samples, comparative data regarding differences between the Magnet and non-Magnet samples, and correlational data illustrating the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals.
CHAPTER V

SUMMARY AND DISCUSSION

The purpose of this chapter is to summarize the preceding chapters and discuss the implications of the study. The summary includes a review of the purpose and significance, the methodology, and recommendations for replication of this study. The subsequent discussion includes implications and recommendations for practice, as well as recommendations for future research.

Problem and Significance

Nursing leadership is a critical component to the provision of affordable, accessible, and high-quality healthcare (Anderson, Issel, & McDaniel, 2003; Boyle, 2004; Chiok Foong Loke, 2001; Doran et al., 2004; Failla & Stichler, 2008; Houser, 2003; IOM, 2004; McNeese-Smith, 1999; McAlearney, 2008; Pollack, Koch, & DCNN, 2003). Evidence supports the influence of nursing leadership on increased patient safety and reduced mortality rates (Anderson, Issel, & McDaniel, 2003; Boyle, 2004; Houser, 2003; IOM, 2000; Laschinger & Leiter, 2006; Nembhard & Edmonson, 2006; Pollack, Koch, & DCNN, 2003; Tourangeau, et al., 2002) and improved patient satisfaction (Doran et al., 2004; McNeese-Smith, 1999). Increased productivity, job satisfaction, and organizational commitment, as well as reduced staff turnover, have also been attributed to strong nursing leadership (Acree, 2006; Brooks & Anderson, 2004; Chiong Foong Loke, 2001; Failla & Stichler, 2008; Fox, Fox, & Wells, 1999; Kleinman, 2004a; Letvak &
Although nursing leadership has a significant influence on providing affordable, accessible, and high-quality healthcare, it has become clear that hospital restructuring initiatives during the 1980s and 1990s, the nursing shortage, changing contexts for nursing leadership, and new competencies for nurse leaders have resulted in a shortage of well-prepared nurse leaders (Aiken, Clarke, & Sloane, 2000; Bazzoli et al., 2002; Clifford, 1998; Sovie & Jawad, 2001).

Published reports on leadership development practices in nursing reveal that deviations from evidence-based practices supported by the broader leadership development literature are common (Cleary, Freeman, & Sharrock, 2005; Conley, Branowicki, & Hanley, 2007; Cunningham & Kitson, 2000a, 2000b; George et al., 2002; Krugman & Smith, 2003; Tourangeau et al., 2003; Werrett, Griffiths, & Clifford, 2002; Wessel-Krejci & Malin, 1997; Weston et al., 2008; Wolf, 1996).

A growing number of leadership development programs are being offered to help alleviate the shortage of well-prepared nursing leaders. Significant time, energy, and financial resources are being dedicated to leadership development, making it imperative that programs offered be effective and efficient at meeting the needs of the participants and the organization. This requires the design and delivery of these programs to be evidence-based. Few programs, however, articulate the evidence-base supporting their program content, pedagogical practices, and evaluation methods. Therefore, little has been known about current practices in leadership development and how they relate to best-practices found in the research literature.
The purpose of this study was to evaluate current practices in leadership development in relation to best-practices in leadership development found in the research literature. The particular focus of this study was on the content included in leadership development offerings, the pedagogical practices being used in leadership development, and the methods being used to determine the effectiveness of leadership development programs in Magnet and non-Magnet hospitals.

This research generates new understanding regarding how the state of practice in nursing leadership development relates to evidence-based recommendations, potentially helping health care organizations identify strategies to improve the effectiveness and efficiency of their own leadership development programs. The new knowledge generated through this research study also serves as a foundation for future research. As the state of practice becomes more clearly defined, research that is more systematic, experimental, and generalizable can be conducted to more accurately determine the value of specific practices in leadership development.

Review of Methodology

Research Questions

The general research questions for this study were:

1. What are the current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals in the United States?

2. What differences exist between leadership development programs offered to front-line nurse managers in Magnet versus non-Magnet hospitals in the United States?

3. What characteristics of Magnet and non-Magnet hospitals influence the content, pedagogical practices, and evaluation methods incorporated into leadership development programs offered to front-line nurse managers?
Research Design

A non-experimental, quantitative descriptive, comparative, correlational design was selected for this study. The descriptive component of this study was designed to obtain detailed information regarding the current practices in leadership development in Magnet and non-Magnet hospitals. The comparative component of this study was designed to explore differences in leadership development practices in Magnet hospitals as compared to non-Magnet hospitals. The correlational component of this study was designed to evaluate the relationship between hospital characteristics and the leadership development practices of Magnet and non-Magnet hospitals.

This study was conducted nationally, using the telephone to establish initial contact with hospitals, electronic mail for the distribution of a web-based survey, and a web-browser to gather publically available hospital demographic data. The population for this study was leadership development programs offered to front-line nurse managers employed in Magnet hospitals and comparable non-Magnet hospitals.

A stratified random sampling technique was used to determine which Magnet-designated hospitals were contacted. This technique was selected for its ability to generate a sample in which all sizes of Magnet hospitals would be represented in proportion to their prevalence in the population (Houser, 2008). For each Magnet hospital included in the sample, a matched, non-Magnet hospital was selected. Matched hospitals were selected based on having characteristics similar to the randomly-selected Magnet hospitals.
Instrumentation

No specific instruments could be found in the literature to assess the current practices in leadership development for front-line nurse managers. Thus, a survey was developed by the researcher to collect and generate relevant information regarding these practices. Several sources were used to guide the development of the quantitative questions included in the survey (Avolio, 1999; Bass, 1990, 2008; Day, 2000; Kirkpatrick, 1959; Phillips & Phillips, 2007).

Open ended questions were included at the end of each section of the survey. These questions were designed to collect additional information about leadership development practices. It was anticipated that the survey questions would not represent the full scale of possible practices currently provided for the leadership development of front-line nurse managers. Responses to these questions provided supplementary data for this study, and will guide revision of the survey for future studies.

Data collected for this study were primarily quantitative in nature. The data collection methods chosen for this study were based Dillman’s (2007) Tailored Design Method (TDM). The TDM was designed to reduce sampling, coverage, measurement, and nonresponse error associated with survey methods. The hospital demographic data used for this study were collected from publically accessible websites. The primary website used was the ANCC (2009) website, which included a listing of all the current Magnet hospitals. The American Hospital Directory (2010) was used as a source of hospital demographic data.
Data Analysis

For the descriptive component of this study, summary statistics, including frequencies, percentages, and means were calculated to provide descriptive information about the prevalence and distribution specific practices in leadership development for front-line nurse managers.

The comparative component of this study involved using t-tests to compare mean scores on each scale and subscale of interest for Magnet and non-Magnet hospitals. Bivariate linear regressions were chosen for the correlational component of this study. Data collected through the open-ended questions in the survey were thoroughly reviewed to identify any potential trends and patterns. These data were used as a supplement to the quantitative data collected, helping guide interpretation of the findings. These data will also be used to guide revisions of the survey for future studies.

Recommendations for Study Replication

The purpose of this section is to provide insight and guidance for researchers who may wish to replicate this study. Various elements of the methodology for this study are reviewed and suggestions for future research are made. The elements discussed include the setting and sampling technique, the process for sample size determination, instrument development, and the data collection process. Each of these elements is discussed in turn.

Setting and Sampling

In order to generate the most meaningful and generalizable description of leadership development practices in Magnet and non-Magnet hospitals, it was necessary to conduct this study on a national scale. The selection of Magnet hospitals was facilitated by using the ANCC (2009) website, which is publicly accessible. A stratified
random sampling technique was selected in order to ensure the Magnet hospitals sampled were representative of the Magnet hospital population. Because this study did not support bed size as having a clinically significant influence on leadership development practices, this process of stratification may not be necessary for future studies.

Non-Magnet hospitals were selected through a matched sampling process to control for variables extraneous to Magnet status. Bed size, geographic region, control or governance structure, and status as a teaching or non-teaching hospital were used as the criteria for matching hospitals. This matching process was not difficult, but was time-consuming. Given the lack of clinically significant influence on leadership development practices associated with bed size, geographic region, and control structure, it may not be necessary to use the variables for matching purposes in future studies. The influence of teaching status, however, may be important to consider when designing a sampling procedure.

Sample Size Determination

Determining the appropriate sample size for a particular study can be challenging, particularly when little is known about the target population. While this study does provide additional insight regarding current practices in leadership development, many variables that would simplify the process for determining an appropriate sample size remain unclear. At the present, researchers in the area of leadership development may need to rely on conventions that have been established for research in the areas of sociology, psychology, education, and other social sciences.
Instrumentation

A thorough review of the literature did not reveal any instruments that could be used to assess the current practices in leadership development for front-line nurse managers. This necessitated the development of a new instrument. For this study, it was important that the new instrument address the major components of a leadership development program: the content, the pedagogical practices, and the methods used for evaluation. In order to develop an instrument that encompassed such a broad scope of topics, one existing research instrument and three theoretical frameworks were used to guide the development of the instrument for this study. Because of the exploratory nature of this study and the untested status of the instrument, open-ended questions were incorporated into the instrument. These questions reduced the risk of artificially limiting the range of possible responses, and resulted in information to guide future revision of the instrument.

In general, the scope of questions included in the instrument was sufficiently broad to account for most of the respondents’ answers. It was discovered, however, that the open-ended question related to leadership development content generated responses that could primarily be categorized within the AONE’s (2004) NMLC Learning Domain Framework. Future revisions of the instrument should incorporate the key concepts of this framework. It is strongly recommended that a pilot study be conducted before broadly distributing any new or revised research instrument. In the present study, a pilot study would have allowed key concepts of the NMLC to be incorporated into the quantitative portion of the research instrument.
Data collection

The data collection methods chosen for this study were based on Dillman’s (2007) TDM. Although this method was designed to improve survey response rates, obtaining a sufficiently large sample proved very difficult and the desired sample size for non-Magnet hospitals was not achieved. One challenging factor was the absence of an established list of individuals who are responsible for the administration of leadership development opportunities for front-line nurse managers. This necessitated contacting individual hospitals one-by-one via telephone rather than by postal or electronic mailing. Initial contact was often made through the telephone number of the hospital operator, often the only telephone number publicly available. It was challenging and time-consuming to navigate each hospital’s unique automated answering service and make contact with a human operator. Although the operators were often very pleasant, few were aware of the individual or department responsible for leadership development within the organization.

After several telephone calls, it quickly became clear that tremendous diversity exists related to where leadership development falls in each hospital’s organizational structure. In some organizational structures, leadership development is a function of executive-level nursing administration. In others, the Human Resources or Nursing Education department facilitates leadership development. Some hospitals have a department dedicated to Professional Development in which leadership development is a specialty. Still other organizational structures include a department solely dedicated to leadership development. Some hospitals worked with a contracted individual or organization to provide leadership development. Several hospital systems provided
leadership development through a centralized structure, often an individual or department at the corporate level. Several hospitals indicated during the telephone conversation that leadership development simply did not occur within their organization. This response was particularly common among the non-Magnet hospitals that were contacted.

A second challenging factor was obtaining contact information from the individual who was most appropriate for answering questions about the leadership development program in their organization. An electronic mailing address was needed in order to send a link to the web-based survey. In many cases, multiple voicemail messages were left with a particular department or individual without a response. Although information was given specifying that the study was a doctoral dissertation, the name of the school and degree program, and the purpose of the study, some individuals who did return telephone calls expressed skepticism regarding the authenticity of the study. Many indicated their suspicion that the purpose of the contact was actually to sell a product or conduct a marketing survey. These individuals were not willing to provide their electronic mailing address.

A third challenging factor was obtaining responses from individuals who had agreed to complete the survey. Some electronic mail messages sent to potential participants were returned as “undeliverable”. In several instances, participants called the researcher indicating that they did not receive the electronic mail message, that the message was blocked by their electronic mail server, or that their institution’s firewall would not allow the message to be delivered. Despite sending reminder messages via electronic mail over multiple weeks, many potential participants simply did not respond. It is unknown how many of these individuals were unable to complete the survey due to
time constraints, how many declined to participate, and how many simply never received the electronic mail message sent.

In combination, all of these factors make it difficult to make a reliable estimate of the response rate for this study. At the initiation of this study, just over 300 hospitals were designated as Magnet hospitals. Telephone contact was initiated with 220 of those hospitals, and 135 agreed to participate in the survey. For the 135 surveys sent, completed surveys were received from 108 hospitals, indicating a response rate of 80% from the Magnet hospitals that had agreed to participate. Given the possibility that some of the hospitals contacted did not receive the survey (due to electronic mail filters or organizational firewalls), the actual response rate may be significantly higher. Telephone contact was initiated with approximately 600 non-Magnet hospitals, and 104 agreed to participate in the survey. For the 104 surveys sent, completed surveys were received from 46 hospitals, indicating a response rate of 44% from the non-Magnet hospitals that had agreed to participate. Again, given the possibility that some of the hospitals contacted did not receive the survey, the actual response rate may be significantly higher.

Although the data collection process for this study was quite arduous, the process developed was the only clear way to obtain a truly randomized sample of leadership development programs that ensured a single response from each participating hospital, represented an accurate size distribution of Magnet hospitals, and did not include selection bias based on the hospital’s affiliation with any particular association or participation in an electronic mailing distribution list. Conducting a pilot study may have given valuable insight regarding the challenges associated with the data collection process. Although the process may not have been significantly modified as a result of the
pilot study, the experience would have provided a more realistic understanding of how intensive the process would be. It is recommended that researchers intending to replicate this study carefully consider these factors, either designing the study in a way the challenging factors might be avoided, or by budgeting adequate time, energy, and resources to obtain a large enough sample in spite of them.

Discussion and Recommendations for Practice

The purpose of this section is to discuss the implications of the findings from this study and provide recommendations for improving practices in leadership development. This section is organized by the foci of the three overarching research questions for this study, 1) current practices in leadership development in Magnet and non-Magnet hospitals, 2) differences between leadership development programs in Magnet and non-Magnet hospitals, and 3) the influence of hospital characteristics on leadership development. It is anticipated that this information will be useful for organizations and leadership development practitioners with the intention of developing or strengthening a comprehensive leadership development program. Current leaders may also find value in understanding various processes that may facilitate their own ongoing development.

Current Practices in Leadership Development: Content

Transformational Leadership

Contingent reward. In this study, contingent reward was the element of transformational leadership most commonly included in the content of leadership development for nurse managers in Magnet and non-Magnet hospitals. Contingent reward has consistently been linked to positive outcomes at the personnel and organizational level (Doran et al., 2004; Goodwin, Wofford, & Whittington, 2001; Lowe,
Kroeck, & Sivasubramaniam, 1996; McGuire & Kennerly, 2006; Stordeur, D’hoore, & Vandenberghe, 2001). It is not surprising that contingent reward leads to positive outcomes. In a relationship based purely on contingent reward, an individual who expends extra effort and increases productivity will receive, from the organization, a corresponding amount of financial remuneration, career advancement opportunities, and sincere recognition for a job well done. In a contingent reward relationship, however, there are practical limitations related to the organization’s capacity to provide such rewards and the individual’s motivation and ability to pursue them. At some point, a nurse manager fueling progress with extrinsic rewards will either exhaust the supply of rewards or find that such rewards are no longer effective at motivating staff.

Upon careful consideration, it is clear that the first-order gains associated with a contingent reward model are necessary, but are not sufficient to realize quantum leaps in the sustained improvement of organizational outcomes (Avolio & Bass, 2004; Bass, 1985). It is strongly recommended that nurse managers within hospital organizations be supported in their development as transformational leaders. The effectiveness of nurse managers will be optimized when their development encompasses the full spectrum of transformational leadership. While still affording adequate attention to the importance of Contingent Reward, maintaining an expanded scope of leadership development that includes other components of transformational leadership (i.e. Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration) may position hospitals for more dramatic and sustainable improvements in performance.

*Intellectual stimulation.* Intellectual stimulation was the element of transformational leadership least commonly included in the content of leadership
development for nurse managers in Magnet and non-Magnet hospitals. Intellectual Stimulation has also been linked to positive outcomes at the personnel and organizational level (Avolio & Bass, 2004; Doran et al., 2004; Lowe, Kroeck, & Sivasubramaniam, 1996), and is critical in a knowledge economy where knowledge workers are the currency. The nurse manager needs to stimulate fresh thinking and promote exchange of diverse perspectives related to challenges and opportunities that are relevant to the organization. Engaging the intellectual resources of many individuals on a hospital unit may lead to problem-solving and opportunity capturing beyond what the manager could do individually, increase buy-in when decisions are made, and elevate empowerment (Larrabee et al., 2003; Morrison, Jones, & Fuller, 1997; Pearson et al., 2007).

For example, a nurse manager whose 50 staff are intellectually engaged in improving processes on a hospital unit will be exponentially more effective in identifying ideal opportunities for process improvement than a manager working in isolation. It also seems reasonable to anticipate fewer challenges when making necessary changes if staff play an integral role in identifying those changes and planning their implementation. In addition to the immediate benefits of empowering staff in this way, empowerment also functions as a powerful source of intrinsic reward for many individuals (Larrabee et al., 2003; Morrison, Jones, & Fuller, 1997; Pearson et al., 2007). Adequate preparation of effective nurse managers includes facilitating their ability to intellectually stimulate their staff.

*Moral and ethical decision-making.* A point of specific concern, unique to the sampled non-Magnet hospitals, was the relatively infrequency with which leadership development for nurse managers included consideration for the moral and ethical
consequences of their decisions. The importance of the ethical and moral orientation of transformational leaders has been emphasized since Burns (1978) described moral progression and development as key differences between traditional models of leadership and transforming leadership, and has continued to be a prominent topic in recent publications on transformational leadership (see, for example Simola, Barling, & Turner, 2010).

Nurse managers who neglect to consider the ethical and moral consequences of their decisions may use decision-making processes that overemphasize the profitability or popularity of available options. While such decisions may facilitate the accomplishment of short-term financial goals or temporarily increase staff satisfaction, it is also possible that nurse managers will alienate subordinates who recognize that their own moral and ethical values differ significantly from those of the leader with whom they associate. In relation to the concept of transformational leadership, the Idealized Influence of the nurse manager would be compromised. In order for nurse managers to be as effective leaders as possible, their development must incorporate the importance of decision-making in context of the moral and ethical implications of those decisions.

Leadership Competencies

Managing the business. In addition to transformational leadership, leadership development programs for nurse managers in Magnet and non-Magnet hospitals often included necessary education related to managing the business aspects of the hospital unit. Although most (if not all) of the responses related to Managing the Business would be better defined as management rather than leadership competencies, there is no paucity of published research and expert opinion supporting those specific competencies as
critical for individuals in nurse manager roles (AONE; Care & Udod, 2003; Contino, 2004; Flesner, Scott-Cawiezell, & Rantz, 2005; Golden, 2008; Jennings et al., 2007; Kleinman, 2003; Oroviogoicoechea, 1996; Shaffer, 2003; Sherman et al., 2007).

Unfortunately, the focus of this content rarely expanded beyond the scope of the hospital unit, nor did it include content on strategic or systems thinking.

Broadening the focus of leadership development beyond the hospital unit would support nurse managers’ understanding of how their own unit’s functioning influences and is influenced by dynamics within the department, hospital, and external environment. In order for nurse managers to fully participate in department-level and organization-wide strategic initiatives, they must be prepared to conceptualize their unit in the broader context of the organization. Nurse managers must also be able to understand the unique opportunities that exist for their respective units and be skilled in developing and implementing strategic plans related to those opportunities.

Leading the people. Important practices related to leading people effectively are frequently included in leadership development for nurse managers. Particular focus is placed on assessment (primarily in the form of annual reviews). These annual reviews are a critical component of providing recognition and feedback that will promote staff development. These reviews also promote high levels of accountability to clinical expectations, professional colleagues, and organizational values.

Nurse managers are less frequently receiving development in the area of providing staff with the mentoring support necessary to develop as clinicians and professionals. Mentoring has been supported as an effective way to increase job satisfaction and organizational commitment in new graduate staff nurses (Weng et al.,
and has been linked to a number of positive organizational outcomes in a variety of disciplines (Eby, Allen, Evans, Ng, & DuBois, 2010) and organizations (Douglas & McCauley, 1999). Given the many financial and organizational costs associated with staff turnover and the evidence-base supporting the value of mentoring, organizations may find that resources committed to developing nurse managers as mentors is high-returning investment.

Shared governance and shared decision-making was rarely incorporated into the content of leadership development programs for nurse managers in either Magnet or non-Magnet hospitals. This was particularly surprising, given the emphasis on shared governance in the process for obtaining Magnet designation. Giving more attention to shared governance and shared decision making may result in nurse managers creating more opportunities to empower and intellectually stimulate their staff (Larrabee et al., 2003; Morrison, Jones, & Fuller, 1997; Pearson et al., 2007). Preparing nurse managers to effectively support shared governance is particularly important for organizations wishing to decrease turnover, increase levels of organizational commitment, and successfully pursue Magnet status.

Creating the leader within. Content related to Creating the Leader Within was essentially non-existent in the leadership development programs studies, indicating that managers may not be learning about maintaining work/life balance, managing stress, engaging in reflective practice, pursuing opportunities for continuing education, etc. Given the national scope of this study, it is extremely concerning that this trend appears to be so pervasive. It is a standard for Magnet hospitals to encourage work/life balance among employees, which makes it particularly surprising that hospitals may not be
applying this practice to their nurse managers. Given the shortage of qualified nurse
managers, concerns regarding nurse manager turnover, and the key responsibilities nurse
managers bear (Mackoff & Triolo, 2008a, 2008b; Scytt, Ljunggren & Carlsson, 2007;
Shirey, Ebright & McDaniel, 2008), it is crucial that nurse managers have sincere
encouragement and are fully supported to engage in activities that promote their personal
and professional development. In order to provide high-quality healthcare that is both
accessible and affordable, organizations must make this investment in their nurse
managers. It is also important that leadership development practitioners begin working to
incorporate content on Creating the Leader Within into leadership development
programs.

Current Practices in Leadership Development:
Pedagogical Practices

Support

In this study, Support was the pedagogical practice most commonly included in
leadership development experiences for nurse managers in Magnet and non-Magnet
hospitals. Nurse managers most frequently received this support from a supervisor.
Support from a supervisor is a critical component of overall organizational support,
which has been linked to working effectively, feeling empowered, and performance of
work beyond standard expectations of the role (Chen, Eisenberger, Johnson, Sucharski, &
Aselage, 2009; Patrick & Laschinger, 2006; Rhoades & Eisenberger, 2002).

Assessment

The pedagogical practice least commonly included in leadership development
experiences for nurse managers in Magnet and non-Magnet hospitals was assessment of
their performance in relation to ideal performance. Assessment and feedback have
consistently been linked to improved performance for managers (Atwater, Brett, & Cherise-Charles, 2007; Collins & Holton, 2004; Cunningham & Kitson, 2000a, 2000b; George et al., 2002; Hezlett, 2008; Smither, London, & Reilly, 2005; Tourangeau et al., 2003). Assessment data allows nurse managers to compare their performance to the ideal, determine the areas in which they have improved, and those areas in which opportunities for improvement continue to exist. It is particularly important that this feedback comes from multiple sources, including the nurse manager’s supervisor(s), peers, and staff. When applicable, feedback from clients may also be valuable. Providing nurse managers assessment data and feedback from multiple sources is an essential part of their ongoing development as effective leaders.

**Consultant.** The source from which nurse managers least commonly received assessment information was a consultant. The value of receiving feedback from a source external to the organization is supported in the literature (Kirkbride, 2006; McNally & Lukens, 2006; Thach, 2002; Smither et al., 2003), yet the financial cost of employing a consultant should be considered as well. It is also important for organizations to consider the potential implications, both positive and negative, of a nurse manager receiving feedback from an individual to whom the nurse manager does not report (i.e. a supervisor) or potentially compete with for resources (i.e. a peer within the organization).

**Mentor or coach.** Receiving support from a mentor or coach was also relatively rare in the leadership development programs of non-Magnet hospitals. Receiving support from a mentor or coach is important when reviewing and interpreting feedback that may be critical and difficult to accept, or feedback that is simply challenging to understand (McCauley & Van Velsor, 2004). Current evidence supports mentoring and coaching as
effective strategies in promoting leadership development (Atwater, Brett & Cherise-Charles, 2007; Cunningham & Kitson, 2000a, 2000b; Davies & Easterby-Smith, 1984; Day, 2000; Douglas & McCauley, 1999; Thach, 2002; Smither et al., 2003).

Organizations interested in developing or strengthening an effective leadership development program may need to allocate adequate financial and personnel resources toward mentoring or coaching support for nurse managers.

**Context**

In approximately half of the leadership development programs studied, leadership development primarily occurred outside the context of the nurse managers’ work environment. Leadership development occurring outside the context of the work environment may result in instruction that is not effective and/or learning that is not applicable or transferrable into the leader’s workplace (Day, 2000; McCauley & Van Velsor 2004).

Organizations that approach leadership development as a process that primarily occurs outside of work (e.g. via “Boot Camps”, seminars, retreats, and classroom lessons) may also be missing the leadership development opportunities embedded in the daily work of the nurse manager. Rather than learning only in monthly seminars and annual retreats, nurse managers can learn daily from their work. This occurs when managers receive meaningful feedback on their performance, challenging assignments designed to facilitate their development, and adequate support as they interpret, accept, and act upon the feedback. Over time, it is likely that the process of learning from daily experiences will become a more independent process in which the nurse manager is continuously engaged.
Although it is not clear why leadership development so frequently occurs outside the context of the nurse managers’ work environment, it is strongly recommended that organizations carefully consider the true costs associated with this practice. If nurse managers are unable to apply what they have learned to their work, the costs of the program infinitely outweigh the benefits. If nurse managers develop the ability to learn from their daily experiences, the benefits of the program will exponentially exceed the costs.

Program Design

Based on responses to the open-ended question related to pedagogical practices, the vast majority of leadership development programs are imbalanced or incomplete in terms of pedagogical design. This held true for Magnet and non-Magnet hospitals. As described previously, effective leadership development programs include three essential elements: assessment, challenge, and support. The results of this study suggest the vast majority of leadership development programs are imbalance or incomplete. Specifically, one or more of these essential elements is missing entirely, or one or two elements are emphasized to the minimization of the other(s).

Imbalanced or incomplete leadership development programs are at risk for being ineffective, discouraging, or even harmful (Davies & Easterby-Smith, 1984; Day, 2000; Fielder, 1996; Lord & Hall, 2005; McCauley et al., 1994; McCauley & Van Velsor, 2004). For example, consider a calculus course where the teacher gives frequent encouragement and the students are all very supportive of each other. Challenging assignments are given frequently to help students develop their calculus skills. The only drawback is that students are not regularly assessed and subsequently do not receive
regular feedback regarding their calculus skills. In this scenario, the teacher would not know whether the assignments were too easy, of appropriate difficulty to facilitate growth, or overwhelming, nor would the teacher know whether the assignments were aligned with skills the students still needed to develop. The students would not know whether their performance was exceptional, acceptable, or poor, and would be left to rely on and act upon their own (potentially inaccurate) assumptions. As can be seen in this example, missing even one of the three essential components may result in instruction that is, at best, ineffective. Organizations must evaluate whether assessment, challenge, and support are integrated throughout their leadership development programs in a balanced way, and then make adjustments and revisions as necessary.

Current Practices in Leadership Development: Evaluation Methods

Reaction/Planned Response

Evaluation of the effectiveness of leadership development opportunities for nurse managers most commonly occurred at the first level of evaluation, Reaction/Planned Response. Evaluation at this level is common within the field of organizational development (Arthur et al., 2003). Evaluation of an individual’s reaction and/or planned response to training can provide guidance to ensure leadership development opportunities are accessible, enjoyable, and perceived as valuable by target audience. It is important that nurse managers are able to access and be willing to engage in leadership development activities. Although evaluating at the Reaction/Planned Response level is necessary, it is not necessarily sufficient. Positive results at the Reaction/Planned Response level do not guarantee positive results at subsequent levels.
Fully understanding the effectiveness of a leadership development program or initiative requires evaluation of whether participants learned, changed their behavior, affected organizational outcomes, and generated some level of positive return for the organization. For example, consider a leadership development program focused on improving communication. An evaluation conducted at the end of the program reveals that the participants clearly enjoyed and appreciated the opportunity for development. The participants feel they have developed some valuable communication skills and eagerly await an opportunity to implement the skills on their respective hospital units. As these opportunities arise, the participants find it difficult to remember some important aspects of the new approach to communication. After some frustrating attempts with the new communication techniques, they find themselves relying on the communication strategies they had been using before the development opportunity.

In this example, an evaluation at the Reaction/Planned response level suggested the leadership development program was extremely effective. Based on these results, the program might be implemented more broadly within the organization or even disseminated to other organizations via professional papers and presentations. Evaluation conducted at the level of Learning or Behavior Change would have suggested the program had a minimal effect, if any. These results might prompt an organization to follow up with additional development opportunities with the participants, and to make necessary revisions to improve the quality of the program. Determining the true effectiveness of a leadership development program requires an adequately designed evaluation.
Business Results

At first glance, it may be surprising that hospitals so frequently track Level 4: Business Results (i.e. organizational outcomes) as a means for evaluating the effectiveness of the leadership development opportunities for nurse managers. In fact, only 7% of organizations evaluate their leadership development efforts at the level of Business Results (Arthur et al., 2003). While many hospitals do regularly track key organizational outcomes, it is not readily apparent in the results that hospitals are isolating the effect of the leadership development program on these outcomes. Unless the effects of the leadership development program are isolated, the hospitals cannot necessarily attribute variations in these outcomes to the nurse manager, much less to the effects of the leadership development program (Phillips & Phillips, 2007). Evaluation at Level 2: Learning and Level 3: Behavior Change, both of which intermediary levels between Level 1: Reaction/Planned Response and Level 4: Business Results, is necessary to clearly understand the relationship between the leadership development program and the desired organizational outcome.

As an example, consider a hospital system where staff turnover is a problem that is becoming progressively more severe. In order to reverse this trend, a leadership development initiative is undertaken to support nurse managers in empowering staff. During this initiative, nurse managers are taught new approaches to empowering staff. Evaluations of the participants’ reactions and planned responses suggest the initiative was a tremendous success. Staff turnover is tracked as an organizational outcome to evaluate the effectiveness of the initiative. Over several months, it becomes clear that staff turnover is trending downward.
In this example, the desired outcome was accomplished, yet the role of the nurse manager and the role of the leadership development initiative remain unclear. Turnover may have been reduced for any number of reasons that were entirely unrelated to the nurse manager or the leadership development initiative (or, indeed, in spite of them). Similarly, an upward trend in turnover might be unfairly attributed to a very effective initiative, or to a nurse manager who is quite skilled at empowering staff.

In order to determine the effectiveness of the initiative, it must first be determined whether the nurse managers truly learned the new approaches to empowerment (Level 2: Learning). It must then be determined whether the nurse managers actually implemented the new approaches to empowerment (Level 3: Behavior Change). Trends in staff perceptions of empowerment, as well as staff turnover, could then be tracked as organizational outcomes (Level 4: Business Results). Changes in these organizational outcomes could then be more meaningfully linked to the leadership development initiative.

Although the complexity of the evaluation clearly increases when intermediary levels are included, the results provide a meaningful basis for decisions regarding the effectiveness of the program. A complete evaluation also offers insight regarding why an initiative may not have been effective. For example, knowing that the nurse managers learned the new strategies but did not implement them might indicate an organizational barrier to empowerment that needs to be addressed. If, perhaps, the empowerment strategies were implemented and staff perceptions of empowerment increased, yet turnover continued to rise, factors beyond staff empowerment might be explored as potentially contributing to turnover.
Return on Investment

Evaluating leadership development programs at Level 5: Return on Investment was the method used least frequently by Magnet and non-Magnet hospitals. Return on Investment can be a very important mechanism for determining how valuable the leadership development program is to the organization and for justifying financial and other resource allocations for supporting the program (Phillips & Phillips, 2007). Although calculating return on investment may be necessary at times, many organizations may be sufficiently satisfied with evidence that the leadership development program has a positive impact on key organizational outcomes. As with evaluation at Level 4: Business Results, evaluation at Level 5: Return on Investment is only meaningful if adequate evaluation has occurred at the preceding levels.

Differences Between Magnet and Non-Magnet Hospitals

Content

The findings from this study suggest Magnet hospitals, as compared to non-Magnet hospitals, more frequently include content in their leadership development opportunities that is aligned with the key concepts of transformational leadership. Given the emphasis on transformational leadership as a key component of the Magnet model (Wolf, Triolo & Ponte, 2008), this result validates the alignment of Magnet hospitals with the model. Organizations intending to more closely align their leadership development programs with the key concepts of transformational leadership may find it useful to seek consultation from or collaboration with Magnet hospitals.

Magnet hospitals also incorporated a broader range of the AONE-identified NMLCs (2004) into leadership development programs than did non-Magnet hospitals.
Both Magnet and non-Magnet hospitals placed heavy emphasis on Managing the Business, but significantly more Magnet hospitals included content on Leading the People as well. This difference also suggests Magnet hospitals are working to meet expectations for strong nursing leadership within the organization. Neither Magnet nor non-Magnet hospitals incorporated a notable focus on Creating the Leader Within into their leadership development programs. As described previously, this finding is extremely concerning and warrants an active response from organizations and leadership development practitioners.

**Pedagogical Practices**

As compared to non-Magnet hospitals, leadership development opportunities for nurse managers in Magnet hospitals more frequently incorporated two of the three critical components of effective leadership development experiences (Assessment and Challenge) into leadership development opportunities for their nurse managers. No significant difference in the use of Support was found between Magnet and non-Magnet hospitals.

**Assessment.** In order to receive Magnet designation, hospitals are required to provide evidence that demonstrates the alignment of their organizational structure, processes, and practices are aligned with the Magnet model (Wolf, Triolo & Ponte, 2008). The measures used to track quality of care, quality improvement processes, and leadership effectiveness, are likely very similar to the metrics provided to nurse managers in the form of assessment and feedback. This practice may be associated with the comparatively high scores Magnet hospitals received for incorporating Assessment into leadership development programs.
Although assessment may be used with relative frequency in Magnet hospitals, it does not appear to be used with the intentionality needed to effectively promote leadership development. Providing a nurse manager with regular reports of various organizational metrics is most helpful when there is a clear understanding of how the nurse manager’s behavior influences the metric. Understanding this relationship makes it possible to develop or strengthen effective leadership behaviors. Otherwise, the nurse manager is left to make assumptions about what behaviors to change, learning primarily through a slow and potentially frustrating trial-and-error process.

When organizational outcomes are used to assess the performance of a nurse manager or the effectiveness of a leadership development program, such metrics should be interpreted with caution. It is important to note that not all variations in patient satisfaction, staff satisfaction, unit productivity, and staff turnover can be attributed solely to the nurse manager. Random variability and systematic variability beyond the control of the nurse manager may also influence these outcomes, particularly over limited periods of time.

**Challenge.** Receiving Magnet designation also requires hospitals to track and improve outcomes over time (Wolf, Triolo & Ponte, 2008). The leadership of front-line nurse managers plays an essential role in accomplishing optimal organizational outcomes in the hospital setting. It follows that nurse managers bear much of the challenge associated with improving organizational outcomes, and are likely held accountable for improving outcomes on their respective units. This practice would likely be associated with the comparatively high scores Magnet hospitals received in the Challenge subscale.
While the role of the nurse manager is certainly challenging to fill, it does not appear that Challenge is being used intentionally as a strategy to promote leadership development. Giving a challenging assignment is most beneficial when the assignment is designed to facilitate the development of a specific skill or skill-set. For example, a nurse manager working to develop skills in the area of Intellectual Stimulation might be tasked with developing a unit-based Practice Council that would critically evaluate standards of practice and make recommendations for improvement. This exercise would meet an important need on the hospital unit, and would give the nurse manager an opportunity to develop skills in the area of Intellectual Stimulation. Using Challenge with this level of intentionality helps assure that nurse managers are continually learning through various work experiences, and may allow nurse managers to experience the challenging aspects of the role as learning experiences rather than simply as burdens to be borne.

Support. Although there was no significant difference in the use of Support was found between Magnet and non-Magnet hospitals, both received higher scores on the Support subscale than the Assessment or Challenge subscales. The reason for this phenomenon is not clear, but it is interesting to note that none of the standards for Magnet hospitals (Wolf, Triolo & Ponte, 2008) are clearly related to the items on the Support subscale.

Evaluation Methods

Magnet hospitals used all five levels of evaluation more frequently than did non-Magnet hospitals, although this difference was only statistically significant for evaluation at the level of Reaction/Planned Response. This may be a result of a stronger overall focus on evaluation in Magnet hospitals, as it is a requirement of Magnet hospitals to
track a number of organizational outcomes (Wolf, Triolo & Ponte, 2008). As discussed previously, there is value to evaluation at the level of Reaction/Planned Response, yet additional levels of evaluation must be conducted to support conclusions about the overall effectiveness of a leadership development program.

Influence of Hospital Characteristics on Leadership Development

Content

The hospital characteristic with the highest predictive value for the content of the leadership development program was having a leadership development specialist with experience in organizational development. This finding does not support the American Nurses Association’s (2010) standards for nursing professional development educators, which specify the need for a graduate degree in nursing or a related specialty. Although a graduate degree in nursing may be important for many reasons, the degree does not necessarily ensure that the professional development educator has experience in organizational development. Other published literature related to leadership development for nurse managers does not address the importance of having a leadership development specialist within the organization, nor does it address the educational or experiential qualifications of that individual.

As described in Chapter 2, the concept of transformational leadership has had a dramatic impact on the trajectory of leadership practice, theory, and research. Published research and theoretical analyses of transformational leadership are prevalent in the literature associated with the field of organizational development. In general, published research links the practice of transformational leadership positively to desired outcomes in organizational development. Therefore, it is not entirely surprising that having a
leadership development specialist with experience in organizational development predicts the alignment of a leadership development program’s content with transformational leadership; however, this line of reasoning does not explain why having a leadership development specialist with a degree in organizational development did not produce similar results.

When developing or strengthening a leadership development program, it is important for organizations to consider the positive impact of a professional development educator with experiential preparation for the role. Based on the results of this study, a potential candidate’s experience in organizational development should be a strong point of consideration. The importance of an individual’s background in organizational development may also have broader implications related to the preparation and qualifications of leadership development practitioners.

Pedagogical Practices

The hospital characteristic with the highest predictive value for the pedagogical practices used in the leadership development program was designation as a Magnet hospital. These results indicate that Magnet designation is associated with incorporating essential elements of effective leadership development experiences (i.e. assessment, challenge, and support) into the leadership development opportunities provided to nurse managers within the organization. As described previously, it is critical that organizations incorporate each of these methods into programs in a way that intentionally promotes leadership development. For organizations working to improve the pedagogical practices associated with their leadership development programs, obtaining consultation or pursuing collaborative opportunities with a Magnet hospital may prove helpful.
Evaluation Methods

The hospital characteristics with the highest predictive value for the methods used to evaluate leadership development programs were 1) having Magnet status, 2) being located in an urban area, 3) being affiliated with a hospital system, and 4) having a designation as a teaching hospital. Each of these characteristics will be discussed in turn.

*Magnet Status.* Magnet designation requires hospitals to provide evidence of transformational leadership. It follows that Magnet hospitals conduct more frequent evaluations of their leadership development programs. Magnet hospitals may also track other organizational outcomes more frequently, and then use that data to evaluate the effectiveness of their leaders. These results may also appear to confirm that Magnet hospitals place a stronger overall focus on evaluation than non-Magnet hospitals, particularly related to leadership. Although evaluation may occur more frequently in Magnet hospitals, it is important that program evaluation in any setting be conducted thoughtfully and thoroughly to ensure that the results provide meaningful information about the effectiveness of the program.

*Urban Location.* It is not clear why urban hospitals evaluate the effectiveness of their leadership development programs more frequently than do rural hospitals. It could be presumed that urban hospitals tend to be larger than rural hospitals in terms of bed size, and thus have organizational infrastructure that would support more sophisticated methods for evaluating leadership development programs; however, bed size was not found to predict more than 10% of the variance in evaluation methods. Another possible consideration is that urban hospitals are in a more financially favorable condition than rural hospitals, and thus can afford more sophisticated evaluation methods; however,
annual patient revenue was not found to predict more than 10% of the variance in evaluation methods used by hospitals.

*System Affiliation.* It is not clear why hospitals affiliated with a hospital system evaluate the effectiveness of their leadership development programs more frequently than hospitals not affiliated with hospital systems. It is possible that this phenomenon is due to the “economy of scale” opportunities that might accompany affiliation with a hospital system, in which the costs of evaluation are distributed among the hospitals in the system.

*Teaching Hospital Designation.* It is not clear why teaching hospitals evaluate the effectiveness of their leadership development programs more frequently than do non-teaching hospitals. It is possible that teaching hospitals have a stronger focus on research and evaluation in general, as compared to non-teaching hospitals, and this focus extends to the evaluation of leadership development efforts.

*Summary*

The results of this study suggest opportunities abound for improving practices in leadership development for nurse managers in both Magnet and non-Magnet hospitals. These potential improvements span all three aspects of leadership development studied: content, pedagogical practices, and evaluation methods. Despite this global need for improvement, the results also suggest that some elements of the leadership development practices in Magnet hospitals tend to be superior to those in non-Magnet hospitals. It appears that several distinct hospital characteristics (i.e. Magnet status, urban location, affiliation with a hospital system, and designation as a teaching hospital) have a significant influence on leadership development practices. The reasons for this influence are not entirely clear, although several possibilities exist.
Recommendations for Future Research

This study provides a more detailed understanding of current practices in leadership development than was previously available. There is, however, a considerable body of research that remains to be conducted. For example, little is known regarding the effectiveness of current practices in leadership development. Longitudinal case study research, including both qualitative and quantitative components, may provide a deeper, more detailed understanding of the implementation and effectiveness of current practices in leadership development in selected hospital settings. The qualitative component of the study may be able to include a focus on cultural factors within the organization that facilitate or act as barriers to the development and implementation of effective leadership at the level of the front-line nurse manager. Adding a multi-site, comparative aspect to this case study research may facilitate the development of a comprehensive theoretical framework for leadership development, as well as structured hypotheses that could be tested through experimental and quasi-experimental research.

Ultimately, experimental and quasi-experimental studies are necessary to determine the relative effectiveness of specific practices in leadership development. An experimental study could be conducted by constructing a leadership development program based on the theoretical frameworks that were used in this study, with the inclusion of the AONE’s (2004) NMLC Learning Domain Framework. Randomly selected front-line nurse managers from multiple hospitals would experience this leadership development program. The remaining front-line nurse managers would serve as a control group, experiencing the leadership development program currently offered within their respective hospitals. A comparison of the two groups would be based on data
collected at each level of the PFL, including reaction/planned response, learning, behavior change, business results, and return on investment.

A quasi-experimental study could be conducted in a similar fashion, except nurse managers would not be assigned randomly to an experimental or control group. Instead, nurse managers considered part of the experimental group would be those already working in a hospital where leadership development practices reflect those outlined in the theoretical frameworks used for this study. Again, comparison would be conducted based on data collected at each level of the PFL.

Other questions that remain at the conclusion of this study include the effect of a leadership development specialist within the hospital, and the specific effect of that individual’s experiential and educational background. Differences were found in leadership development practices in Magnet versus non-Magnet hospitals, yet the reasons for these differences are not well understood. Additional study of how hospitals with Magnet designation interpret and operationalize the requirements for Magnet status may help explain these differences. Additional understanding is also possible regarding the hospital characteristics determined to predict the evaluation methods used in leadership development programs (i.e., Magnet status, designation as urban, designation as a teaching hospital, affiliation with a hospital system). Although it is not always possible or practical to modify these characteristics, further exploration of their individual effects may make it possible for hospitals without those characteristics to reproduce at least some of the positive effects.

The focus of the present study was on leadership development for front-line nurse managers. Leadership development is important for leaders at all levels of nursing, as
well as other disciplines functioning in the health care system. Future research could focus on leadership development for nurse executives, directors of nursing departments, and managers in other healthcare disciplines. A growing body of research suggests that development in organizations has a cascading effect extends beyond the immediate team and organization (Aguinis & Kraiger, 2009). This cascading effect is a phenomenon that would be important to include in future research on leadership development.

Summary

This research included a descriptive study of current practices in leadership development for front-line nurse managers in Magnet and non-Magnet hospitals, addressing the content, pedagogical practices, and evaluation methods associated with formal leadership development programs. A comparison of leadership development programs in Magnet and non-Magnet hospitals was also performed. Further analyses explored the influence of hospital characteristics on leadership development in Magnet and non-Magnet hospitals.

Conclusion

This chapter provided a summary of the preceding chapters and included a discussion of the implications of the study. The summary included a review of the purpose and significance, the methodology, and recommendations for replication of this study. The discussion included implications of the results and implications for practice, as well as recommendations for future research.
REFERENCES


Merriam, S. B. Qualitative research and case study applications in education. San Francisco: Josey-Bass.


APPENDIX A

LEADERSHIP DEVELOPMENT PRACTICES SURVEY
Leadership Development Practices Survey: Part I

Please consider the formal leadership development opportunities offered to nurse managers in the hospital where you work. Use the scale below to answer each of the questions.

1=Never or rarely  2=Sometimes  3 = Usually  4= Frequently

<table>
<thead>
<tr>
<th>In this program, leaders are taught how to:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate to subordinates what is expected of them</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate to subordinates what rewards or recognition can be expected if performance goals are achieved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate satisfaction with subordinates when expectations are met</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish trust with subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model their own values and beliefs for subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider the moral and ethical consequences of their decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help subordinates develop optimism and enthusiasm about a shared future vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help subordinates realize the value of their work responsibilities in contributing to the overall success of the team, unit, or hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help subordinates feel empowered to accomplish their goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seek new ideas and perspectives from their subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage subordinates to consider problems from different perspectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-examine commonly held assumptions within the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify the specific needs and capabilities of individual subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitate the development of the subordinate through coaching or mentoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interact with subordinates as individuals, not just members of the group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What other content is taught in the leadership development program?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Leadership Development Practices Survey: Part II

Please consider the formal leadership development opportunities offered to nurse managers in the hospital where you work. Use the scale below to answer each of the questions.

1 = Never or rarely  2 = Sometimes  3 = Usually  4 = Frequently

<table>
<thead>
<tr>
<th>In this program, leaders develop their leadership skills by:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewing feedback from their supervisor, peers, and/or subordinates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewing the results of employee satisfaction surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving feedback from a consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Being given challenging job assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working toward challenging goals within a current job assignment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving support from a mentor or coach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving support from professional colleagues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiving support from a supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What other methods are used to help leaders develop their leadership skills?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

198
Leadership Development Practices Survey: Part III

Please consider the formal leadership development opportunities offered to nurse managers in the hospital where you work. Use the scale below to answer each of the questions.

1 = Never or rarely  2 = Sometimes  3 = Usually  4 = Frequently

<table>
<thead>
<tr>
<th>This program is evaluated by:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking whether participants enjoyed the experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asking whether participants feel they learned</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing the participants to evaluate their learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asking participants to describe what they learned</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observing, or having someone else observe, whether the participant’s behavior has changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collecting ratings of the participant’s performance from peers, subordinates, and/or supervisors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring an organizational outcome (e.g. patient satisfaction, unit productivity, staff turnover, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measuring the financial impact of the experience (e.g. increases in profitability, decreased expenditures)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculating the return-on-investment associated with the program (i.e. the financial benefit of the program in relation to its cost)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What other methods are used to evaluate the leadership development offerings?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>