Leadership and Political Skill Preparedness

of the Doctoral Prepared Nurse

Wanda Montalvo

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DISSERTATION ABSTRACT

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The Institute of Medicine Future of Nursing report recommended the development of more nurse leaders at every level and across all settings. The Accountable Care Act has led to a reformed healthcare system, placing a growing demand for nurse leaders. The doctoral prepared nurse must be able to fulfill leadership roles to educate future generations of nurses, translate research into practice, and influence organization-level research to meet federal performance indicators. **Study Aim:** To analyze the mentoring elements provided in the mentoring elements provided in the mentoring relationship of doctorate nurses and their correlation to leadership and political skill development. **Methods:** A population-based web-based retrospective cross-sectional design was used to measure the correlation between mentoring functions provided to guide leadership and political skill development in PhD and DNP prepared nurses (n=222) identified as Jonas Nurse Scholars. **Results:** A response rate of 52% (n=115) was attained; 86 (75%) were PhD and 29 (25%) were DNP prepared nurses. The respondents were predominately female (87%) with 21% in the 25-34 age range and 57% in the 35-44 age range and 70% were Caucasian and 29% were minority. Of the 115 respondents, 64% (n=74) had a mentor of which 62% (n=46) reported being in an informal mentoring relationship. This cadre of PhD and DNP prepared nurses were highly experienced with 49.6 % having $\geq$ 16 years of experience and 67% working either full-time or part-time regardless of graduation status. The most frequent psychosocial mentoring functions were role modeling and learning facilitation. The most frequent career mentoring functions were coaching and advocacy closely followed by career development facilitation and strategies and systems advice. Leadership skill development was

correlated with the coaching mentoring function (r=.30, p. < 0.05). Political skill development was correlated with the career development mentoring function (r=.34, p. < 0.005). PhD and DNP nurses were similar on the leadership scale with a mean score of 7.92 (scale range 1-10) and political skill scale with a mean score of 5.73 (scale range 1-7). **Conclusion:** Both PhD and DNP prepared nurses identified as Jonas Nurse Scholars possess leadership and political skill as measured by industry standard instruments. Mentoring is one strategy to support and further develop leadership and political skill in the doctoral prepared nurse.

Table of Contents.

List of Tables ..... **v**

List of Figures ..... **vi**

Acknowledgements ..... **vii**

Dedication ..... **viii**

Chapter 1: Introduction to the Dissertation **1**

Introduction 1

Purpose of this Research 3

Rationale/Statement of the Problem 4

Research Question 6

Theoretical Framework 7

Definition of Terms 9

Mentoring: 9

Protégé: 9

Political skill: 9

Leadership: 9

Doctoral Nurse: 10

Doctoral Nurse Candidate: 10

Assumptions of this study 10

Significance 10

Mentoring in Nursing 11

Political Skill 12

Leadership 12

Chapter 2: Comprehensive Review of Mentoring, Leadership and Political Skill **14**

National Trends 14

The Concept of Mentoring 15

Phases of the Mentoring Relationship 17

Levels of Mentoring Support 18

Dysfunctions in Mentoring 19
Mentoring in Nursing 19
The Benefits of Mentoring for Nursing 21
Nurse Mentoring Research 23
Table 1: Summary of Nurse Mentoring Studies 25
Summary of the Nurse Mentoring Research 27
Political Skill 27
Political Skill Construct 28
Political Skill Theoretical Framework 30
Job Performance and Political Skill 31
Power and Political Skill 32
Nursing Research of Political Skill 33
Summary of Political Skill and Relevance to Nursing 33
Leadership in Nursing 34
Future Nurse Leader Framework 34
Nursing Leadership Research by Domain Thread 36
Clinical Leadership 36
Influencing Behavior 37
Mentoring Emerging Nurse Leaders by Nurse Leaders 38
Challenge of Limiting Leadership Style to Transformational Leadership 39
Summary of Leadership and Relevance to Nursing 39
Chapter 3 44
Methods 44
Overview 44
Description of the Population 44
Research Design 45
Sample 46
Inclusion Criteria 46
Exclusion Criteria 46
Recruitment 46
Sampling Frame 47
Data Collection 47

Controlling for extraneous variables 48
Missing Values 48
Description of Instruments 49
Mentoring Functions Survey (MFS) 49
Leadership Practice Inventory (LPI) 50
Political Skill Inventory (PSI) 50
Data Analysis 51
Effect Modifiers 52
Analysis of Study Aims and Hypothesis 52
Chapter Four: Results 59
Answering the Research Questions 61
Additional Findings 63
Chapter Five: Discussion, Conclusions and Recommendations 82
Comparison with the literature 83
Mentorship Phase 84
Mentoring Functions 85
Protégé-Mentor Similarities 85
Correlation to Leadership 86
Correlation to Political Skill 87
Contrast to the Literature 88
Synthesis of the literature 88
Conclusions and Limitations 89
Recommendations 90
Implications for Future Research 90
Recommended Mentoring Practices for Doctoral Prepared Nurses to Improve Outcomes 93
Summary 96
Appendices 97
Appendix 1 IRB Approval 98
Appendix 2 Part I Survey Instrument: Mentoring and Political Skill 99
Appendix 3 Part 2 Survey Instrument Sample of Leadership Practice Inventory 107
Pertinent Communication 109

Approval for Mentoring Research Instrument 109
Approval for Leadership Practice Inventory 110
Approval for Political Skill Inventory 111
Approval to use AONE Three-dimensional Administration Curriculum Model 112
Approval to use Dimension of Political Skill and Meta-Theoretical Framework 114
Invitation to Participate in Study with Consent 115
References 117

List of Tables

Table 1 Summary of nurse mentoring studies. 25

Table 2 Political skill construct 29

Table 3 Summary of nursing leadership research 41

Table 4 Study variables and statistical methods 55

Table 5 Frequency counts for selected variables 66

Table 6 Frequency counts for selected mentoring variables 68

Table 7 Communication type and frequency 70

Table 8 Ratings of similarities with mentors sored by the highest mean 71

Table 9 Self-perceived level of political skill 72

Table 10 Psychometric characteristics for the aggregated scale scores 73

Table 11 Mann-Whitney test for selected scale scores based on doctoral program 74

Table 12 Spearman's Rho correlation for selected mentoring scale and political skill 75

Table 13 Spearman's Rho correlation for selected mentoring scale and leadership 76

Table 14 Mann-Whitney test based on mentoring status for leadership and political skill 77

Table 15 Odds Ratio Test for Graduation Status and Participation in Leadership or Fellowship Program 78

Table 16 Kruskal Wallis Test for Career Stage, Age Group, Yrs of Work Experience 79

Table 17 Final Model for LPI Total Score Based on Selected Variables 80

Table 18 Spearman's Rho correlation for the nine mentoring similarity ratings 81

Table 19 Effective Mentor and Protégé Characteristics 95

List of Figures

Figure 1: Nurse Mentoring Framework 8

Figure 2: Meta-Theoretical Framework of Political Skill 30

Figure 3: AONE/CGEAN Three-dimensional Administration Curriculum Model 35

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Dedication

This dissertation is dedicated to Ermenegilda Perez (a.k.a Nina) who passed on January 15, 2015 at the age of 103. In my life, she was Mother, Father and Grandmother; a mighty prayer warrior. She gave me unconditional love, even when I was sometimes unlovable, prayed for me every day, and shared with me many pearls of wisdom. Though she was denied even an elementary school education, she instilled in me the value of an education to help change the next generation.

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Chapter 1: Introduction to the Dissertation

Introduction

The Affordable Care Act (ACA) will result in health insurance coverage for about 94% of the American population.[1] In order to help reduce healthcare spending, agencies like the Center for Medicare & Medicaid Services (CMS) have embarked on a large scale transformation of clinician practices to achieve observable and measureable changes to practice behavior.[2] The CMS Quality Initiatives identified the following core competencies to facilitate healthcare transformation: engaged leadership and quality improvement, team-based relationships, and evidenced-based care.[2] Nurses with varying levels of education and preparation play an important role in public health, patient-centered care, quality, safety and system performance. [3] In alignment with the CMS Quality Initiative, the Quality and Safety Education for Nurses (QSEN) project (http://qsen.org/competencies/graduate-ksas) established guidelines for graduate education to prepare future nurses, specifically graduate nurses to have the knowledge, skills and attitudes (KSAs) necessary to continuously improve the quality and safety of the healthcare systems.[4] The QSEN project identified essential competencies for graduate nurses to provide leadership and guidance:[5,6] quality improvement, safety, teamwork and collaboration, patient-centered care, evidence-based practice, and informatics. The need for well-equipped nurse leaders is clear and will play a critical role in the future of healthcare system performance. However, a pathway for developing these future nurse leaders must be identified and empirically studied.

According to labor statistics, nursing is the largest workforce in healthcare and will grow at an accelerated pace. The U.S. Department of Labor projects a 19 percent growth of registered

nurses from 2012 to 2022, faster than the average for all occupations.[7] There were 2.8 million nurses reported between 2008-2010 with the majority (63.2%) working in hospitals providing inpatient and outpatient care.[8] As the largest sector of the healthcare, nurses can help redesign a system focused on patients instead of on the convenience of providers, payers or health care organizations.[3] The Occupational Information Network (O*NET)[9] database describes nursing graduates as knowledgeable and having the necessary skills to help with system redesign; possess decision making and problem solving skills'; and able to organize and prioritize work. In a reformed health care system, there is a growing demand of emerging competencies in decision making, quality improvement, systems thinking. To answer this call, nurses with a Doctorate in Philosophy (PhD) help teach future generation of nurses and conduct research that becomes the basis for improvement in nursing practice. [3] The PhD nurse is also able to assume leadership and administrative roles in health care system and academic settings. Nurses with a Doctorate of Nursing Practice (DNP) are clinical scholars with the capacity to translate research, shape systems of care, and influence organizational-level research to improve performance using informatics and quality improvement models. [3]

The healthcare climate has placed an increased demand for highly educated nurses capable of leading quality, safety and care access. A growing number of nurses are pursuing graduate level degrees, a select group to consider for leadership and political skill development. The HRSA Nursing Workforce Center reported that between 2007 to 2011, more than 24,000 nursing master's degrees and nearly 2,200 doctorate degrees were awarded in 2011, an increase of 67 percent for master or doctoral prepared nurse.[8] In 2013, the American College of Nursing (AACN) nursing PhD and DNP programs had 19, 922 enrollments and 3,101 graduates.[10] The doctoral prepared nurse, as the emerging nurse leader, needs to be supported to develop a

systems-perspective of healthcare to fill essential roles in research, quality improvement, evidence-based practice, and leading interdisciplinary teams across diverse delivery settings.[11,12] The National Institute of Nursing Research (NINR) recommended that nurses lead and be politically skilled in order to realign the healthcare system for long-term changes in healthcare quality, design of health-care practice, and health information transparency.[1,13-16] As a decision maker, the expert nurse brings a deep knowledge along with the capacity to assess the context of a situation and make salient points to achieve resolution.[17] The doctoral prepared nurse is in a prime position to execute the strategies developed by CMS, NINR and QSEN, but leadership and political skill competences are needed to navigate organizational politics and lead the nursing workforce. To accomplish the goals of these agencies, the doctoral prepared nurse will need to have skills beyond those of clinical and research expertise. The acquisition of leadership and political skill is not developed through textbook learning only but would benefit from mentoring because experience and contextual knowledge is guided through the mentoring relationship.[18] Mentors guide mentees in understanding the formal and informal power structures of the organization, an imperative for supporting these emerging leaders or risk failing the next generation of leaders.[19]

Purpose of this Research

The purpose of this study is to analyze the mentoring elements provided in the mentoring relationship of doctoral prepared nurses and their correlation to leadership and political skill development.

Rationale/Statement of the Problem

In 2011, a seminal report by the Institute of Medicine (IOM) entitled "The Future of Nursing: Leading Change, Advancing Health" made several strategic recommendations to help advance the healthcare reform outlined in the ACA.[3] The IOM report indicated that our complex healthcare system would benefit by having more nurses lead at every level and across all settings. The report indicated that nurses *must understand* that their leadership is important to quality care along with their technical skills. [3] However, healthcare industry leaders and policy makers perceive nurses as doers and not leader. Throughout the history of the nursing profession, the nurse is often confronted with limitations based on cultural ideology of the patient care-giver role, economic constraints, and ultimately limited political power.[20] As a predominately female profession, understanding nursing's historical context is important because of the inherited assumption that nurses have acquiesced authority to paternalistic hospital systems and patriarchal control to physicians.[20] The negative impact of these trends can be found in the national opinion poll from the IOM Future of Nursing (2011) report where "relatively ***few*** opinion leaders say nurses currently have a great deal of influence on increasing access to care, including primary care"(p. 224) and "perceive patients and nurses as having the ***least amount of influence*** on health care reform *in the next 5-10 years*"(p. 224).[3] A 2013 national survey of hospital nursing found physicians and hospital administrators lacked an understanding of the contributions of nursing research or their role in supporting system change.[21] While the IOM and other leading nursing organizations recommended mentoring to support leadership development, mentoring in nursing has primarily focused on recruitment and retention [22] but has had limited use as a mechanism for the advancement of leadership and political skill development.

In an increasingly complex system, the competencies recommended by CMS, NINR and QSEN outline essential skills nurse leaders will need such as being prolific relationship builders and communicators, knowledgeable of the healthcare environment, and political savvy.[12] Nurse leaders need to be equipped to lead inter-professional teams and help educate staff nurses to facilitate optimal teamwork to ensure patient safety.[26] While the demands for skilled nurse leaders become increasingly complex, a 2013 AONE study projected high turnover rates of nurses in Chief Nursing Officer positions, creating a brain-drain of knowledge and foreseeable leadership gaps, indicating a need for succession planning to identify well-educated nurse leaders.[23] These future nurse leaders will need to understand power structures,[24] learn to work with and lead interdisciplinary teams, and help educate the future nursing workforce.[5,8,11] Managing these complex health systems also include environmental stressors like limited resources, placing a high demand for politically skilled nurses able to handle social and job performance stressors.[25]

To prepare for an expansion of nurse leaders, the Future of Nursing report endorsed mentoring as a mechanism to support leadership development.[3] Mentoring fills a gap that is not always addressed by formal education or leadership development programs. For example, political skill when linked to mentoring helps to facilitate teamwork to help ensure patient safety and interpersonal aspects of job performance based on the contextual factors[26] of the work environment.[27,28] Developing the leadership and political skills of the nurse leader is essential because low political skill is a disadvantage for gaining power, information, and resources via social networks.[29-31] Based on these national recommendations, the elements and gaps in mentoring must be addressed. These gaps include: (a) the mentoring functions utilized in nursing to advance professional development of the doctoral prepared nurse are not well-defined

in nursing; and (b) the mentoring activities that influence leadership and political skill development have not be identified.

Research Question

Aim 1: Describe the mentoring functions experienced by PhD and DNP nurses.

Aim 2: Characterize the association between the mentoring process and the development of political and leadership skill for the protégé.

Hypothesis 1a: Doctoral prepared nurses provided with higher reported levels of strategies and systems advice, career development facilitation and role modeling mentoring functions will demonstrate higher levels of political skill development

Hypothesis 1b: Doctoral prepared nurses provided with higher reported levels of personal and emotional guidance, coaching, learning facilitation mentoring functions will report higher levels of leadership

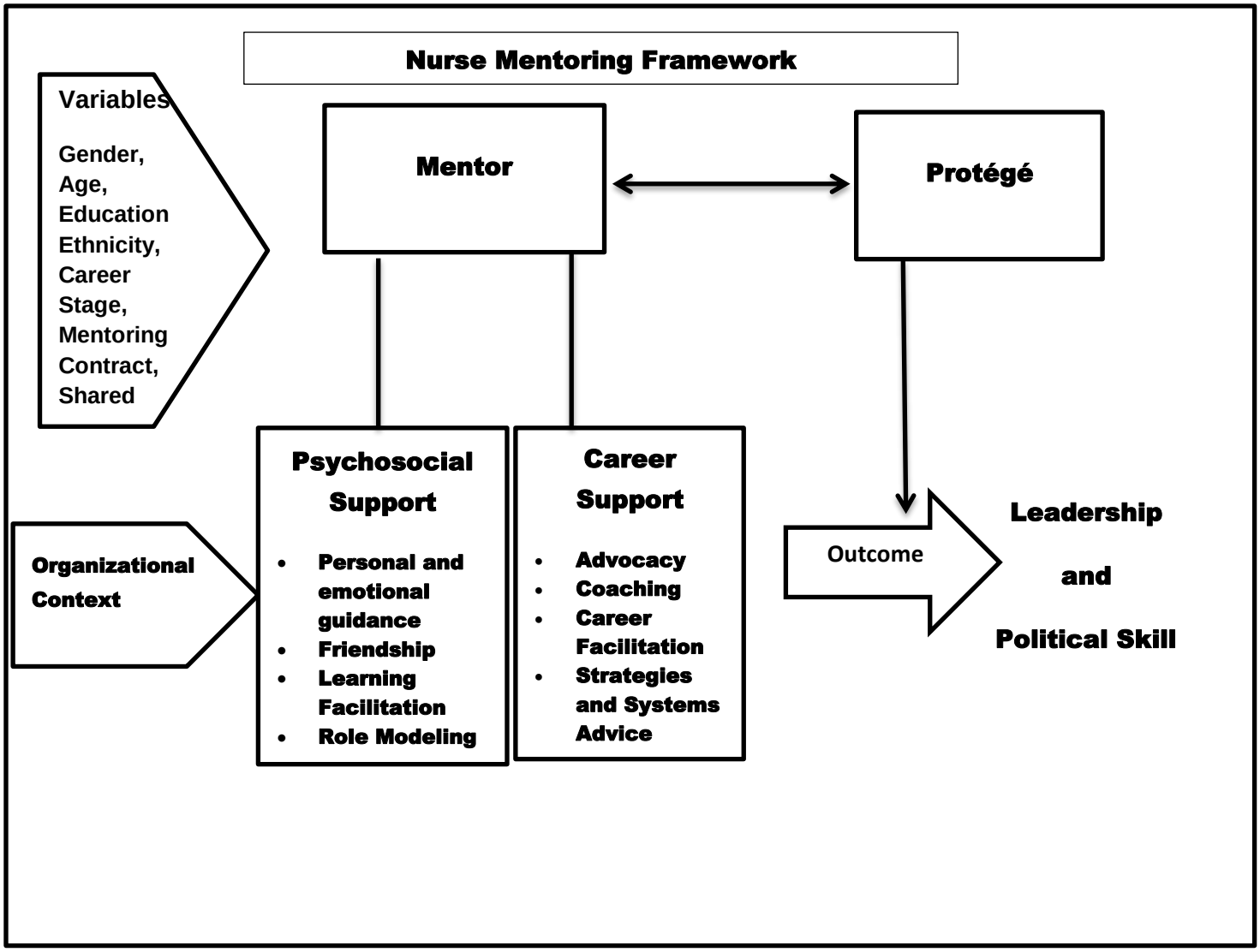
Aim 3: Compare and contrast the mentoring functions that influence leadership and political skill development for doctoral nurses.

Hypothesis 2: Doctoral prepared nurses who receive higher reported levels of all mentoring function will report greater mentoring benefit as compared to those who were non-mentored or lower levels of mentoring function

Theoretical Framework

Mentoring is considered a viable strategy for career and skills development.[32,33] Mentoring as a structural role helps with role development of a novice within an organization or a discipline.[34] Mentoring is an interpersonal relationship that requires mutual commitment from both the mentor and protégé to help facilitate positive career development.[35] The conceptual framework for this study is based on Yoder's[34] mentoring framework which captures important variables like gender, age, and ethnicity **(Figure 1).** The conceptual analysis of mentoring in nursing by Yoder (1990) was informed primarily by Kram's Phases of Mentoring theory[36] and consists of two major mentoring pathways: psychosocial and career support. The pathways consist of the following contemporary mentoring functions: (a) personal and emotional guidance, (b) coaching, (c) advocacy, (d) career development, (e) role modeling, (f) organizational systems advice, (g) learning facilitation, and (h) friendship.[34,37-39] The conceptual framework is well-suited for this study because several important variables like career stage and shared traits are represented as part of the interpersonal relationship that can lead to mentoring benefit for the doctoral nurse scholar.[40-42]

Figure 1: Nurse Mentoring Framework



Source: Adapted from Yoder's 1990 Mentoring Model and Kram's 1983 Mentoring Theory

Definition of Terms

Mentoring: The same basic assumption applies to all types of mentoring, when a more experienced or senior individual (the mentor) takes an interest in and encourages a less experienced or disadvantaged individual (the mentee or protégé), the mentee or protégé will benefit. [33,34,36,43]

Protégé: Protégé comes from the French verb protéger, meaning "to protect".[44] A protégé is an inexperienced, less proficient, or uninitiated individual selected as a beneficiary to receive counsel, acceptance, and affirmation given by the mentor, while taking the initiative to become self-sufficient. Ideally, a protégé is a peak performer with a solid work ethic and strong personal identity.[44]

Political skill: The ability to effectively understand others at work, and to use such knowledge to influence others to act in ways that enhance one's personal and/or organizational goals.[18,45]

Leadership: Leadership doesn't have a one-size-fits-all definition. Leadership is an observable set of skills and ability useful whether one is at an executive or frontline level. The American Organization of Nurse Executives describe nurse leaders as being knowledgeable, strong, risk-takers able to convey and articulate strategic vision and lead followers to achieve organizational goals. American Nurses Credentialing Center defines quality of nursing leadership[46] as being knowledgeable, strong, risk-taking nurse leaders who follow well-articulated, strategic and visionary philosophy in the day-to-day operations of nursing services.

Nursing leaders, at all organizational levels, convey a strong sense of advocacy and support for the staff and for the patient.

Doctoral Nurse: A nurse who has obtained a Doctorate in Philosophy (PhD) or Doctorate of Nursing Practice (DNP) both a terminal degree in nursing, a doctoral program graduate.

Doctoral Nurse Candidate: A nurse who has met all course requirements and is either preparing for dissertation or capstone defense, not yet graduated from doctoral program.

Assumptions of this study

1. Political skill can be learned.

2. Leadership skills can be learned.

3. The protégé benefits from the mentoring relationship.

Significance

In a reformed healthcare system, nurse leaders also face the challenge of limited access to key decision makers[13,47] and this negatively impacts their ability to influence organizational policy related to research, staffing and patient care.[13] The nursing profession and healthcare system are also confronted with the impending high turnover rate of nurses in Chief Nursing Officer (CNO) positions. In 2013, the American Organization of Nurse Executives (AONE)[23] conducted a national study of CNO (n=2,313) with a response rate of 27 percent, indicating estimates may be affected by low response rate and potential responder bias by those particularly interested in the research.[48] The AONE researchers reported that the state of CNO turnover is urgent with 41 percent indicating intent to leave within three years of 2013 and 67 percent with

intent to leave within five years of 2013.[23] With mentoring support, the doctoral nurse can step into leadership positions and avoid the projected turnover of qualified CNO in the next three to five years. In addition, the AONE study found 94 percent of CNO are Caucasian, indicating diversification of nurse leaders will be important. It is imperative to have ethnic diversity among doctoral nurses to help diversify the representation of top senior executive leadership, known as the C-Suite.[49] Mentoring of minority nurses will help to diversify the leadership representation and reflect the demographic characteristics of the population we serve at large.[3] Race and gender are important dimensions to consider when looking at opportunity structures for minority nurses to lead,[50] because access and benefit to influential decision makers is often given to White men in society.[50]

Mentoring in Nursing

Mentoring as a strategy to develop nurse leaders is recommended in the IOM Future of Nursing Report (2011)[3] but empirical research in this area is lacking. Nursing research has primarily focused on recruitment and retention but limited as a mechanism for advancing leadership and political skill development.[57] Nurse researchers have reported that mentoring in nursing has focused primarily on novice nurses, job satisfaction, and short-term needs of new educators.[51,52] In 2006, Kopp[44] examined nurse mentoring relationships and found that protégés experience enhanced job satisfaction, reduced turnover and earlier leadership behaviors in comparison to non-mentored nurses.[44] Nurses pursuing doctoral education represent career-minded nurses who may excel without a mentor, but having a mentor helps the protégé gain access, momentum, exposure and visibility.[44,53] A protégé often benefits from the expanded lens of the mentoring relationship to support career advancement, organizational commitment, and job performance.

Political Skill

Preparing doctoral nurses with the right leadership skills is imperative or there is a potential risk of having inadequate supervisory skills in these future leaders. Nurse leaders are increasingly responsible for meeting organizational goals while working with constrained budgets and dealing with staffing, retention and turnover.[54] Working in stressed environment, nurse supervisors with low political skill can exhibit increased abusive behaviors,[55] and pre-dispose staff nurses to omission errors that can threaten patient care systems.[56]

Political skill seems to play a critical role in helping to regulate behaviors in work environments. A 2011 meta-analysis by Bing,[29] and additional studies by Ferris [57] and Treadway,[58] indicate politically skilled individuals are able to regulate behaviors to adapt or override circumstances within organizational environment. These individuals self-monitor their behavior and use influential responses for the purposes of successful job performance.[58,59]

Leadership

Research indicates that by 2020 nursing leadership will be increasingly impacted by workplace stress, retirement, and turnover,[60] creating a shortfall of nurse leaders.[61] The decline or closure of graduate nursing administration programs at academic institutions will also impact the number of nurse leaders.[60] The fluctuating healthcare environment has increased patient care demands at the same time that hospitals are challenged by a 2013-2015 predicted 37 percent staff nursing turnover rate.[62] As of 2014, at the executive nurse leader level, there is a projected 41-67 percent turnover of CNO within the next three to five years.[23] Nurse leaders must be skilled at managing relationships between groups, subordinates and the environment to advance both personal and organizational goals.[63] Nurse leaders need to understand the social and power

settings of the organization to effectively influence by using appropriate tactics to gain support.[64] Mentors play a crucial role in facilitating skills development among emerging nurse leaders by acting as role models and allowing protégé to observe them in action.[65]

Chapter 2: Comprehensive Review of Mentoring, Leadership and Political Skill

National Trends

A 2013 survey conducted by the National Council of State Boards of Nursing and the Forum of State Nursing Workforce Centers, indicated that 55% of the RN workforce is age 50 years or older.[66] The economic downturn in 2008 influenced nurses to delay retirement, but as the economy stabilizes and work environment stressors increase, these older nurses will retire creating a "brain drain" in experience[67], clinical judgment, and expertise for the profession.[68,69] Future nurse leaders will need to acquire and learn the skills associated with adaptability, flexibility, and coping with uncertainty in this demanding healthcare environment.[70]

As indicated by the 2014 AONE study,[23] the projected turnover of nurse leaders will happen within the next three to five years. Nurse leaders are leaving due to aging, stressful work environments and organizational culture.[71] It is estimated that six months is needed for the "on boarding" of new nurse managers; indicating that proactive methods must be utilized to identify and develop nurse leaders.[72] The doctoral nurse will be expected to play a significant role in transforming the healthcare system;[73] and mentoring will be a useful strategy to help prepare and help offset knowledge gaps about organizational culture.[73-75] Incoming nurse leaders will need to be politically aware and possess sufficient research skills to make informed decisions.[75] Mentoring has been extensively studied and provides one potential pathway for doctoral nurses to develop leadership and political skill. An added learning benefit of the mentoring relationship is the reciprocity of the relationship, such that protégés may be coaching mentors on new technologies, how to cope with rapid change, the perspectives of a younger generation, and how to appropriately mentor individuals of a gender or race different from the mentor's. [70]

The Concept of Mentoring

The concept of mentoring emanates from an ancient archetype originating in Greek mythology in Homer's Odyssey, with Mentor as the wise and faithful advisor entrusted to protect Odysseus's son, Telemachus.[76] Mentoring was first defined in research by Kram[36,77] as a relationship between an older, more experienced mentor and a younger, less experienced protégé for the purpose of helping and developing the protégé's career. Mentoring is a developmental relationship embedded within the career context.[76,78] In Kram's research, she identified two main categories of mentoring: career and psychosocial functions.[36,77] Mentoring *career* functions are those aspects of the relationship that primarily enhance career advancement,[36] by providing the protégé with coaching, sponsorship, increased visibility, protection and giving challenging assignments.[36,76,77]

Within mentoring career function, coaching involves having the mentor provide a directive approach; specifically, advising the protégé on issues such as whether certain roles are consistent with his or her identity of self and values, as well as how to attain those roles.[59] The purposes of coaching can be diverse but may include helping with role transition, dealing with organizational change, resolution of issues and skills development.[79] The mentor provides nondirective counsel by posing questions that promote self-reflection, helping the person obtain feedback to enhance self-awareness and explore positions that offer a good fit with values, interests, and skills.[37] The concept of sponsorship as a career function is where the mentor introduces the protégé to his or her social network, signaling the protégé's legitimacy as a candidate for promotion or leadership.[37,38] Social networking helps the protégé effectively gain a solid reputation as he or she demonstrate competence.[59]

The psychosocial mentoring functions are those aspects of the relationship that primarily enhance a sense of competence, clarity of identity, and effectiveness in the managerial role.[36] Mentoring psychosocial functions entail building trust, interpersonal bonds, offering acceptance, counseling, friendship and role modeling to help enhance the protégé's professional and personal growth.[36,76,77,80] The counseling behaviors of the mentor entails serving as a sounding board, sharing personal experiences, and helping resolve problems through feedback. These behaviors enable the protégé to cope with personal problems more effectively.[70] This psychosocial mentoring function help protégés increase their sense of competence, effectiveness, and self-worth.[81]

Mentoring relationships can be either formal or informal. Formal mentoring programs attempt to match protégé-mentor with careful evaluation and planning, while other programs conduct arbitrary pairing.[82] In formal mentoring programs, an orientation program and ongoing professional development for the mentors are viewed as important.[83] Informal mentoring relationships develop by mutual identification: mentors choose protégé or protégé selects mentors whom they view as role models.[78] This mutual identification contributes to often-cited closeness and intimacy of the mentoring relationship.[78,84]

Researchers have discovered that different mentoring functions predict different protégé outcomes; career functions are a stronger predictor of protégé's compensation and advancement, while psychosocial functions have a stronger correlation to the protégé's satisfaction with the mentoring relationship.[76] Research by Allen[85]and Wanberg[42] found both psychosocial and career functions predict protégés' job and career satisfaction.[76] Mentoring has been utilized in business, academia, and community programs to help both the organization and protégés increase effectiveness and promote higher productivity, improve retention, support training and

socialization into the organization.[32,84,86] Research by Eby[33] comparing mentored and non-mentored individuals found larger effect sizes for protégé outcomes in academic mentoring settings as compared to workplace mentoring. The mentor, as part of the protégé's developmental network, takes an active interest in and action to advance the protégé's career by providing developmental assistance.[59]

Phases of the Mentoring Relationship

Mentoring relationships undergo different phases as part of the psychological and career functions that are influenced by the relationship itself and organizational factors.[36,87] Based on Kram's[36] 1983 foundational qualitative mentoring research, the mentoring timeframe ranges from two to five years with four distinct phases: an initiation phase as the start of the relationship; cultivating phase where higher levels of mentoring functions are offered; separation phase is when an established relationship is substantially altered by organizational context and/or psychological changes of either mentor, protégé or both; redefinition phase is where the relationship evolves into being peers or friends or the relationship ends. While Kram's qualitative research provided valuable insight into the phases of the mentoring relationship, a limitation of her research was the homogeneity of the participants who were mostly Caucasian male senior managers. In Zey's Mutual Benefits Model[88,89] mentoring functions are described as a hierarchy. A mentor who takes the role of sponsor is identified as progressively more committed; while teaching is cited as a mentoring function with the least level of commitment.[88,89] The mentor who provides visibility and sponsorship along with personal support, organizational intervention, and promoting of the protégé is the most commitment.[88,89]

Levels of Mentoring Support

The commitment level of the mentoring relationship and the mentoring functions provided may influence the protégé's professional development. [87] For example, if mentors provide learning facilitation opportunities to the protégé, does this lead to better interpersonal skills? An important consideration is to determine the mentoring functions provided by the mentor which correlate to leadership and political skill development of doctoral nurses. Mentors may offer high, medium or low levels of a specific mentoring function in a relationship.[36,76,77,90] The range and degree of mentoring function provided by the mentor may be driven by the needs and preparedness of the protégé, the mentor's ability to meet those needs (i.e. interpersonal skills, resources and power), and the organizational context.[76,90,91] These are important factors because mentoring is relational, a high-quality emotional bond between mentor and protégé may differentiate a high-quality relationship from an average quality mentoring relationship.[92] A study of mentor-protégé dyads by Armstrong[40] found that congruency in cognitive styles between mentors and protégés led to mutual liking and enhanced quality of the mentoring relationship.[40] Mentors who generated more ideas and were proactive in the relationship were perceived by protégés as receiving more career and psychosocial support in the mentoring relationship.[40,42] When mentors engage in sufficient levels of social support behaviors [93] to meet a protégé's expectations, a protégé will form higher perceptions of relationship effectiveness and trust for the mentor.[94] Regardless of gender or diversity background,[92] perceived attitudinal similarity is a better predictor of protégé's satisfaction with and support received from their mentors than is demographic similiarity.[95] In fact deep-level similarity in attitudes, beliefs, values and other personal characteristics (e.g. personality) and experiential similarity like educational background are likely to influence the mentoring relationship.[92]

Dysfunctions in Mentoring

The success of a mentoring relationship benefits from having clarity of expectations and shared perceptions between mentor and protégé because differences in these expectations may lead to loss of trust or dissatisfaction in outcomes.[96,97] Interpersonal mentoring relationship are not always cordial; rising tensions or levels of annoyance may lead to a dysfunctional relationship.[98] A comprehensive literature review by Scandura identified two key aspects for dysfunction in a mentoring relationship: (1) the mentor is an immediate supervisor and (2) the mentoring relationship was perceived as being assigned.[99] The characteristics of mentors, protégés, and the structural aspects of their relationships can contribute to a dysfunctional mentoring relationships.[99] For example, if both the protégé and mentor possess poor interpersonal skills, the interaction of both together is a stronger predictor of dysfunction than the characteristics of either individual.[99] A mentor with a dense social network (closely linked group), may limit the protégé's ability to gain broader perspectives outside that network.[100] A related issue is having a social network with high homogeneity. This could have a deleterious impact on learning because exposure to new or different ideas are narrowed; thereby limiting the protégé's learning cycle.[100] Changes in relationships are inevitable or irreconcilable differences due to personal style may arise,[98] thus development of professional competencies of the protégé may suffer.

Mentoring in Nursing

Mentoring in nursing first appeared in the literature as a result of the work by Connie Vance, EdD, RN, FAAN at the College of New Rochelle in the late 1970s, who has written

extensively on the topic.[101-103] Vance reported that mentoring occurred at many levels and should be continuous, goal directed, and under the aegis of a capable person who has the best interest of the protégé as the focal point, to serve the protégé as a trusted teacher and counselor.[101,102] As the protégé's career progresses, mentoring relationships undergo transition that may require different kinds of mentors depending on needs and goals.[103] A concept analysis of mentoring by Stewart in 1996,[43] identified six essential attributes of mentoring: teaching-learning process, reciprocal role, career development relationship, knowledge differential between participants, duration of several years, and resonance,[43,104] and these were later applied to several models congruent with resources, objectives, time and setting.[87,104] However, Stewart's research indicated that nursing literature occasionally confuses mentoring with role modeling and precepting. The mentoring research by Bryne[87,104] found similar role confusion in the mentoring of PhD nurses between mentor, teacher and advisor. Precepting is an orientation technique that includes instructing a neophyte in the protocols and proficiencies,[105]distinctly different from mentoring because of the limited time commitment to meet a set of externally set objectives for skills development.[43,96,105]

In mentoring research, the mentor as role model has been presented both as a function of psychosocial support or as an additional facet of mentoring that is separate and distinct[106] from psychosocial support.[107] Within nursing, both Stewart[43]and Yoder[34] make an important distinction in that for role modeling to occur there does not have to be an actual personal relationship between role model and imitator, yet the person can still internalize another's behaviors, values, or standards. The person being observed or imitated as a role model may never know he or she is being imitated.[98] A set of useful descriptors of role modeling in Mentor Connection[102] described three different role-modeling processes: partial, stage, and option. In

partial, the protégé selects desired attributes from several different mentors. In stage modeling, the protégé seeks out more advanced colleagues as resources for personal and career development.[102] In option modeling, the protégé seeks a mentor with an unusual or deviant career pattern which can be useful because it provides evidence that alternatives and variations are possible despite the prevalence of the status quo.[102] While the distinctions made by Stewart[43]and Yoder[34] are useful, a 2011 literature review of the evolving definitions of mentoring by Haggard[108] recommended that role modeling is a foundational element of mentoring and should not be omitted when conceptualizing the mentoring construct.[108]

The Benefits of Mentoring for Nursing

Mentors can facilitate professional socialization of new staff; facilitate workplace transition and explain the social culture of the organization and bridge relationships for the protégé with peer groups and coworkers.[109] Since nursing is predominately female, the "old boy's network" can be bridged by having mentors to help close the loop and gain access to vital information, networks, and political know how.[103] In the context of healthcare, nurses can be supported in their professional development and strengthen their skills for patient care.[109] The research by Stewart revealed that 60 percent of the literature indicated mentoring led to greater levels of career development and promotion, completion of doctorate education earlier, greater job satisfaction and productivity.[43] Mentorship in nursing contributes to a sense of intra-professional support and is an interpersonal relationship that helps to grow and cultivate skills in the protégé.[98] A mentor helps the protégé develop a richer and more informed understanding of their environment (i.e. work, academia) and associated with career success and the development of leaders.[98] The conceptual analysis of mentoring in nursing by Stewart (1996) provided a comprehensive and useful theoretical definition of mentoring.

> "Mentoring in nursing is a teaching-learning process acquired through personal experience within a one-to-one, reciprocal, career development relationship between two individuals diverse in age, personality, life cycle, professional status, and/or credentials. The nurse dyad relies on the relationship in large measure for a period of several years for professional outcomes, such as research and scholarship; an expanded knowledge and practice base; affirmative action; and/or career progression. Mentoring nurses tend to repeat the process with other nurses for the socialization of scholars and scientists into the professional community and for the proliferation of a body of nursing knowledge"(p.315)[43]

Kram's Mentoring Theory[36,77] captures much of Stewart's definition of mentoring in nursing, and informed the conceptual framework of mentoring in nursing developed by Yoder[34] **(Figure 1, page 8)**. The research by Kram[36,76,77], Stewart[43] and Yoder[34] will guide the identification of a mentoring pathway that supports the development of doctoral nurses. The psychosocial and career support pathways capture the contemporary mentoring functions proposed for this study: (a) personal and emotional guidance, (b) coaching, (c) advocacy, (d) career development, (e) role modeling, (f) organizational systems advice, (g) learning facilitation, and (h) friendship.[34,38,39,100]

Mentoring relationships can facilitate networking ability[33,77] and career development,[36,37] with research by Allen[85] finding significant correlation between workplace mentoring and career attitudes, work attitudes and career outcomes.[33] Positive correlations of mentoring have been found to benefit the protégé's psychological well-being such as positive self-image, emotional well-being, and positive social relationships.[33] Satisfaction with the mentoring relationship is influenced by the interactions in the relationship and trust is a key component.[94] Mentoring was found to be an antecedent of the four constructs used to describe political skill: social astuteness, networking ability, and interpersonal influence with apparent sincerity predicted by self-efficacy and mentoring.[110] Mentoring supports leadership development primarily by helping protégés

develop relationships with powerful individuals, increased visibility to opinion leaders, and to enhance a positive perception of themselves within the organization.[111] Research by Blass [112] explored the relationship between networking ability and mentoring and reported that by helping the protégé understand the political environment drives the development and use of social networks.[112,113] Protégés benefit from the mentoring relationship because it can support development of political skill,[18,114] Mentoring relationships have been associated with individual learning that relates to work content and interpersonal competencies.[18] Mentoring supports the informal training and development of the interpersonal and social effectiveness competencies[80] that help round out political skill.[18] All of these skills are important for doctoral nurses because performance ratings, networking ability and interpersonal influence significantly predict work unit performance.[113]

Nurse Mentoring Research

Mentoring research in nursing has primarily focused on supporting novice[17] nurses to enhance their clinical expertise[51,115], recruitment and retention[116,117], and mentoring students or junior faculty[87,104,118,119]. Empirical studies of mentoring as facilitator to advance professional development and assist with access to career opportunities[22] are limited within nursing (**Table 1)**. A recent 2014 systematic review by Chen[96] examined the effectiveness of mentorship programs primarily for novice nurses. Mentorship was found to be essential for retaining novice nurses,[120] reducing human resources costs, and improving patient safety and the quality of nursing care.[96] Research by Jakubik,[121] Smith,[22] and Latham[52] found that the mentoring function predominately utilized in nursing was psychosocial support as compared to career functions. The 2007 study by Jakubik to identify the mentoring benefit among 214 pediatric nurses, utilizing Zey's Mutual Benefits Model,[88,89] found that reported time since mentoring was ten years with teaching and

supporting as the primary mentoring function provided.[89,122] Based on Jakubik's research, staff nurses may have limited access to the full range of mentoring functions and fewer opportunities for developing as nurse leaders. A study on the mentoring needs of nursing faculty (n=49) by Sawatzky,[83] revealed that faculty expressed the most dissatisfaction for late-career mentoring (p=0.004) due to unmet needs for professional development and a lack of mentoring philosophy at the organizational level.[83] The study by Sawatzky[83] emphasized an in-depth need for mentoring approaches across all career phases but the nurse-mentoring process is stymied by consistently focusing on early career[17] and short-term needs of new educators.[22] Similar to the study by Smith,[22] the complexity of the organizational environment places competing demands on human resources, financial support and clinical practice, challenging the discipline to do so.[21] Most disconcerting is the study by Adeniran (2013)[63] of U.S. and Foreign born nurses (n=200). The study indicated that when ethnically diverse nurses were paired with staff nurses, access to mentors in leadership positions was limited, creating barriers to career advancement and disparity in the role model function of mentorship. Villarruel [123] discussed the experiences of Hispanic Nurses and found similar results as Adeniran's study, indicating a common pattern of a lack of support and opportunity for developing leadership skills of minority nurses.

Table 1: Summary of Nurse Mentoring Studies

Author and Year	Design	Sample	Setting	Population	Measurement Tool	Key Findings
Adeniran 2013[63]	CS	n=195	Local chapters of nursing organizations	US Educated Nurses (UEN) and Internationally Educated Nurses (IEN)	Scandura Mentoring Questionnaire[124]	Disparities existed in the role model function of mentoring. Newly hired UEN and IEN nurses perceive similar psychosocial and career mentoring functions. The IEN identified mostly clinical nurse preceptors as mentors. Differences noted between groups for promotion.
Chen 2014[96]	SR	n=5	National Taiwan University	Recently registered nurses	Critical appraisal of articles using Newman & Cook[125]	One study showed reduced employee turnover costs, four studies indicated mentorship programs improved nursing competencies, job satisfaction, communication skills and the development of interpersonal relationships.
Fielden 2009[79]	Long	n=30	Six UK Health Care Trusts	staff nurses	Questionnaire developed by researcher	Coaching and mentoring impact on professional development of nurses. Participants in both the mentoring and coaching groups reported significant development in terms of career development, leadership skills and capabilities. Mentees reported the highest level of development for self-esteem, leadership, problem solving, with significantly higher scores in eight areas of leadership and management and in three areas of career impact.

Jakubik 2008[117]	CS	n=214	National Study of Children's Hospitals	Pediatric staff nurses	Caine Quality of Mentoring Questionnaire[1][26]; Mentoring Benefits Questionnaire developed by research for this study[117]	Mentoring quality single best predictor of mentoring benefit, not length of mentoring relationship. Career functions like intervening at an organizational level or sponsorship occurred at lower levels.
Latham 2011[52]	QE	n=198 mentor-mentees dyads	Medical Teaching Hospital Center	Nurses in 33 unit care areas	Occupational stress inventory;[127] Cultural Competency Questionnaire;[128] PPE Scale;[129] Decisional Involvement Scale[130]	Increased professionalism of frontline staff, Mentors at the competent, proficient, and expert level reported being reinvigorated, retention improved, governance board improved nurse mentor-administration feedback
Smith 2012[22]	CS	n=56	Midwestern Public University	Nursing Faculty and clinical instructors	Measures of Precepting and Mentoring developed by researcher	Adequate levels of support identified for early career stage faculty. The highest level of dissatisfaction of mentoring support was found among later career faculty.
Sawatzky 2009[83]	CS	n=49	University in large urban center in Canada	Full time faculty	Faculty of Nursing Mentoring Needs Assessment developed by researcher	Career functions and caring cited as important role for mentors. Novice faculty cited highest stress was "fitting in" and cited mentors with teaching expertise and caring as in the "caring atmosphere that nutures" (p.149) is important

Design*: CS=*Cross Sectional* SR=*Systematic Review* Long=*Longitudinal*

QE=*Quasi-Experimental*

Summary of the Nurse Mentoring Research

Based on the review of these studies, one could conclude that nursing has predominately utilized mentoring for psychosocial support; early career development of novice nurses; recruitment and retention of new nurses. These efforts have achieved mixed levels of success at the individual and organizational level with nursing yet to achieve a 'culture' of mentorship within the profession.[19,43,131] With the exception of Jakubik,[117,122,121] a key limitation of these descriptive studies is the limited use of theoretical mentoring models, and previously published validated tools to objectively measure the mentoring functions provided by the mentor. Several nurse mentoring gaps exist: (a) the mentoring function most often utilized are not well-defined in nursing, (b) how mentoring activities influence leadership and political skill development in nursing is non-existent , (c) the lack of empirical research using validated tools, and (d) the use of appropriate conceptual models to guide mentoring research. The mentoring opportunity in nursing is to help elevate graduate education beyond the initial acquisition of information and technical expertise and raise social awareness and use knowledge development to impact organizational culture.[43] Therefore, the next two sections of this literature review will discuss the concept of political skill and relevance to nursing as an important skill set of the doctoral nurse as the emerging leader.

Political Skill

The concept of political skill was first introduced in 1981 by Pfeffer[133] in part as the tactics and strategies of power used in organizational politics.[134] Political skill is utilized on an individual level to demonstrate political behavior to help acquire or develop power.[134] Political skill as described by Mintzberg (1983, 1985) suggests it can be viewed as how individuals use

persuasion, manipulation, and negotiation to effectively exercise influence.[135-137] Mintzberg (1983 p.26) used the following description "political skill means the ability to use the bases of power effectively to convince those to whom one has access, to use one's resources, information, and technical skills to their fullest in bargaining, to exercise formal power with a sensitivity to the feelings of others, to know where to concentrate one's energies, to sense what is possible, to organize the necessary alliances."[137] Both Pfeffer and Mintzberg described political skill in the context of gaining or using formal power, while the modern description of political skill is the ability to know how to exercise influence.[134]

Political Skill Construct

In 1999, Ferris further refined the concept of political skill by describing the constructs of political skill and developing a six-item political skill inventory.[134,138] The following four core dimensions are utilized to describe political skill: social astuteness, interpersonal influence, networking ability and apparent sincerity. **(Table 2)**

Table 2: Political Skill Constructs

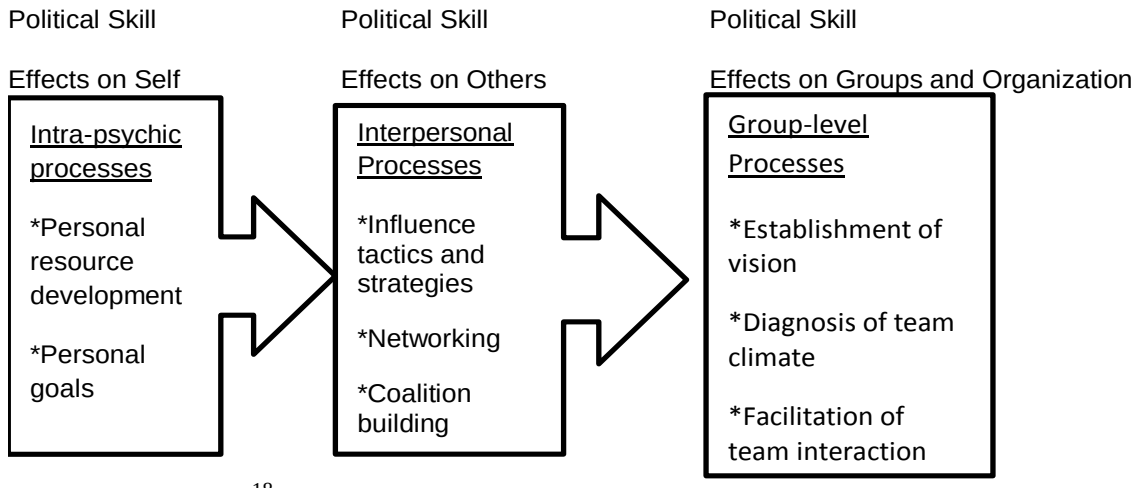
Construct	Definition
Social Astuteness	Politically skilled individuals are keen observers of their social environment, understanding not only the intricacies of their surroundings but also the motivations of themselves and others acting within that setting. Socially astute individuals possess superior self-awareness and can correctly interpret the behavior of others.
Interpersonal Influence	The politically skilled are characterized by a capability to subtly influence those around them. They have an effective communication style that puts others at ease. This equips the politically skilled with the facility to act as chameleons, changing and adapting to the environment in ways that provoke desired responses from others.
Networking Ability	Politically skilled individuals are adept relationship builders, able to forge strong bonds for friendships, alliances, and coalitions. This allows the politically skilled to develop and maintain vast networks of individuals that can ultimately help them achieve their goals. They possess the ability to know how to leverage their networks by ensuring they are connected to influential others and in a position to receive and generate opportunities. They have the capacity to effectively handle conflict and negotiate to help reinforce the strong bonds formed with others.
Apparent Sincerity	Politically skilled individuals are viewed by others as being honest and sincere in their words and actions. They are described as being authentic and genuine, their attempts at influencing others comes across as trustworthy and veritable. This is vital to the success of influence, masking any ulterior motives, if they are present. The politically skilled are not seen as manipulative or coercive; therefore, their influence behavior is likely to be more successful.

Source: Ferris (2007)[18]

Political Skill Theoretical Framework

Since 1999, extensive research on political skill has been conducted. In 2007, Ferris conducted a comprehensive review and research to develop a theoretical framework **(Figure 2)** for political skill as a multidimensional construct.[18,134] Ferris' theoretical statement for political skill stated "a comprehensive pattern of social competencies with cognitive, affective, and behavioral manifestations, which have both direct effects on outcomes, as well as moderating effects on predictor-outcome relationships."[134](p.291) In the context of the work environment, political skill focuses on managing interactions with others in influential ways that lead to individual and organizational goal accomplishment. Political skill is what determines both the selection of influence tactics to be used in a situation and the successful execution of those tactics.[134,139]

Figure 2: Meta-Theoretical Framework of Political Skill



Source: Ferris, 2007[18]

Job Performance and Political Skill

Each organization has its own organizational culture, contextual performance refers to behaviors inherent in all jobs that help maintain the organizational culture such as helping others, organizational citizenship, following the rules and so forth.[139] Political skill has been found to influence the way others see you at work[57,140] and shown to significantly influence job performance ratings, beyond general mental acuity and personality characteristics.[141] A politically skilled employee may persuade their supervisors by displaying ambition, hard work, commitment and ingratiation.[138,139,142,143] In the frame of contextual performance, the politically skilled employee reads the situation and will conform to the expected behavior, thereby influencing how they are perceived by supervisors.[139,144]

As a person moves up the hierarchy of an organization, the reliance on technical expertise declines and political skill increases.[134,139] Politically skilled individuals utilize their social acumen to choose the methods of self-presentation and select the most appropriate behavior that appears genuine and authentic. [110,141] These are important skills to possess because as individuals move higher in organizational responsibility and increased visibility, specific job-related skills are less necessary and interpersonal and networking skills become more important.[145] A study by the Center for Creative Leadership found that executives derailed their careers when they lacked social effectiveness.[139,146] The dimension of networking ability plays an important role in job performance as found by Todd [31] that showed networking ability as meaningful in achieving career goals.[31] This is of particular importance for women because research by Isaacson[147] showed women spent more time getting reports perfect and getting results but rarely networking with others. In this particular situation, mentors play a valuable

role by providing access to influential networks within the organization, transmitting information and cultivating the protégé's political skill.[18,31]

In 2004, Douglas and Ammeter[148] examined leader political skill as well as its relationship with leader effectiveness ratings. The study found that after adjusting for education, gender, self-efficacy and self-monitoring, both the leader's networking ability and interpersonal influence of political skill explained significant variance in performance ratings and work unit performance.[134,149] Politically skilled leaders affect the organizational experience of their employees by cultivating their perceptions of receiving support which predicted trust, cynicism, job satisfaction and organizational commitment.[134]

Power and Political Skill

Power is context-specific, and organizations are political settings that facilitate the exchange of power.[150] The politics within the organization shapes performance standards and determines the process by which leaders acquire their roles and authority.[150] As political skill competencies increase, behaviors directed towards obtaining valuable organizational resources are positively related to personal power.[151] Individuals high in political skill are able to accrue personal power and enhance career advancement through their political behavior.[151] It is important for the individual to consider the style with which power and influence is demonstrated and observed by others because it impacts their social effectiveness.[150] Individuals with high political skill know precisely how to act in social situations, appear sincere, and use power unobtrusively[152] to influence the outcome for either individual or organizational gain.[59,150,152]

Nursing Research of Political Skill

The use of the concept and research related to political skill within nursing is limited. Only two nursing research articles were identified that review political skill and used Ferris' definition of political skill, the 2013 study by Whitman[55] and the 2000 study by Harrell-Cook.[138] The research by Whitman[55] studied the concept of entitlement-abusive supervision among 132 supervisor-subordinate dyads. The study found that nurse supervisors with low political showed higher abusive behaviors along with high psychological entitlement. In contrast, nurse supervisors with high political skill used it as a self-regulating mechanism that allowed them to adapt or override negative behaviors for the purposes of goal attainment.[55] As these disruptive behaviors are perceived by subordinates, negative consequences include increased job dissatisfaction, higher turnover, and adverse events in patient care. [55] In dyad a design study by Harrell-cook of staff nurses (n=95) and their supervisors (n=28), reviewed perceptions of organizational politics, job satisfaction, intent to leave and political behaviors. The study found a negative correlation between perceptions of organizational politics and job satisfaction with differing reaction by nurses to highly political environments.[138] Depending on the level of political skill of the nurse, he or she will either exhibit higher political behaviors to make the work environment more bearable or withdraw further substituting absenteeism or avoiding behaviors.[138]

Summary of Political Skill and Relevance to Nursing

While the nursing research on political skill is limited, both of these studies reviewed dyads of staff nurses and their supervisors, political skill and organizational politics. The findings of these studies indicate that political skill is relevant to both job satisfaction and

turnover rate as well as how to react and deal with organizational politics. Depending on the nurse's level of political skill, either personal or organizational goal attainment were similar to those reported in the organizational psychology research by Ferris[153], Treadway,[154] Bing,[29] and Higgins.[142] Nurse leaders must be mindful of the organizational climate and political behaviors deployed because he or she may be susceptible to the informal influence and deliberate political manipulation by both the decision maker and the subordinate.[138,142] More importantly, political skill facilitates leadership behaviors that can help influence followers to garner additional trust, job satisfaction, and organizational commitment. Therefore, it is important to consider how nursing research conceptualizes leadership, style of leadership, influencing behaviors, and whether mentoring is viewed as a facilitator of leadership development for doctoral nurses as emerging nurse leaders.

Leadership in Nursing

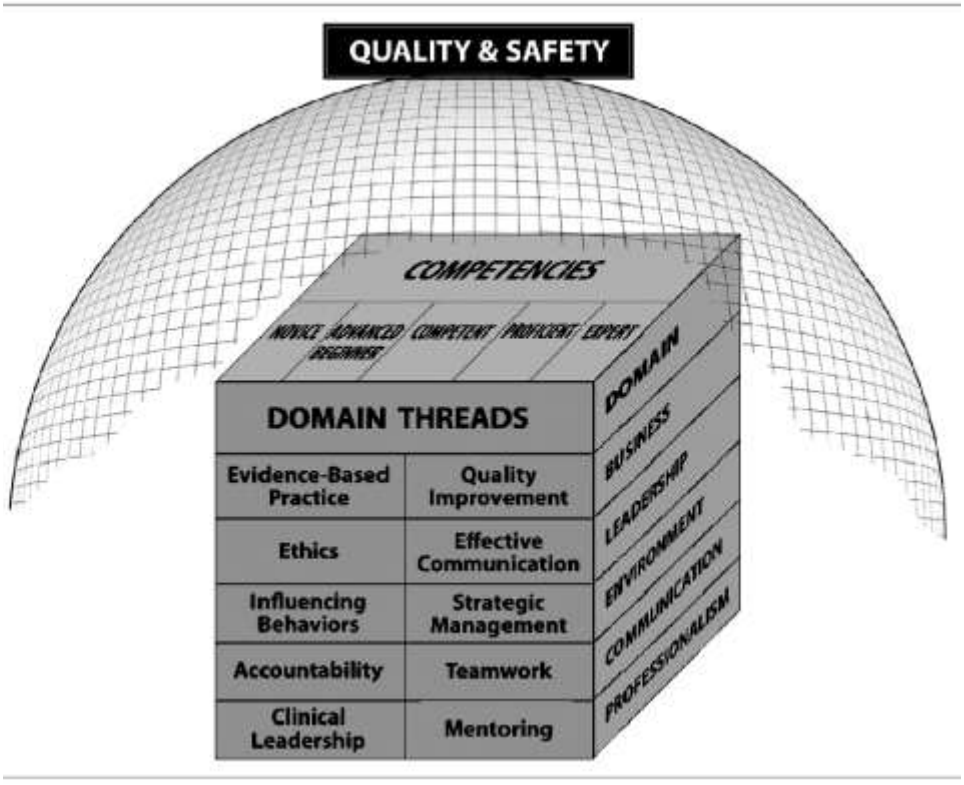
Future Nurse Leader Framework

Leadership in general is defined as a process of one person influencing others toward goal attainment; nurses are leaders when they influence others toward achievement of goals.[155] Effective nurse leadership is positioned as an essential factor in achieving optimal patient outcomes and workplace enhancement.[14] In contrast, a lack of leadership development and succession planning create obstacles to career progression for the nursing profession to advance to top leadership levels.[156]

In 2006, the AONE Council on Graduate Education for Administration in Nursing (CGEAN)[73] developed a framework to support the knowledge, skills and abilities needed by current and future nurse leaders. The CGEAN used Benner's novice-to-expert framework[17,157]

to clarify the different levels of nursing leadership and utilized a three-dimensional administration model. The ten domain threads of the AONE/CGEAN model and Benner's novice-to-expert framework provide a guiding framework for this study. The ten domains threads are: (1) evidenced-based practice, (2) ethics, (3) influencing behaviors, (4) clinical leadership, (5) accountability, (6) quality improvement, (7) effective communication, (8) strategic management, (9) teamwork, and (10) mentoring. For the purposes of this study, three domains have been selected: influencing behaviors, mentoring, and clinical leadership. (**See Figure 3**)

Figure 3: AONE/CGEAN Three-dimensional Administration Curriculum Model



The CGEAN strongly advocated for the importance of graduate nursing education and the significant role it plays in research and practice. Nursing research on health systems and outcomes was found to be critical in helping to examine the organization and delivery of healthcare influence on quality, cost and experience of patients.[3,11,73] The CGEAN cited the importance of having doctoral nurses in management and in specialty areas to conduct studies at the organizational and systems level.[73] With proper support by seasoned mentors, the doctoral nurse can serve as a future role models and mentors. The rationale to develop doctoral nurses to fulfill leadership positions is supported by a national survey of the quality of hospital nursing research[30] (n=477 Magnet, n=107 non-magnet) which demonstrated that the PhD nurse researchers were influential-role models and mentors in supporting staff RN-led research. In support of developing doctoral nurses, recommendations by AONE and CGEAN included the importance of nurse leaders being excellent communicators, team builders, change agents, and possessing analytical thinking to support service excellence.[73]

Nursing Leadership Research by Domain Thread

Clinical Leadership

Cultivating leadership skills for nurses working in practice and research is essential to create a cohort of doctoral nurses who are skilled managers and able to bridge academic excellence with practice.[98] Facilitating the enculturation of evidence-based practice in clinical settings is a leadership responsibility; it is complex, multi-faceted and requires both the art and science of facilitation.[158] As nurses demonstrate high level of leadership skills, they are able to inspire staff nurses towards organization commitment to advance vision and mission. [15] Improvement initiatives that align leadership, and is inclusive of the expertise of staff nurses, a culture of teamwork and thus patient safety is created.[159] Nurse leaders able to operationalize

decisions informed by staff nurses can enhance efficiency and organizational outcomes.[159] A 2012 study by Clavelle,[160] examined the leadership practices of CNOs in Magnet organizations utilizing the Leadership Practice Inventory (LPI)[161-163] and found enabling others to act and modeling the way were top practices by nurse leaders. In her study, Clavelle found that nurse leaders with doctoral degrees scored significantly higher than those with master's degrees for inspiring a shared vision and challenging the process.[160] A 2015 study by Herman,[164] administered the LPI to members of the Association of California Nurse Leaders (ACNL) with 22% response rate (n=261). Her study found enable others to act and model the way subscales scored highest among Chief Nursing Officers (CNO) but the entire ACNL membership had similar subscale results. However, a comparison of CNO to managers showed the subscales of challenge the process and inspire a shared vision were statistically significant. Managers also scored lower in four out of the five LPI subscales as compared to directors, except for enable others to act. Similar to Clavelle's study,[160] Herman [164] found the subscales Enabling others to Act and modeling the way scored the highest but in all cases, those with the title of director level and above were statistically higher than those with the title of manager level and below. The lowest categories for the ACNL members using the LPI were challenge the process and inspire a shared vision, indicating opportunities for further leadership development.[164]

Influencing Behavior

A 2014 study by Bormann[165] of a hospital applying for Magnet, surveyed staff nurse to assess their perception of nurse leader behaviors and influence. The study found staff nurses (n=115) perceived their nurse managers to display less transformational and less transactional behaviors compared to national norms.[165] The researcher indicated these findings raised concerns that must be addressed by any facility attempting to exemplify the Magnet hospital

commitment to behaviors consistent with transformational leadership.[165] Additional recommendations included quality improvement initiatives and leadership training aimed at reducing the influence of passive-avoidant leader behaviors to improve staff nurse job satisfaction and retention.[165] The leadership style[14,166] utilized by nurse leaders determines whether followers will report higher job satisfaction,[165] healthy work environment,[167] recruitment and retention,[167] teamwork,[159] and extra effort[168] to achieve organizational goals.

Mentoring Emerging Nurse Leaders by Nurse Leaders

An opportunity exists for current nurse leaders to understand the connections between mentoring and organizational culture, and emphasize the importance of mentoring in the work environment.[169] As nurse leaders interact with staff, using these opportunities to provide mentoring and develop trusting relationships, staff members feel empowered to openly discuss concerns and propose solutions without fear of penalty from the leader.[15] Establishing mentoring opportunities for doctoral nurses, specifically with nurse leaders who are older and more experienced, is beneficial because these experienced nurses are not as risk averse [160,166] The experienced nurse leader is effective at visioning, challenging the status quo,[160,166] and can help create organizational support for mentorship.[107] Nurses at the director level and above would make the most effective mentors and teachers to develop transformational leadership in future nurse leaders.[164] Individuals who perceive that their organization support their development and career advancement are found to have higher job performance.[107] In addition, expanding mentorship opportunities can help address the lack of racial and ethnic diversity within nursing leadership, mentorship offers a feasible strategy for the development of minority nurse leaders.[123] Based on research by Thomas[170] mentoring is a feasible way to help advance minorities into senior leadership position because he found that people of color shared one

common characteristic; a strong network of mentors and sponsors nurtured their professional development.

Challenge of Limiting Leadership Style to Transformational Leadership

The systematic review by Cummings[171] of nursing leadership styles reported that 53% of the studies focused on transformational leadership. A critical review by Hutchinson[14] in 2012 of transformational leadership research assessed for the evidence of the theoretical limitations, generalizability and validity of common measurement criterion. The following significant limitations were identified by Hutchinson: a focus on charismatic and heroic leaders; minimal attention into leader integrity; limited examination of avoidant leader behaviors; exclusion of culture and gender understanding of leadership; and ambiguity of the theoretical model and associated measurement instrument.[14] The systematic review by Cummings and critical review by Hutchinson provided the rationale for this study to select the five-dimensional framework to assess leadership behaviors utilizing the Leadership Practice Inventory.[162,163]

Summary of Leadership and Relevance to Nursing

Nurse leaders facilitate the implementation of evidence-based practice in clinical settings and need to possess sufficient interpersonal skills to influence followers. While the transformational leadership is often cited in the nursing literature, the focus on charisma and heroic leaders seems to limit other important leadership behaviors. Both Clavelle[160] and Herman[164] found enabling others to act and modeling the way were top practices by transformational leaders but challenge the process and inspire a shared vision seem to indicate areas for leadership development. As indicated by AONE and CGEAN, doctoral nurses have the potential to fulfill leadership positions, plus bring the benefit of research skills to the

organizational and systems level.[73] The emerging nurse leader must possess sufficient political skill to lead complex multi-faceted organizations while having excellent communication and analytical thinking skills. In order to develop the nurse leader of the future, mentorship by seasoned nurse leaders is crucial and doctoral nurses are prime candidates. A potential mentoring resource for doctoral nurses is the older, more experienced nurse leader because they are not as risk averse and more effective at visioning, challenge the status quo, and influencing for the achievement of a shared vision.[160,166]

Table 3: Summary of Nursing Leadership Research

Author and Year	Design	Sample	Setting	Population	Measurement Tool	Key Findings
Bormann 2014[165]	Descriptive cross-sectional	n=115	Non-acute care hospital	staff nurses	Multifactor Leadership Questionnaire 5X Short Form[172]	Transformational and transactional leadership styles should be taught and encouraged among nurse managers to positively influence the job satisfaction of staff nurses.
Castner 2012[159]	Descriptive cross-sectional	n=2,065	5 hospital healthcare system	Charge nurses and nurse managers	Brief TeamSTEPPS Teamwork Perceptions Questionnaire	RNs' perceptions of teamwork skills and behaviors after a nursing organizational teamwork development initiative. Nurse leaders focused heavily on strengthening communication to enhance teamwork prior to this study. While viewed as successful towards supporting teamwork, frontline nurses indicated leadership (i.e. nurse managers and charge nurses) needed improvement to achieve effective teamwork
Clavelle 2012[160]	Descriptive Cross-sectional	n=384	Magnet Designated Hospitals	Chief Nursing Officers	Leadership Political Inventory[162]	Enabling others to act and modeling the way were top practices by transformational leaders. Older, more experienced nurses would be excellent mentors for less experienced CNOs

Cummings 2010[171]	Systematic Review	63 articles	not applicable	Nurses	Key words: leadership, research, evaluation and measurement	Leadership that is task focused is not sufficient to achieve optimum outcomes for the nursing workforce. Relational and transformative skills resonant with staff leading to higher job satisfaction while task oriented behaviors were associate with lower nurse job satisfaction.
Herman[164]	Descriptive Cross Sectional	n=261	Association of California Nurse Leaders	Nurses CNO, Directors, Managers	Leadership Political Inventory[162]	Enabling others to act and modeling the way were top practices; lowest categories challenge the process and inspire a shared vision indicating opportunities for leadership development. The largest number of nurse leaders are at the manager level, yet were measurably lower in four out of the five LPI subscales. Formal leadership training programs should focus on lower-ranked LPI subscales.
Hutchinson 2012[14]	Critical Review	38 quantitative studies	not applicable	Nurses	Key words: transformational leadership, leadership and nurs*	Repeated recycle of the same methodological approach using transformational leadership with little attention given to its limitations and ignoring other interpretations of leadership risks narrowing rather than extending knowledge.

Kanste 2009[173]	Descriptive Cross-sectional	n= 601	Finnish Nurses Association	staff nurses, specialized nurses, publish health, nurse leaders	Multifactor Leadership Questionnaire [50]	Leadership behavior of the immediate supervisor predicts nurses' willingness to exert extra effort, especially among older nurses' and promote younger nurses' satisfaction
Tourangeau 2004[166]	Descriptive Cohort	n=67	Canada Hospital System	Nurses who participated in Leadership Institute	Leadership Practice Inventory [61]; Maslach Burnout Inventory [86]; Organizational Environment Questionnaire developed by researcher	Significant differences were found between aspiring and established leaders who perceive themselves to be more effective at visioning and challenging the way things are, achieving vision, and supporting subordinates to achieve the vision
Villarruel 2004[123]	Descriptive Cross sectional	n=23	Diverse settings	Hispanic Nurse Leaders	open-ended survey via email	Similarities regarding leadership and the skills necessary to be an effective leader aligned with leadership literature such as influencing others, promote change, and provide a vision. Challenges included faced by Hispanics included the need to work harder to prove ones' self, and the isolation related to a lack of Hispanics in the work setting

Chapter 3
Methods

Overview

This research study proposed to explore the relationship between mentoring and development of leadership and political skill in the PhD and DNP prepared nurse. The independent variable for this study is mentoring functions provided by the mentor and the dependent variables are leadership and political skill. The demographic independent variables included: age, gender, ethnicity, doctorate type, graduation status, employment status, work setting, protégé's career stage, mentoring status, mentoring timeframe, phase of mentoring relationship, type and frequency of communication, and shared characteristics between protégé-mentor. **(Table 4)**

Description of the Population

The Jonas Center for Nursing and Veterans Healthcare (www.jonascenter.org) provide institutional awards to schools of nursing to support the doctoral education and development of nurses. The Jonas Nurse Scholar (JNS) represent a national group of PhD and DNP nurse graduates and doctoral candidates. The participants of this study were JNS selected by schools for an academic scholarship between the years of 2008-2014 representing Cohorts I, II, and III of the program. There is at least one JNS in all 50 states plus the District of Columbia with at least 88 schools of nursing participating in the JNS program.

Research Design

This is a web-based retrospective cross-sectional design administered to PhD and DNP nurses to measure the correlation between mentoring functions provided to guide leadership and political skill development. As a descriptive study, the use of a web-based cross-sectional design facilitates data collection and allows for comparison of the different variables of interest while being cost effective. An application to Columbia University Institutional Review Board was submitted for this study and approval received December 2014 for the protection of human subjects. A request for a waiver of documentation of consent was approved and consent was implied by participants by completing the online survey. Columbia University's Qualtrics Survey Research Suite, an online secure survey software, was utilized to administer the web-based survey. The survey information was organized with appropriate skip patterns and navigation visually appealing to responders. The administration of the survey was conducted in two parts: (1) demographics, Mentoring Functions Survey (MFS) and Political Skill Inventory (PSI); (2) unique link to the Wiley Publisher proprietary Leadership Practice Inventory (LPI). Qualtrics was utilized by the researcher to track completion of part one by survey respondents. Upon confirming completion of part one, the researcher was required to use the Wiley LPI website to generate a unique code and link for respondents to complete the LPI survey. This two-step process was utilized to match part one respondents with part two LPI survey to the demographic, mentoring and political skill survey. Demographic, mentoring and political skill questions were embedded in part one of the survey as outlined in **Instrument 1** to include variables like age, gender, ethnicity, working status, and work setting for both mentor and protégé.

Sample

As of 2014, there have been three cohorts of JNS and this study of 249 represent cohorts I, II, and III of PhD and DNP nurses. The JNS are diverse in age, work experience, and represent veteran and civilian nurses who have graduated or are doctoral candidates. As a population based study, all 249 JNS were invited to participate in the study, representing a diverse group of men and women at various stages of professional career, years of experience, ages, and work settings. The JNS met the inclusion criteria of doctoral nurses representing nursing faculty, primary care, veteran health, long term care, mental health and academic hospital partnerships.

Inclusion Criteria

One key expectation of JNS is to have a mentor during their academic doctoral studies preparation. Selected scholars in cohort I, II, and III between 2008-2014 represent both PhD and DNP nurse scholars and doctoral candidates.

Exclusion Criteria

Exclusion criteria included newly selected JNS as of September 2014, non-JNS, or scholars who have withdrawn from their PhD or DNP program according to Jonas Center database.

Recruitment

The researcher recruited JNS participants by using a 90 second introductory video embedded in an email explaining the purpose, rationale, and instructions for completing the two-

part survey of this study. Subjects were recruited using direct emails provided by the JNS for cohorts I, II, and III. Using the online survey software program Qualtrics™, the JNS email list was imported and a unique survey link emailed to each participant. The Qualtrics software does not allow duplicate responses and requires respondents to complete unfinished questions using a validation menu to force a response. This study had added legitimacy because the Jonas Center supported the study to help increase the compliance rate of responders.[174] A unique tangible incentive for responders was providing them with a copy of their LPI self-report. The Dillman Method[174] recommends increasing response rate by providing tangible incentives. Survey respondents were provided with the following incentives with one random winner per week: (1) week one a $75 Amazon gift card, (2) week two a $50 Amazon gift card, and (3) week three a $25 Amazon gift card. Direct email reminders were utilized on days 5, 15, 25, and 30 to non-responders only using the Quatrics software.

Sampling Frame

This is a population-based study and viewed as important in providing a comprehensive description of PhD and DNP nurses, aspects of mentorship, leadership and political skill.

Data Collection

This research will utilize Columbia University's Survey Software Qualtrics™ to administer part I of the survey containing demographic questions, mentoring and political skill surveys. Qualtrics™ has multiple built-in functionalities to assess response rates, run reports, identify incomplete surveys, export data directly into SPSS for data analysis. Using emails provided by the Jonas Center, all n=249 PhD and DNP nurses will receive an invitation email containing survey link. Qualtrics™ allows the researcher to check for bounce-back error

messages or email coded as spam by mail servers. The part two survey containing the LPI Self-Report survey requires the researcher to utilize the LPI Wiley website because this is a proprietary survey. A potential limitation of the LPI Wiley website is the inability of the researcher to check for bounce-back error messages or email coded as spam by mail servers. Qualtrics ™software reporting functions will be utilized to check the response rate, completion time of survey, and assess data for missing values. While survey is active, reports will be generated to assess participation rates and automated reminders scheduled to reach non-responders.

Controlling for extraneous variables

Variables identified that could potentially impact the correlation between mentoring and the protégé's leadership and political skill assessments were: (a) participation in a leadership program, (b) years of work experience and career stage[17] (i.e. novice, competent, proficient), (c) age, and (d) shared traits between protégé and mentor (i.e. similar work and communication style)

Missing Values

The strategy for addressing missing values was dependent on the extent of missing data; the role of the missing variable in the analytic scheme (i.e. dependent, independent or descriptive variable); and randomness of the missing data.[175,176] A correlation matrix of the valid-missing variables detected no concentration of missing data across multiple variables, except for where appropriate for non-mentored respondents because the mentoring questions 13 thru 25 did not apply to this group. Missing values were examined by running the diagnostic of

the dataset and information assessed for the elimination from the analysis or use of the mean response of the Likert scale,[175,176] but no missing values or outliers were identified from demographic, mentoring, leadership or political skill responses.

Description of Instruments

This study utilized three validated instruments: Mentoring Functions Survey (MFS),[39] Leadership Practice Inventory (LPI),[166] and Political Skill Inventory (PSI).[45] The MFS is a 36-item survey with an estimated completion time of 15 minutes.[39,177] A sample MFS question is "*mentor provided strategic advice on how to handle people or situations*." The PSI is an 18-item instrument has been extensively utilized in research by various industries, including healthcare and has an estimated completion time of 10 minutes.[45,110,142,178,179] A PSI sample question is "*I am good at building relationships with influential people.*" The LPI is a 30-item instrument has been extensively utilized in research with over one million participants, including healthcare and has an estimated complete time of 10 minutes.[162] A sample LPI question is "*challenges people to try out new and innovative ways to do their work.*" To assess for internal consistency and reliability of instruments, a correlation matrix was utilized, subscale scores and scale scores computed for inter-class correlation and Cronbach's alpha.[175,176]

Mentoring Functions Survey (MFS)

This survey measures the perceptions for both mentors and mentees and can be utilized to assess the congruence in expectations and diagnostic tool for evaluating the mentoring

relationship. The questionnaire has eight components measuring personal and emotional guidance, coaching, advocacy, career development facilitation, role modeling, strategies and systems advice, learning facilitation and friendship.[39] This 36-item survey was given to 272 mentees and 228 mentors (response rate 50%) from eight public-sector and five private-sector organizations with a high internal consistency of a Cronbach alpha of .89 and .93.[39]

Leadership Practice Inventory (LPI)

Investigators developed this instrument to help assess leadership actions and behaviors to support management skills development. This 30-item scale measures the following five leadership practices subscales: (1) challenging the process, (2) inspiring a shared vision, (3) enabling others, (4) modeling the way, and (5) encouraging the heart. The original LPI was tested in a sample of 2,876 managers and subordinates with a reliability of 0.94.[166] The LPI has a self-report version and an observer version given to supervisors, followers, and peers to obtain objective feedback.[161-163] The LPI Self was tested among 1,651 individuals participating in a multi-day leadership workshop with diverse backgrounds and nearly 48% female.[163] The test-retest reliability of the LPI Self was at .90.[163] A 2004 study of emerging nurse leaders (n=67 response rate 61.4%) by Tourangeau[166] utilized the LPI with internal reliability of the original LPI subscales ranging from 0.88 to 0.93 and overall reliability of 0.96.[166] The LPI uses a percentile ranking to report the frequency for each subscale for the five behaviors as: (a) least frequent between 0-30%, (b) frequent between 31-70%, and (c) most frequent between 71-100%

Political Skill Inventory (PSI)

The PSI has been extensively researched and shown to outperform several measures of social effectiveness including emotional intelligence, self-monitoring, and leadership self-

efficacy in the prediction of job performance. [45,180,181] Investigators developed this instrument to assess a person's ability to influence for either personal or organizational gain. This 18-item instrument measures four dimensions: social astuteness, interpersonal influence, networking ability and apparent sincerity. The PSI has a reported reliability of .90 among a 350 sample of undergraduates, managers and administrators at a southern university with a response rate of 56% and nearly 70% female..[45] This tool has been extensively utilized in organizational psychology to measure political skill among supervisors, managers, and leaders. [25,55,58,59,181-183] The scoring of the PSI is done on a seven point likert scale with subscale mean scores indicating the following levels of political skill: 1-2, low political skill; 3-5, average political skill; 6-7, high political skill.[45,134,139]

Data Analysis

Data frequency tables were generated to discern general trends of the data such as the distribution of values, central tendency and variability. For example, the respondent's distribution for work experience and career stage showed negative skewness for both years of experience and career stage. The range of survey scores will be assessed using scale scores from low-to-high for mentoring (scale=1 to 6), leadership (scale=1 to 10) and political skill (scale=1 to 7) with mean and median to assess the data distribution. The range of variance of survey summary sub-scale scores for mentoring will be used to determine the level of dispersion of the data for mean and total scale scores. The survey results and respondent's demographic data like age group, years of work experience and career stage will be assessed skewness, indicating non-parametric statistics will be needed. Histograms will be constructed to display various characteristics of the population such as age; ethnicity; work status; and shared characteristic between protégé and mentor. Mann-Whitney test for comparisons were conducted

to assess for differences between PhD and DNP across multiple variables like leadership and political skill scores with mentoring status to identify potential relationships between variables.

Effect Modifiers

The potential effect modifiers in this study were identified to potentially influence the dependent variables Leadership and Political Skill were: mentoring contract (binary), graduation status (binary), participation in leadership development (binary), age (ordinal), work experience (ordinal), and career stage (ordinal). To determine whether these variables were acting as modifiers, the Kruskal-Wallis statistic was used to determine differences in the ranks of scores and odds ratio for binary variables.

Mediator

Protégés who perceive sharing similar characteristics may mediate the mentoring relationship and mentoring functions provided. These protégés may report higher scores on shared similarities using ordinal scale as well as score mentors higher on the mentoring functions scale. To determine strength of correlation, Spearman's Rho will be conducted.

Analysis of Study Aims and Hypothesis

Aim 1: Describe the mentoring functions experienced by PhD and DNP nurses characterized by: (a) personal and emotional guidance, (b) coaching, (c) advocacy, (d) career development facilitation, (e) role modeling, (f) strategies and systems advice, (g) learning facilitation, and (h) friendship

Analysis: Descriptive statistics consisted of frequency tables, measures of central tendency, and range of variance. Analysis of variance was conducted using Spearman's Rho to identify correlations between mentoring subscale mean scores. To assess for differences in mentoring functions provided to PhD and DNP, Mann-Whitney Test comparison was used to compare PhD and DNP as independent samples.

MFS Instrument Analysis: To assess MFS for internal consistency, evaluation included an inter-item correlations within each subscale with a score of .335 and a Cronbach's coefficient alpha of .96 for scale score

Aim 2: Characterize the association between the mentoring process and the development of political and leadership skill for the protégé.

Hypothesis 2a: Scholars provided with greater levels of Strategies and Systems Advice, Career Development Facilitation and Role Modeling mentoring functions will demonstrate higher levels of political skill development

Analysis: Summary score range high to low ranges and mean scores were examined using non-parametric Spearman's rho two-tail test for correlation to compare mentoring subscale scores and political skill score.

PSI Instrument Analysis: To assess for PSI for internal consistency evaluation included an item-score correlations within each subscale of .309 and a Cronbach's coefficient alpha of .89 for scale score.

Hypothesis 2b: Doctoral nurses provided with greater levels of personal and emotional guidance, coaching, learning facilitation mentoring functions will report higher levels of leadership

Analysis: Summary score range high to low ranges and mean scores were examined using non-parametric Spearman's rho two-tail test for correlation to compare mentoring subscale scores and leadership score.

LPI Instrument Analysis: To assess for internal consistency, evaluation will include an item-score correlations within each subscale of .353 and a Cronbach's coefficient alpha of .94 for scale score.

Aim 3: Compare and contrast the mentoring functions that influence leadership and political skill development for the doctoral nurse.

Hypothesis 3: Doctoral nurses who receive higher levels of all mentoring function will report greater mentoring benefit as compared to those who were non-mentored or lower levels of mentoring function

Analysis: Mentored doctoral nurses were differentiated from non-mentored, mentoring score range high to low ranges, non-parametric Spearman's Rho for correlation. The Mann-Whitney test for comparison between groups for leadership and political skill.

Table 4: Study Variables and Statistical Methods

Demographic	Information Source	Variable Type	Ascertained How	Purpose	Analysis	Statistical Category/Method
Age	Respondent	IV	Data Extraction	Effect Modifier	Aims 1-3 Ho 1-2	Descriptive predictive variable, ordinal scale, Kruscal Wallis
Sex	Respondent	IV	Data Extraction	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, binary (M/F)
Ethnicity	Respondent	IV	Data Extraction	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, nominal
Doctorate Type	Respondent	IV	Data Extraction	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, binary (PhD or DNP)
Years of Experience	Respondent	IV	Scale	Effect Modifier	Aims 1-3 Ho 1-2	Descriptive predictive variable, ordinal scale, Kruskal Wallis
Graduation Status	Respondent	IV	Time Scale	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, binary (Yes/No), Odds Ratio
Work Setting	Respondent	IV	Multiple choice	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, nominal
Mentoring Status	Respondent	IV	Multiple choice	Descriptive	Aims 3, Ho 1-2	Descriptive predictive variable, binary (Yes/No)

Timeframe of Mentoring Relationship	Respondent	IV	Time Scale	Descriptive	Aims 1-3 Ho 1-2	Descriptive predictive variable, ordinal scale
Frequency and type of mentor communication	Respondent	DV	Time Scale Activity Scale	Descriptive	Aims 1-3 Ho1-2	Descriptive predictive variable, ordinal scale
Shared Traits with Mentor • Personality • Approach to work • Communication style • Critical thinking • Ambition	Respondent	DV	Likert Scale 1-5 Strongly disagree to Strongly agree	Mediator	Aim 1-3 Ho 1-2	Descriptive predictive, ordinal scale, Spearman's Rho
Career Stage	Respondent	IV	Multiple Choice	Effect Modifier	Aims 2-3 Ho 1-2	Descriptive predictive variable, ordinal scale, Kruskal Wallis
Leadership Program Participation	Respondent	IV	Multiple choice	Effect Modifier	Aims 2-3 Ho 1-2	Descriptive predictive variable, binary (yes/No), Odds Ratio

Survey Instruments	Likert Scale	Variable Type	Ascertained How	Purpose	Analysis	Statistical Analysis for Hypothesis Testing
Mentoring Functions Survey •Personal and emotional guidance •Coaching •Advocacy •Career Development •Role Modeling •Strategies and Systems Advice •Learning Facilitation •Friendship	1- Never 2-Rarely, less than 10% of the time 3-Occasionally, 30% of the time 4-Sometimes, about 50% of the time 5-Frequently about > 70% of the time 6-Very Frequently >90% of the time	IV	MFS	Descriptive	Aims 1-3 Ho 1-2	Scale Scores Mann-Whitney test for comparisons Kruskal-Wallis mean rank for scale scores Spearman's Rho
Political Skill Inventory •Social astuteness •Interpersonal influence •Networking ability •Apparent sincerity	1-Strongly disagree 2-Disagree 3-Slightly Disagree 4-Neutral 5-Slightly Agree 6-Agree 7-Strongly Agree	DV	PSI	Descriptive	Aim 2 Ho 1a Aim 3 Ho 2	Scales Score Mann-Whitney test for comparisons Kruskal-Wallis mean rank for scale scores Spearman's Rho

Leadership Practice Inventory •Model the way •Shared vision •Challenge the process •Enable others •Encourage followers	1-Almost never 2-Rarely 3-Seldom 4-Once in a while 5-Occasionally 6-Sometimes 7-Fairly Often 8-Usually 9-Very Freq 10-Almost always	DV	LPI	Descriptive	Aim 2 Ho 1b Aim 3 Ho 2	Scale Scores Mann-Whitney test for comparisons Kruskal-Wallis mean rank for scale scores Spearman's Rho

Chapter Four: Results

The purpose of this study was to examine the mentorship experiences of doctoral nurses to: a) describe the mentoring functions provided and experienced by the protégé; b) characterize the associations between the mentoring elements and development of political and leadership skills for the protégé; and c) compare and contrast mentored to non-mentored doctoral nurses with mentoring functions that influence leadership and political skill development. Responses from 115 nurses were gathered for this study.

Of the 249 scholars, 27 emails bounced back or coded as spam by mail servers. Survey link successfully reached N=222 participants of which n=115 (52%) completed part one survey and of these n=92(80%) completed part two LPI survey. Administration of the part two LPI survey to n=115 part one survey responders, required the researcher to utilize the LPI Wiley website but confirmation of email receipt was not accessible to the researcher. The Qualtrics response validation report indicated 100% completion of questions except for ***non-mentored*** respondents for which mentoring questions 13 thru 25 did not apply. The average time responders needed to complete part one survey ranged between nine minutes (65%) to eighteen minutes (35%), completion time for part two LPI survey was not accessible. Regardless of graduation status, examination of the data revealed no outliers and homogenous in age, career stage and years of work experience between PhD and DNP responders.

Table 5 displays the frequency counts for selected variables. PhD respondents accounted for (74.8%) of the sample as compared to DNP respondents (25.2%). Forty-four percent of the respondents had graduated from their doctoral program. Most (87.0%) were female. The ages in the sample ranged from "25 to 34 years (20.9%)" to "55 to 64 years (21.7%)" with the median age being 39.50 years. Seventy percent were White and thirty percent were minority. Only

12.2% had served in the military. Over half (54.8%) were working full time and the most common work settings were academic (41.7%) or within a hospital (26.1%). Almost half the sample (49.6%) had 16 or more years of work experience with a median of 13 years. When queried about their level of expertise, 74.8% rated themselves as either being "proficient" or "expert." In addition, 59.1% reported that they had participated in at least one leadership program (Table 5).

Table 6 displays the frequency counts for selected mentoring variables. Seventy-four of the respondents (64.4%) reported having at least one mentor and over half (62.2%) described the relationship as being "informal." About a quarter of the respondents (25.7%) had a formal mentoring contract. The length of time the respondent was mentored ranged from "< 1 year (14.9%)" to "6+ years (10.8%)" with the median length being four years. The most common mentoring phases were "cultivating (51.4%)" and "redefinition (23.0%)." Almost all (91.9%) had a female mentor with 90.5% of the mentors being White. Eighty-one percent of the mentors worked in an academic setting and almost all (90.6%) had 16 or more years of work experience. The most common terminal degree for the mentors was a doctoral degree (82.4%). A variety of professional positions were held by the mentors (Table 6).

Table 7 displays the type of frequency of communication between protégé-mentor sorted by the most frequent followed by type using a 5-point metric: 1=*Never*, 2=*Quarterly*, 3=*Monthly*, 4=*Bi-weekly*, 5=*Weekly*. Email exchanges were the most frequent form of communication occurring weekly or bi-weekly, followed by monthly phone calls or 1:1 formal meetings. The least often used form of communication was video conferencing (Table 7).

Table 8 displays the similarity ratings between mentor and protégé sorted by the highest mean. These rating were given using a 5-point metric: 1 = *Strongly Disagree* to 5 = *Strongly*

Agree. The highest level of similarity was for intellectual / innovative thinking (M = 4.30) while the lowest level of similarity was for personality (M = 3.49) (Table 8).

Table 9 displays the self-perceived level of political skill. Sixty-four percent gave themselves ratings in the "average" political skill range and another 35.7% considered themselves to have "high" political skills (Table 9).

Table 10 displays the psychometric results for the three primary scale scores and means as follows: LPI total score (M = 7.92) on a 10-point scale with a Cronbach alpha of .94, total political skill (M = 5.73) on a 7-point scale with a Cronbach alpha of .89 and total mentoring (M = 5.03) on the 6-point scale with a Cronbach alpha of .96. This suggested that all scales had acceptable levels of internal reliability[184,185] (Table 10).

Answering the Research Questions

The first aim of this study was to, "Describe the mentoring functions experienced by PhD and DNP nurse scholars using a validated instrument by category". Table 10 displays the eight mentoring subscale scores. The highest mentoring subscale score was role modeling (M = 5.53) while the lowest score was friendship (M = 3.60).

Table 11 displays the Mann-Whitney test comparisons for the eight scale scores based on the respondent's type of doctoral program (PhD versus DNP). None of the eight related Mann-Whitney tests was significant at the $p < .05$ level (Table 11). This combination of findings provided support that both PhD and DNP nurses experience are provided with the same mentoring functions.

The second aim for this study was asked to, "Characterize the association between the mentoring process and the development of political and leadership skill for the protégé". Hypothesis 1a stated, "doctoral nurses provided with higher levels of strategies and systems

advice, career development facilitation and role modeling mentoring functions will demonstrate higher levels of political skill development" and the related null hypothesis predicted that, "None of the following mentoring functions (a) strategies and systems advice, (b) career development facilitation and (c) role modeling will correlate to political skill development." Table 12 displays the Spearman Rho correlations between the respondent's political skill score with the three relevant mentoring scores. Only the career development facilitation score was significantly related to the political skill development score using Spearman Rho correlation ($r_s = .34$, $p < 0.005$) showing moderate effect. This combination of findings provided partial support to reject the null hypothesis with career development facilitation being supported but no correlations were found for strategies and systems advice or role modeling (Table 12). Hypothesis 1b stated, "Doctoral nurses provided with higher levels of personal and emotional guidance, coaching, and learning facilitation mentoring functions will report higher levels of leadership" and the related null hypothesis predicted that, "None of the following mentoring functions (a) personal and emotional guidance, (b) coaching, or (c) learning facilitation will correlate to leadership developing." Table 13 displays the Spearman Rho correlations between the respondent's leadership score with the three relevant mentoring scores. Only the coaching score was significantly related to the leadership score using Spearman correlation ($r_s = .30$, $p < .05$) showing moderate effect. This combination of findings provided partial support to reject the null hypothesis with coaching being supported but no correlations were found for learning facilitation or personal and emotional guidance (Table 13).

The third research aim of this study was to "Compare and contrast the mentoring functions that influence leadership and political skill development for doctoral nurses." Hypothesis 2 asked, "Mentored doctoral nurses receiving higher levels of all mentoring function

will report greater mentoring benefit as compared to those who were non-mentored or lower levels of mentoring function" and the related null hypothesis predicted that, "There will be no difference between mentored and non-mentored doctoral nurses or within the degree to which mentoring functions is provided to doctoral nurses." Table 14 displays the relevant Mann-Whitney test comparisons. Mentored respondents had significantly higher political skill scores (p = .001) but similar leadership scores (p = .13). This combination of findings provided partial support to reject the null hypothesis (Table 14).

Additional Findings

Table 15 displays the Odds Ratio for effect modifiers graduation status, participation in a leadership or fellowship program with LPI and PSI scores. The results were significant for LPI Score with an OR 1.68 ($p < 0.01$, CI (1.13-2.52)) for graduation and OR 1.54 ($p < 0.02$ CI (1.05-2.26)) for participation in leadership or fellowship program but no significant findings were found for PSI score (Table 15). A mentoring contract had no effect on LPI and PSI scores (no table shown).

Table 16 displays the relevant Kruskal-Wallis rank-based comparison for effect modifiers career stage, age group and years of work experience with LPI and PSI scores. The results were significant for LPI mean rank scores for career stage (low mean rank 7.25, high mean rank 8.32 with $p < 0.00$) and age group (low mean rank 7.42, high mean rank 8.32 with $p < 0.05$). No significant findings were found between career stage, age group and years of work experience as effect modifiers for PSI score or Mentoring score (Table 16).

Table 17 displays the final regression model for LPI total score based on 11 variables (eight demographic variables from Table 5 and the three mentoring subscale scores from Table 13). The final 3-variable model was significant (p = .001) and accounted for 33.7% of the

variance in the total leadership score. Inspection of the table found total leadership was positively related to: (a) years of work experience (β = .38, p = .002); (b) having graduated (β = .29, p = .01); and (c) the coaching scale score (β = .26, p = .03) (Table 17).

A similar regression analysis was performed using the total political skill score as the dependent variable. The final 1-variable model yielded the same finding as the correlation in Table 12 (positive correlation between career development facilitation and total political skill, (β = .31, p = .007) (no table shown).

Table 18 displays the Spearman correlations between the nine mentoring similarity ratings and the total mentoring score. All nine correlations were significant and in the positive direction with largest correlations being with approach to work or assignments (r_s = .58, p < .001), communication style (r_s = .59, p < .001), and problem solving skills (r_s = .59, p < .001) showing large effect (Table 18).

In summary, this study used surveys data from 115 nurses to describe the mentoring functions provided to PhD and DNP nurses; identify the correlations between mentoring functions provided to leadership and political skill development; and to compare and contrast mentored to non-mentored doctoral nurses. The mentoring functions provided to PhD and DNP nurses in this population of Jonas Nurse Scholars, regardless of graduation status, were similar and not supported. Hypothesis 1a identifying the mentoring function of career development facilitation correlated to political skill development received partial support (Table 12). Hypothesis 1b identifying the mentoring functions of coaching correlated to leadership received partial support (Table 13). Hypothesis 2 identifying mentored respondents had significantly higher political skill scores but similar leadership scores received partial support (Table 14). The following effect modifiers were found to influence LPI rank mean scores but not PSI scores:

graduation status and participation in a leadership or fellowship program (Table 15) as well as age group and career stage (Table 16). The similarities between protégé-mentor were highly correlated and may have influenced the protégé's perception of mentoring functions provided (Table 18).

In the final chapter, these findings will be compared to the literature, conclusions and implications will be drawn, and a series of recommendations will be suggested.

Table 5

Frequency Counts for Selected Variables (N = 115)

Variable	Category	*n*	%
Type of Program			
	PhD	86	74.8
	DNP	29	25.2
Graduated			
	No	65	56.5
	Yes	50	43.5
Sex			
	Female	100	87.0
	Male	15	13.0
Age Group [a]			
	25 to 34 years	24	20.9
	35 to 44 years	37	32.2
	45 to 54 years	29	25.2
	55 to 64 years	25	21.7
Race/Ethnicity			
	Black	17	14.8
	White	81	70.4
	Hispanic, Asian, More than one race	17	14.8
Military Service			
	No	101	87.8
	Yes	14	12.2
Current employment status			
	Working full time	63	54.8
	Working part time and a full time student	19	16.5
	Working full time and a full time student	18	15.7
	Other	15	13.0
Work setting			
	Hospital	30	26.1
	Academic Setting	48	41.7
	Other	30	26.1
	Not applicable	7	6.1

Table 5 *Continued*

Table 5 *Continued*

Variable	Category	*n*	%
Years of work experience			
	Under 4 years	11	9.6
	4-6 years	13	11.3
	7-10 years	15	13.0
	11-15 years	19	16.5
	16+ years	57	49.6
Self-described level of expertise			
	Novice	3	2.6
	Advanced beginner	8	7.0
	Competent	18	15.7
	Proficient	26	22.6
	Expert	60	52.2
Participated in a leadership program			
	No	47	40.9
	Yes	68	59.1

Table 6

Frequency Counts for Selected Mentoring Variables (n = 74)

Variable	Category	*n*	%
Current mentoring status (*N* = 115)			
	Yes, I have a mentor	74	64.4
	No mentor	41	35.6
Description of relationship			
	Informal Mentoring relationship	46	62.2
	Formal mentoring relationship	26	35.1
	Mentoring program	2	2.7
Mentoring contract			
	Yes	19	25.7
	No	55	74.3
Length of mentoring [a]			
	1-2 years	30	40.5
	3-5 years	36	48.6
	6+ years	8	10.8
Mentoring phase			
	Initiation Phase	10	13.5
	Cultivating Phase	38	51.4
	Separation Phase	9	12.2
	Re-definition Phase	17	23.0
Sex of mentor			
	Male	6	8.1
	Female	68	91.9
Mentor's race			
	White	67	90.5
	Other	7	9.5
Mentors work environment			
	Hospital	6	8.1
	Academic Setting	60	81.1
	Other	8	10.8
Mentor's years of experience			
	1-5 years	2	2.7
	6-15 years	5	6.8
	16+	67	90.6

Table 6 *Continued*

Variable	Category	*n*	%
Mentor's highest degree			
	Masters (MBA, MPH, MS)	4	5.4
	Doctoral (PhD, EdD, JD)	61	82.4
	DNP	4	5.4
	MD	5	6.8
Mentor's professional position			
	Supervisor/Manager	2	2.7
	Director	6	8.1
	Vice President/Sr. Vice President	2	2.7
	Assistant Professor	9	12.2
	Associate Professor	10	13.5
	Tenured Professor	29	39.2
	Dean	8	10.8
	Other	8	10.8

Table 7

Communication Type and Frequency (n=74)

Type of Communication

	Email Exchanges		Telephone Calls		Formal 1:1 meetings		Socially outside of work/school		Video Conferencing	
Scale	n	%	n	%	n	%	n	%	n	%
Never	0	0	22	30	4	5	30	41	67	91**
Weekly	**41**	**56***	13	18	15	20	1	.01	1	.01
Bi-weekly	12	16	12	16	10	14	6	.08	1	.01
Monthly	14	19	**18**	**24***	**21**	**28***	7	.09	0	0
Quarterly	7	9	9	12	24	32	**30**	**41***	5	.06

*Most Frequent communication format within category

**Least used communication format

Table 8

Ratings of Similarities with Mentors Sorted by the Highest Mean (n = 74)

Type of Similarity	*Mean*	*SD*
Intellectual /Innovative thinking	4.30	0.86
Values about life in general	4.14	0.94
Ambition	4.08	0.87
Approach to work or assignments	3.93	1.02
Values of work-personal life balance	3.91	1.11
Problem solving skills	3.82	1.10
Communication Style	3.78	0.95
Social Capital	3.62	1.00
Personality	3.49	1.15

Note. Ratings were based on a 5-point metric: 1 = *Strongly Disagree* to 5 = *Strongly Agree*.

Table 9

Self-Perceived Level of Political Skill (N = 115)

Skill Level (Ratings)	*n*	%
Low Skill (1 or 2)	0	0.0
Average Skill (3, 4, or 5)	74	64.3
High Skill (6 or 7)	41	35.7

Note. Ratings were based on a 7-point scale: 1 = *Strongly Disagree* to 7 = *Strongly Agree*. The scale of Low, Average and High Skill is based on the book by Ferris (2005) Political Skills at Work: Impact on Work Effectiveness

Table 10

Scale Mean Scores for Leadership, Political Skill and Mentoring
Rank Order Means for Psychosocial and Career Mentoring Subscales

Scale Scores	*n*	Number of Items	*Mean*	*SD*	Low Score	High Score
LPI Total Score (Range 1 to 10)	92	30	7.92	1.17	4.87	9.30
Cronbach alpha .94						
Total Political Skill (Range 1 to 7)	115	18	5.73	0.64	3.94	7.00
Cronbach alpha .89						
Total Mentoring (Range 1 to 6)	74	36	5.03	0.82	2.31	6.00
Cronbach alpha .96						
Psychosocial Mentoring Functions						
Role Modeling	74	4	**5.53**	0.81	2.00	6.00
Learning Facilitation	74	6	**5.30**	0.79	3.00	6.00
Personal and Emotional Guidance	74	8	**4.85**	1.20	1.13	6.00
Friendship	74	2	**3.60**	1.36	1.00	6.00
Career Mentoring Functions						
Coaching	74	4	**5.17**	1.01	2.00	6.00
Advocacy	74	4	**5.11**	1.07	1.50	6.00
Career Development Facilitation	74	4	**5.06**	0.94	1.75	6.00
Strategies and Systems Advice	74	4	**4.96**	1.18	1.50	6.00

Table 11

Comparisons for Selected Scale Scores Based on Type of Doctoral Program

Scale Score	Program	*n*	*Mean*	*SD*	Mann-Whitney Z test	*p Value*
Total Political Skill					0.32	.76
	PhD	86	5.72	0.62		
	DNP	29	5.76	0.73		
LPI Total Score					0.23	.82
	PhD	71	7.97	1.06		
	DNP	21	7.76	1.49		
Personal and Emotional Guidance					0.83	.41
	PhD	55	4.92	1.17		
	DNP	19	4.66	1.30		
Coaching					0.40	.69
	PhD	55	5.18	1.01		
	DNP	19	5.13	1.03		
Advocacy					1.05	.29
	PhD	55	5.21	0.95		
	DNP	19	4.83	1.35		
Career Development Facilitation					0.69	.49
	PhD	55	5.15	0.83		
	DNP	19	4.83	1.21		
Role Modeling					0.02	.98
	PhD	55	5.56	0.79		
	DNP	19	5.45	0.88		
Strategies and Systems Advice					0.11	.91
	PhD	55	4.93	1.26		
	DNP	19	5.05	0.94		
Learning Facilitation					0.95	.34
	PhD	55	5.36	0.75		
	DNP	19	5.11	0.90		
Friendship					0.67	.50
	PhD	55	3.54	1.32		
	DNP	19	3.79	1.49		
Total Mentoring					0.35	.73
	PhD	55	5.08	0.76		
	DNP	19	4.91	0.97		

Table 12

Correlations for Selected Mentoring Scale Scores with Political Skill Development (n = 74)

Mentoring Score	Political Skill Development	
	Spearman Rho	p Value
Strategies and Systems Advice	.22	.058
Career Development Facilitation	.34	.005*
Role Modeling	-.02	-.018

* *Significant*

Table 13

Correlations for Selected Mentoring Scale Scores with Leadership Development (n = 56)

	Leadership Development	
Mentoring Score	Spearman Rho	p Value
Personal and Emotional Guidance	.16	.244
Coaching	.30	.027*
Learning Facilitation	.24	.078

* Significant

Table 14

Comparisons for the Leadership and Political Skill Scores Based on Whether the Respondent Had a Mentor

Score	Mentored	*n*	*Mean*	*SD*	Mann-Whitney *Z test*	*p Value*
LPI Total Score					1.52	.13
	No	36	7.69	1.21		
	Yes	56	8.07	1.13		
PSI Total Score					3.35	.001*
	No	41	5.47	0.61		
	Yes	74	5.87	0.62		

*Significant

Table 15

Effect Modifiers: Test for Graduation Status and Participation in Leadership or Fellowship

	Graduation Status			Leadership or Fellowship Program		
	Odds Ratio	p Value	CI	Odds Ratio	p Value	CI
LPI	1.68	p<0.01*	(1.13-2.52)	1.54	p <0.02*	(1.05-2.26)
PSI	1.58	p >0.12	(0.87-2.87)	1.44	p >0.22	(0.80-2.59)

*Significant

Table 16

Effect Modifiers: Test for Career Stage, Age Group, and Years of Work Experience

Kruskal Wallis Rank Test	LPI Total Score Scale 1-10 N=92	PSI Total Score Scale 1-7 N=115	Mentoring Score Scale 1-6 N=74
Career Stage			
Low Mean Rank	7.25	5.40	5.08
High Mean Rank	8.32	6.30	5.84
p-Value	$p < 0.00$*	$p > 0.06$	$p > 0.27$
Age Group			
Low Mean Rank	7.42	5.60	4.97
High Mean Rank	8.32	5.78	5.08
p-Value	$p < 0.05$*	$p > 0.83$	$p > 0.76$
Years of Work Experience			
Low Mean Rank	6.90	5.44	4.60
High Mean Rank	8.35	5.80	5.30
p-Value	$p > 0.20$	$p > 0.09$	$p > 0.08$

*Significant

Table 17

Final Model for LPI Total Score Based on Selected Variables (n = 56)

Variable	*B*	*SE*	β	*p Value*
Intercept	4.91	0.76		.001
Years of Work Experience	0.30	0.09	.38	.002*
Graduated Doctoral Program	0.66	0.26	.29	.01*
Coaching Scale Score	0.29	0.12	.26	.03*

Final Model: F (3, 52) = 8.82, p = .001. R^2 = .337. Candidate variables = 11.

*Significant

Table 18

Correlations for the Nine Mentoring Similarity Ratings with the Total Mentoring Score (n = 74)
Similarity Scale 1-5: Strongly disagree to Strongly agree

Mentoring Similarity	Spearman Rho	P value
Intellectual /Innovative thinking	.38	.001*
Personality	.46	.001*
Ambition	.38	.001*
Approach to work or assignments	.58	.001*
Communication Style	.59	.001*
Social Capital	.35	.005*
Problem solving skills	.59	.001*
Values about life in general	.37	.001*
Values of work-personal life balance	.40	.001*

* Significant

Chapter Five: Discussion, Conclusions and Recommendations

In this chapter, comparisons will be made between the results of this research and what was found in the literature to draw conclusions and implications followed by a series of recommendations. First to be discussed will be the demographics of the protégé's work setting and experience, career stage and diversity as compared with their mentor. The second discussion will entail descriptions of the mentoring relationship, mentoring phase, timeframe of the relationship, and communication frequency. The third area will describe the mentoring functions provided followed by protégé's perception of shared similarity with mentor. Finally, the correlations between mentoring, leadership and political skill will be discussed to be followed by conclusion and implications.

The purposes of this study was to examine the mentorship experiences of doctoral nurses to: a) describe the mentoring functions provided and experienced by the protégé; b) characterize the associations between the mentoring elements and development of political and leadership skills for the protégé; c) compare and contrast mentored to non-mentored doctoral nurses with mentoring functions that influence leadership and political skill development.

This research study describes the mentoring elements provided to PhD and DNP nurses in the protégé-mentor relationship and its correlation to leadership and political skill development. Commonly used variables to describe doctoral nurses and the characteristics of mentorship were used. In addition, mentoring theories and mentoring frameworks were used to guide this study, assist with data analysis and interpret results. To recap participation rates in this study, 115 out of a population of 222 responded to the survey for a 52% response rate of which 86 were PhD and 29 were DNPs. The surveys were completed as follows: a) Political

Skill Inventory n=115 (100%), and b) Leadership Practice Inventory n=92 (80%) Of the 115, n=74 (64%) were mentored (e.g. PhD n=55 and DNP n=19). For purposes of clarity and simplification, the term protégé will be used to reference respondents; data analysis did not show differences between PhD and DNPs.

Comparison with the literature

The nursing conceptual mentor framework utilized to guide this study kept important variables in the forefront such as gender, age, career stage, shared similarities between protégé-mentor, and ethnicity. Findings of this study indicate that the independent variables of age, career stage, work experience and shared similarities with mentor are associated with the protégé's perception of mentorship experience to some extent. Regardless of graduation status, protégés were predominately female having more than ten years of work experience and assessed at the proficient or expert level using Benner's Novice to Expert[17] scale. This cadre of nurse protégés is highly experienced with 59 percent having participated in a leadership or fellowship program. The literature indicates that nurses pursuing doctoral education represent career-minded nurses who may excel without a mentor but having a mentor does help gain access to social networks and increase visibility.[44,53] The majority of mentors had a PhD with over 16 years of experience in an academic setting. Regardless of graduation status, many of the respondents were employed with 67 percent of PhDs (n=88) and 80 percent of DNPs (n=31) working either full-time or part-time with 49.6 percent having over 16 years of experience (Table 5). High similarities were found between protégés and mentors working in an academic setting. The literature indicated that similarity of an academic setting as compared to a health system setting is found to have a larger effect in the protégé's mentoring outcomes.[33]

Findings of this research study indicate a lack of diversity among doctoral level nurses with 70 percent of respondents and 90 percent of mentors being White; 14 percent of respondents were Black; and 5 percent were Hispanic or Asian. This demographic data aligns with the American Association of Colleges of Nurses (AACN)[186]for doctoral nurses (71 percent White; 14 percent Black; and 5 percent Hispanic or Asian). Nursing leadership demographics show an even greater lack of diversity with AONE reporting 94 percent are White. The IOM Future of Nursing Report[3] recommended doubling the number of doctoral nurses with attention to increasing diversity. Efforts to increase the diversity of doctoral nurses must be intensified in order to meet the IOM recommendations and to better reflect the demographics of the U.S. population.

Mentorship Phase

Informal mentoring relationship was the most common relationship reported at 62 percent as compared to formal relationships at 35 percent, indicating mutual identification and developmental needs between protégé and mentor (Table 6). The mentoring phase most often reported was the cultivation phase at 51 percent spanning 1-5 years, followed by 23 percent of protégés in a re-defining phase of a peer relationship spanning 3 to 9 years (Table 6). Protégés reported weekly or biweekly email exchanges as the timeliest form of communication, followed by monthly phone calls (Table 7). The cultivation stage of a mentoring relationship is the most active phase where most of the psychosocial and career support is provided. The literature states informal relationships are unstructured; partners meet as needed with relationships lasting three to five years.[78] This may explain the 75 percent of protégés not having formally outlined goals and expectations; and only one-third of protégés met either monthly or quarterly on a social basis with their mentors.

Mentoring Functions

This is the first study to assess the mentoring experience of doctoral nurses utilizing the Mentoring Functions Survey (MFS) relative to the psychosocial and career support elements being provided in the doctoral nurse mentoring relationship. The nurse mentoring research has evaluated mentoring as a recruitment and retention strategy primarily for novice nurses. There has been limited research on the mentoring functions. In this study, the two most frequent psychosocial mentoring functions were role modeling and learning facilitation; the least provided of all the mentoring functions were personal and emotional guidance along with friendship (Table 10). The career mentoring functions most often provided were coaching, advocacy closely followed by career development facilitation and strategies and systems advice (Table 10). In this study, an interesting finding under psychosocial support was that *role modeling* ranked highest but had no correlations to either leadership or political skill development. The literature provides two potential rationales for this finding: a) no actual personal relationship exists between role model and protégé; and b) the protégé may select specific attributes from several different mentors, not just one. Another explanation is most of the mentors were from academia, limiting opportunities to observe mentors leading healthcare teams in practice environments or may have expedited behaviors protégés did not want to emulate within their own behaviors as leaders. The least provided psychosocial mentoring function was *friendship*; yet it correlated to both leadership and political skill development.

Protégé-Mentor Similarities

The top five similarities reported between protégés and their mentors were: problem solving skills ($r = .59$, p. $<.001$), communication style ($r = .58$, $p < .001$), approach to work ($r =$

.58 p<.001), personality (r = .46, p<.001) and values about life (r = .39, p<.001) (Table 18). These finding are supported by the mentoring literature which indicate shared attitudes and values between mentor-protégé like approach to work, personality, work-life balance, intellectual ways of thinking and communication style increase the protégé's perception of a high quality mentoring relationship. In this study, protégé's who perceived shared similarities scored mentoring functions higher as indicated by the negative skewness of the scale. Of the nine categories assessing similarities, seven correlated with total mentoring, explaining 35 percent of the variance. Deep-level similarities between protégé-mentor in attitudes and values along with experiential similarity like educational backgrounds are likely to influence the mentoring relationship.

Correlation to Leadership

This study utilized the Leadership Practice Inventory (LPI) self-report to assess respondent's leadership skills (Scores range from 1 to 10). The LPI total mean score was 7.6 for non-mentored and 8.06 for mentored with an 80% response rate, indicating this is a cadre of doctoral nurses who perceive themselves as having high leadership skills (Table 14). The results indicate no statistical significance between PhD and DNP; mentored and non-mentored scores in the LPI Score (Table 14 and Table 11). In this study, the LPI scores may have been influenced by having graduated or participated in a leadership or fellowship program (Table 15) as well as age and career stage (Table 16). No correlations were found in the mentoring functions with either personal and emotional guidance or learning facilitation to LPI scores but coaching (r = .30, p. <.05) was found to correlate (Table 13). The respondents in this study were recent doctoral graduates between the years of 2011 to 2014 or doctoral candidates, indicating a period

of career transition. The cultivating mentoring phase was reported by 51 percent of protégés, the literature supports coaching as a mentoring function during career transition because it is action-oriented and learning-oriented towards goal attainment.[79,188]

Correlation to Political Skill

This study utilized the Political Skill Inventory (PSI) self-report to assess respondent's political skill. The PSI mean score was 5.4 for non-mentored and 5.8 for mentored (Table 14), indicating this cadre of doctoral nurses scored slightly above average political skill with a mean score of 6 or 7 indicating high political skill (Table 9). While the two nursing studies by Whitman[55] and Harrell-Cook[138] utilized the PSI, neither reported the PSI scores; therefore, no comparison group is available for this study. The results indicate no difference in political skill between PhD and DNP respondents. In contrast to leadership, no correlations where found to political skill for years of experience, leadership or fellowship program, had graduated, or career stage (Table 15 and Table 16). A significance value of $p < .005$ was found for mentored for career development facilitation ($r = .34$) showing moderate effect but correlations were not found for strategies and systems advice or role modeling (Table 12). Two additional psychosocial functions correlated to political skill showing small effect: a) learning facilitation ($r = .293$, $p < .015$) and b) friendship ($r = .283$, $p < .015$), explaining 8 percent of the variance. As compared to leadership, political skill development requires practice and continuous feedback. These mechanisms of learning facilitation that are provided by mentors is supported by political skill research.[31,134]

Contrast to the Literature

The literature suggests friendship and role modeling as important mentoring functions for enhancing the protégé's professional and personal growth.[36,76,77,80] However, in this study role modeling had no correlation to leadership or political skill with friendship perceived as the least often element provided to protégés. Nursing research studies have found that psychosocial support is predominately provided as compared to career support mentoring functions.[22,51,52,117] In to this study, the career mentoring functions ranked high: coaching, advocacy, career development facilitation, strategies and systems advice. In the literature the range and degree of mentoring functions provided is influenced by the protégé's needs and level of preparedness.[76,90,91] This cadre of highly skilled protégés may desire higher levels of career support as compared to psychosocial support.

Of the four PSI subscales, networking ability had the lowest mean score of 5.2. The literature indicated that this is an important skill benefiting from the ability to forge strong bonds for friendship.[18,134] The results of this study indicated that friendship was the least often provided psychosocial mentoring function. In addition, the homogeneity between protégés and mentors may limit access to different networks, impacting exposure to new ways of thinking for the protégé.[37]

Synthesis of the literature

Consistent with the literature, mentored individuals benefit from the mentoring relationship as evidenced by higher levels of political skill and the benefit of coaching for leadership development. The most active mentoring phase is the cultivating stage where psychosocial and career support is provided, ranging one to five years. Informal mentoring and

shared similarities between protégé-mentor has a positive influence on the mentoring relationship. Similar to AACN and AONE studies, there is a lack of diversity among doctoral nurses and mentors, especially in academic settings. Differences in results might be due to the population for this study, protégés were highly educated, with higher levels of experience and expertise.

Conclusions and Limitations

The theoretical models utilized in this research captured important variables like age, career stage as well as mentoring functions such as strategies and systems advice or learning facilitation to describe the psychosocial and career functions most often provided to doctoral nurses. This is the first study to utilize established validated tools to assess mentoring, leadership, and political skill in the doctoral nurse, helping to address knowledge gaps in nursing research of the development needs of emerging nurse leaders. The survey instruments utilized provided objective assessments of the internal psychological states and perceptions of political and leadership skills of doctoral prepared nurses but were less useful for measuring behavioral effectiveness.[134] A technical limitation of this study was using the Wiley website to administer the LPI survey because the researcher could not confirm if emails bounced back or were coded as spam by a mail server. Self-reporting bias is a limitation of this research because the individual's self-perception may be influenced by underlying motives of not wanting to appear lacking in a particular skill. An additional limitation is recall-bias because as a retrospective study, protégés had to recall from memory how often a mentoring function occurred or the communication frequency between the protégé and mentor. Generalizability is limited because of the homogeneity of the protégés in regards to race, age, years of experience, and career stage.

Recommendations

Implications for Future Research

Most of the mentoring research in nursing has focused on novice nurses in the early career stage with a primary intention to support recruitment and retention. Future researchers should continue to explore the mentoring functions provided to doctoral prepared nurses using longitudinal design to capture the transition between graduation and entering a new work environment or promoted into a leadership position. The context of a new work environment or promotion into a leadership position provides an additional lens to assess mentoring elements and in particular, the political skill aspects of interpersonal influence, social astuteness and networking ability. Designing a cohort study comparing nurses pursuing their masters to those pursuing doctoral education could serve as an additional research strategy because of the increase variance in age, career stage and work experience, providing an opportunity to assess additional mentoring functions that correlate to leadership and political skill development. This type of strategy may enable more heterogeneity age, race and ethnicity, years of experience, and career stage to assess the mentoring elements that correlate to leadership and political skill. A challenge of this study was that protégé's were highly skilled, limiting the ability to identify correlations between mentoring and leadership skills development. While limited correlations were identified between mentoring and leadership, coaching was found to correlate with LPI scores. In this study, protégés assessed high on the LPI total score, but the subscales of Challenging the Process and Inspiring Vision were slightly lower. These are necessary skills to possess and effectively utilize when leading individuals and teams and implementing organizational goals. A secondary data analysis of this study could be done to examine

differences between LPI subscales, mentoring functions, age, years of experience, and mentoring similarities.

Methodological enhancements to this study would include qualitative interviews with PhD and DNP key informants along with selected mentors. Additional insights into the mentoring relationship could be gained to better understand the experience of informal vs formal mentoring; mentoring phase; shared similarities; work setting; and whether defined goals and expectations impact skill development. The mentoring function of *friendship* correlated to both leadership and political skill development, yet it was the least often provided to protégés. A key question to explore is why friendship was correlated to both leadership and political skill but was the least often provided mentoring function. Interviews with mentors perceived as offering friendship could provide valuable insight into the protégé-mentor relationship. Of particular interest to this research is how mentors actively expanded the protégé's social network or worked to proactively sponsor the protégé to help advance their career. The following additional questions are recommended to the research survey: a) did the protégé's job performance improve as a result of mentoring? b) did the protégé receive a promotion as a result of mentoring? and c) how was the protégé's productivity impacted as a result of mentorship?

Political skill in the nursing literature is limited but studied extensively in organizational psychology. In organizational psychology, political skill is essential for leaders to better influence others, navigating organizational politics, and enhancing one's career advancement. The political skill inventory survey tool is used widely in organizational psychology research but limited within nursing research. The two nursing studies that utilized the PSI did not report the results of total score or mean score, limiting comparisons. The PSI has a normative scale, allowing for comparisons between PSI total score and subscale scores to help demonstrate

nursing's ability to be politically skilled leaders within and outside of nursing. This is similar to the LPI that has a normative scale, allowing for group comparison within and outside of the nursing profession. While correlations were found between mentoring functions and PSI scores, a secondary data analysis is recommended. A secondary data analysis could further examine differences between PSI subscales, mentoring, age, years of experience, and protégé-mentor similarities.

This research study assessed the perception of mentoring functions only from the protégé's perspective. Future research should include the assessment of protégé-mentor dyads to compare and contrast perceptions of the mentoring relationship. In addition, the LPI and PSI should include the protégé's self-assessment as well as assessments of outside observers such as their supervisor, observer, and follower feedback for objective evaluation of leadership and political skill of doctoral nurses.

Implications for Policy Recommendations

Strong leaders are needed to make innovative changes in the health care system, practice and research. Successful mentorship interventions result in a positive contribution to the protégé's professional development. The IOM Future of Nursing Report recommended that development and mentoring programs be made available within nursing organizations and that researchers take responsibility in supporting development of the next cadre of leaders to enhance the personal and professional growth of leadership competencies.[3]

Implications for Practice Recommendations

In the next three to five years, the nursing profession faces a tsunami of chief nursing officer and tenured professor retirements. Proactive succession planning is urgently needed to identify and develop the next generation. The use of an evidenced based nurse mentoring framework to guide the development of mentoring programs using established validated tools to assess leadership and political skill development is essential. In addition, assessing the psychosocial and career support functions of mentoring and relationship timeframes would allow for objective assessment of mentorship in nursing. A culture of mentoring in nursing may help enhance a protégé's social network to purposefully diversify the homogeneity of a predominately White nursing leadership. Good leadership skills are not enough in today's complex work environment, possessing political skill is essential to enhance one's networking ability and interpersonal influence to develop social capital. Developing high quality political skills is essential for nurses because low political skill places them at a disadvantage for gaining power, information, and resources via social networks. Therefore, it is recommended that the LPI and PSI be administered to obtain both self-report and observer feedback from supervisors, subordinates, and peers. This would allow protégés to obtain objective feedback and utilize the information to outline development goals with their mentors.

Recommended Mentoring Practices for Doctoral Prepared Nurses to Improve Outcomes

At the doctoral level, protégés should have sufficient interpersonal maturity and experience to proactively guide the mentoring relationship. A major goal of mentoring is promoting knowledge, skill development, talent, and achievement in a career,[103] therefore

protégés should develop mentoring intelligence to attain these goals. Protégés need to proactively consider developing a mentoring intelligence by understanding the theory and process of mentoring, having intentionality to give and receive mentoring, embrace the concept of mentoring as a lifestyle.[103] The protégé should possess a sense of self-awareness and confidence, committed to making a difference in his or her work to influence research or practice, emotional intelligence, strong work ethic. A key recommendation is a periodic assessment of the mentoring phase of the relationship, to help determine whether you need to move from a cultivating stage to a re-defining peer stage such as a peer in the mentoring relationship. The mentoring benefits of the relationship may plateau suggesting either a new mentor should be sought or a mentoring contract should be established. A mentoring contract provides an objective opportunity to clarify career goals with a mentor, especially if one rationale for the relationship is to expand the protégé's network and develop social capital. When initiating a new mentoring relationship, take a few weeks to assess whether there is synergy and mutual benefit in the relationship. The doctoral prepared nurse should seek out mentors from different professions to expand and diversify learning opportunities outside of nursing. These strategies can help expand your sphere of influence at all levels of our healthcare system. The doctoral prepared nurse should consider being a mentor for someone outside the profession of nursing as a way to expand the reach of our profession into other professional networks.

Table 19 Effective Mentor and Protégé Characteristics

Mentors	Protégés
• Strong self-esteem and self-empowerment • Excellent communication skills • Able to challenge the status quo • Able to balance personal and professional responsibilities • Respected at the workplace • Knowledgeable in their field and interested in new challenges • Innovative thinker • Intrinsically motivated to mentor, past personal mentoring experiences were positive • Interested and willing to extend social network to the protégé	• Self-assess using objective tools to identify strengths and areas for improvement • Interested and committed to a mentorship relationship • Effective communicator and reciprocal in keeping lines of communication open • Invest in learning and understanding mentoring theory • Open to receiving constructive feedback for self-improvement • Goal driven and compatible with the mentor's expertise • Responsible and independent decision maker • Willing to take on assignment and work collaboratively with mentor to learn

Adapted from Grossman SC. (2012) and Vance, C (2010)

Summary

The recommendations of the IOM Report, *The Future of Nursing*, were established to help examine and provide potential solutions for a complex healthcare system.[187] Nurses comprise the largest healthcare workforce and are equipped to provide solutions but often underutilized. Based on the results of this study utilizing standardized leadership and political skill assessment instruments, both PhD and DNP doctoral nurses do possess leadership and political skills. Mentoring is one strategy to support and further develop leadership and political skill in the doctoral nurse.

Appendices

Appendix 1 IRB Approval

Review Correspondence
Protocol Number: IRB-AAAO7009 Protocol
Current Status: Approved

12/08/2014
IRB Office
Researcher
RASCAL IRB Protocol IRB-AAAO7009 (Protocol)
Protocol (Approved)
On December 8, 2014, a member of the IRB Administrative Review Committee determined that the above-referenced project met the regulatory guidelines of Category # 2 for exemption from the requirements of the federal regulations for the protection of human subjects (45 CFR 46).

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

The following study-related materials were approved:
- Script email for study participation, attached 12/01/2014
- Leadership Practice Inventory, attached 11/12/2014
- Political Skill Inventory, attached 11/12/2014
- Mentoring Functions Survey, attached 11/12/2014

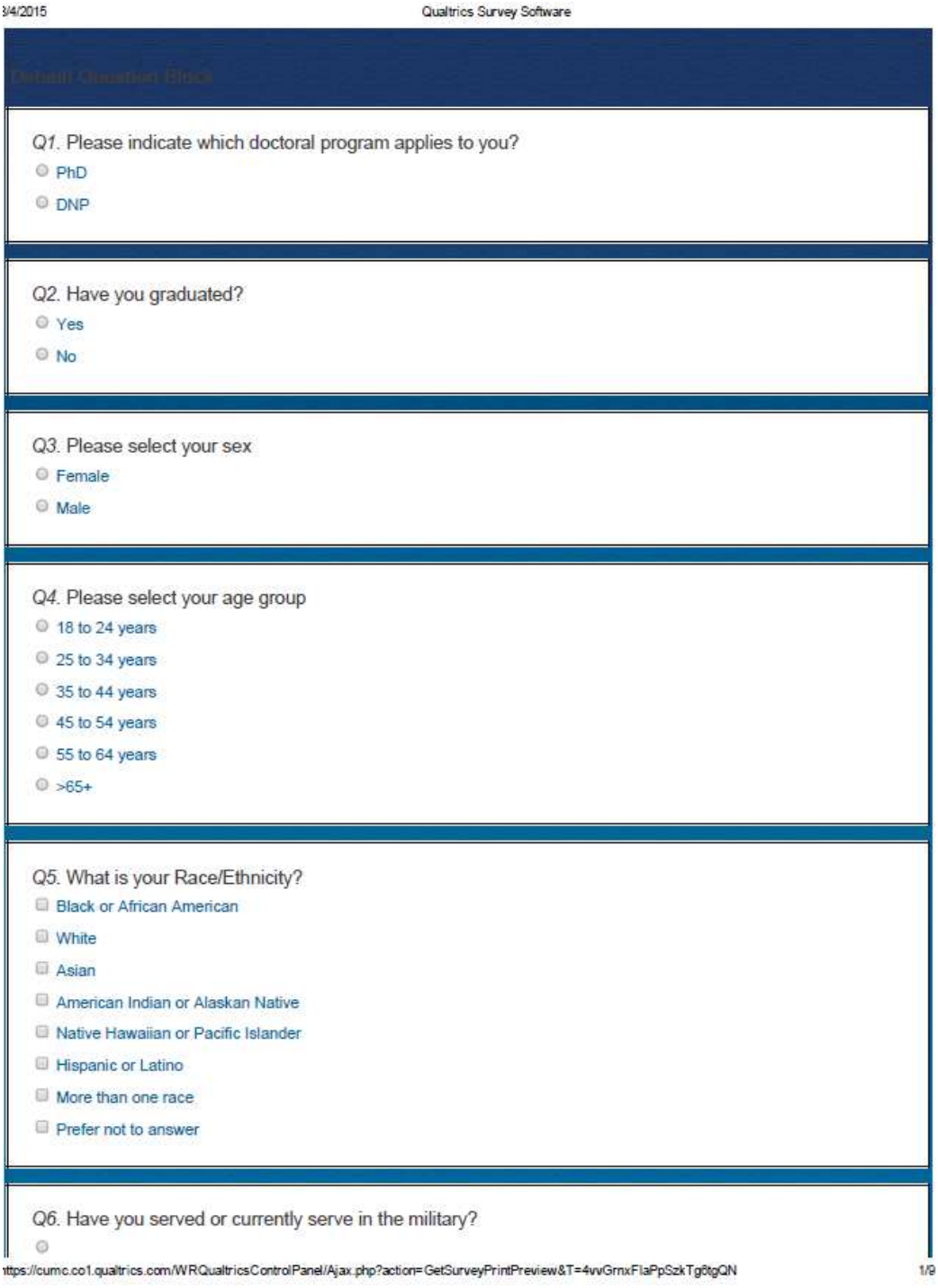
The IRB requests that you notify it of any changes to the study that may affect the exempt status.

Please terminate the study upon completion. If not completed by the expiration date noted, please submit a renewal so that the IRB is kept abreast of the active status.

You will receive a renewal reminder about sixty (60) days prior to the expiration date. To ensure that IRB approval for your study does not lapse, please submit a renewal in Rascal at least thirty (30) days before the expiration date.

If you have any questions regarding this approval, please call Rachel Lally at (212) 342-0948.

Appendix 2 Part I Survey Instrument: Mentoring and Political Skill



3/4/2015 Qualtrics Survey Software

Default Question Block

Q1. Please indicate which doctoral program applies to you?

- PhD
- DNP

Q2. Have you graduated?

- Yes
- No

Q3. Please select your sex

- Female
- Male

Q4. Please select your age group

- 18 to 24 years
- 25 to 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- >65+

Q5. What is your Race/Ethnicity?

- Black or African American
- White
- Asian
- American Indian or Alaskan Native
- Native Hawaiian or Pacific Islander
- Hispanic or Latino
- More than one race
- Prefer not to answer

Q6. Have you served or currently serve in the military?

https://cumc.co1.qualtrics.com/WRQualtricsControlPanel/Ajax.php?action=GetSurveyPrintPreview&T=4vvGrnxFlaPpSzkTg6tgQN 1/9

Yes

- No

Q7. What is your current employment status

- Working full time
- Working part time
- Not working, full time student
- Working part time and a part time student
- Working part time and a full time student
- Working full time and a full time student

Q8. Which best describes your work setting

- Hospital
- Outpatient Clinic or Health Center
- Academic Setting
- VA System
- Other
- Not applicable

Q9. How many years of work experience do you have?

- < 1 year
- 1-3
- 4-6
- 7-10
- 11-15
- 16+

Q10. Reflect on your work experience and select the category that best describes your level of expertise

- Novice
- Advanced beginner
- Competent
- Proficient
- Expert
- Prefer not to answer

Q11. Have you participated in a leadership development program or fellowship?

- Yes
- No

Q12. Which best describes your current mentoring status?

Just to be help differentiate between a mentor and advisor: (a) mentor supports a one-to-one reciprocal relationship providing career and psychosocial support to guide your career development; (b) academic advisor provides guidance to help you navigate doctoral coursework and research skills

- Yes, I have a mentor
- Yes, I have a mentor and an advisor
- No mentor but an advisor
- No mentor or advisor

Q13. Based on your most recent mentoring experience and thinking only of your mentor, do you describe it as:

- Informal Mentoring relationship, emerged naturally between the mentor and protege
- Formal Mentoring relationship, matched as part of a sponsored program by an organization
- mentoring program
- Not in a mentoring relationship

Q14. In your mentoring relationship, do you have a mentoring contract outlining goals and expectations with your mentor

- Yes
- No

Q15. In thinking about your most recent mentoring relationship, what has been the time frame of this relationship?

- < 1 year
- 1-2 years
- 3-5 years
- 6-8 years
- 9+ years

Q16. In thinking of your most recent mentoring relationship, would you describe the stage of the relationship as

-

Initiation Phase: trying to understand each other's interests, personal styles, and working habits

- Cultivating Phase: know each other well, close relationship, career and psychosocial support is provided
- Separation Phase: mentor has provided sufficient mentoring support, I'm moving into a new phase independently
- Re-definition Phase: redefining the relationship and moving into a peer phase, mutually supporting each other

Q17. What is the sex of your mentor?

- Male
- Female

Q18. Is your most recent mentor?

- Black or African American
- White
- Asian
- American Indian or Alaskan Native
- Native Hawaiian or Pacific Islander
- Hispanic or Latino
- More than one race
- Prefer not to answer

Q19. Select the industry that best describes your mentors work environment?

- Hospital
- Academic Setting
- Outpatient Clinical or Health Center
- VA System
- Private Business Sector
- Non-profit organization
- Federal Agency (HRSA, NIH, CDC, etc)
- Other

Q20. Based on your mentor's profession, please select his or her years of experience

- 1-5 years
- 6-10 years
- 10-15 years
- 16+
- Unsure, don't know

Q21. What is the highest degree achieved by your mentor?

- Bachelors
- Masters (MBA, MPH, MS)
- Doctoral (PhD, EdD, JD)
- DNP
- MD

Q22. Which best describes your mentors professional position

- Supervisor/Manager
- Director
- Vice President/Sr. Vice President
- President or CEO
- Assistant Professor
- Associate Professor
- Tenured Professor
- Dean
- Other

Q23. In thinking solely about your most recent mentoring relationship, what is the type and frequency of communication utilized?

	Never	Weekly	Bi-Weekly	Monthly	Quarterly	No response
Telephone Calls						
Video Conferencing						
Email Exchanges						
Formal 1:1 meetings						
Socially outside of work/school						

Q24. My mentor and I share the following similarities

"Social capital refers to the collective value of all "social networks" [people we know] and the inclinations to do things for each other within these networks in reciprocity of the relationship.

	Strongly Disagree	Disagree	No opinion or uncertain	Agree	Strongly Agree
Intellectual /Innovative thinking					
Personality					
Ambition					
Approach to work or assignments					

Communication Style	○	○	○	○	○
Social Capital*	○	○	○	○	○
Problem solving skills	○	○	○	○	○
Values about life in general	○	○	○	○	○
Values of work-personal life balance	○	○	○	○	○

Q25. In thinking solely about your mentor and most recent relationship, please consider the range of possible mentoring functions described and select the best response using the scale provided below.

	Never	Rarely, <10% of the time	Occasionally, 30% of the time	Sometimes, about 50% of the time	Frequently, about 70% of the time	Very Frequently >90% of the time	No opinion or uncertain
My mentor is an effective role model	○	○	○	○	○	○	○
My mentor's approach, attitudes and values are admired by me	○	○	○	○	○	○	○
My mentor displays skills and behaviors I would like to learn	○	○	○	○	○	○	○
I would like to emulate my mentor - in terms of what they know and who they are	○	○	○	○	○	○	○
My mentor introduces me to different networks of people who can assist with my career	○	○	○	○	○	○	○
My mentor makes me aware of, and encourages me to take advantage of opportunities or promotions that are available	○	○	○	○	○	○	○
My mentor and I get together outside of work/academic setting	○	○	○	○	○	○	○
My mentor is a mutual confidant, able to share personal values and beliefs, views and interests	○	○	○	○	○	○	○
My mentor and I have a friendship	○	○	○	○	○	○	○
My mentor has offered or appointed me with career opportunities	○	○	○	○	○	○	○
My mentor promotes, recommends or advocates for me to "people that count"	○	○	○	○	○	○	○
My mentor "goes to bat" for me and/or uses their power or influence on my behalf as their protege	○	○	○	○	○	○	○
	Never	Rarely, <10% of the time	Occasionally, 30% of the time	Sometimes, about 50% of the time	Frequently, about 70% of the time	Very Frequently >90% of the time	No opinion or uncertain
My mentor's reputation reflects positively on me	○	○	○	○	○	○	○

things through for myself							
I can reflect with my mentor on a particular work situation or incidence and he/she provides feedback for future improvement	○	○	○	○	○	○	○
My mentor will share an experience to help illustrate a particular point for learning	○	○	○	○	○	○	○
My mentor provides professional or technical advice	○	○	○	○	○	○	○
My mentor provides assistance for the development of job or project related skills and knowledge	○	○	○	○	○	○	○
My mentor provides performance feedback on work tasks or projects	○	○	○	○	○	○	○

Q26. Using the 7-point scale, select the answer which best describes how much you agree with the statement on the left

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I spend a lot of time and effort at work/school networking with others	○	○	○	○	○	○	○
I am able to make most people feel comfortable and at ease around me	○	○	○	○	○	○	○
I am able to communicate easily and effectively with others	○	○	○	○	○	○	○
It is easy for me to develop good rapport with most people	○	○	○	○	○	○	○
I understand people very well	○	○	○	○	○	○	○
I am good at building relationships with influential people	○	○	○	○	○	○	○
I am particularly good at sensing the motivations and hidden agendas of others	○	○	○	○	○	○	○
When communicating with others, I try to be genuine in what I say and do	○	○	○	○	○	○	○
I have developed a large network of colleagues and associates at work (or school) who I can call on for support when I really need to get things done	○	○	○	○	○	○	○
At work (or school), I know a lot of important people and am well connected	○	○	○	○	○	○	○
I spend a lot of time at work (or school) developing connections with others	○	○	○	○	○	○	○
I am good at getting people to like me	○	○	○	○	○	○	○
	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
It is important that people believe I am sincere in what I say and do	○	○	○	○	○	○	○
I try to show a genuine interest in other people	○	○	○	○	○	○	○
I am good at using my connections and network to make things happen at work	○	○	○	○	○	○	○
I have good intuition and am savvy about how to present myself to others	○	○	○	○	○	○	○
I am always seem to instinctively know the right things to say or do to influence others	○	○	○	○	○	○	○
I pay close attention to people's facial expressions	○	○	○	○	○	○	○

Appendix 3 Part 2 Survey Instrument Sample of Leadership Practice Inventory

The Five Practices of Exemplary Leadership®

Created by James M. Kouzes and Barry Z. Posner in the early 1980s and first identified in their internationally best-selling book, *The Leadership Challenge*, The Five Practices of Exemplary Leadership approaches leadership as a measurable, learnable, and teachable set of behaviors. After conducting hundreds of interviews, reviewing thousands of case studies, and analyzing more than two million survey questionnaires to understand those times when leaders performed at their personal best, there emerged five practices common to making extraordinary things happen. The Five Practices are:

The Leadership Practices Inventory (LPI) instrument is an essential tool to help you gain perspective into how you see yourself as a leader, how others view you, and what actions you can take to improve your use of The Five Practices, which research has demonstrated, year after year, make for more effective leaders.

ABOUT YOUR LPI REPORT

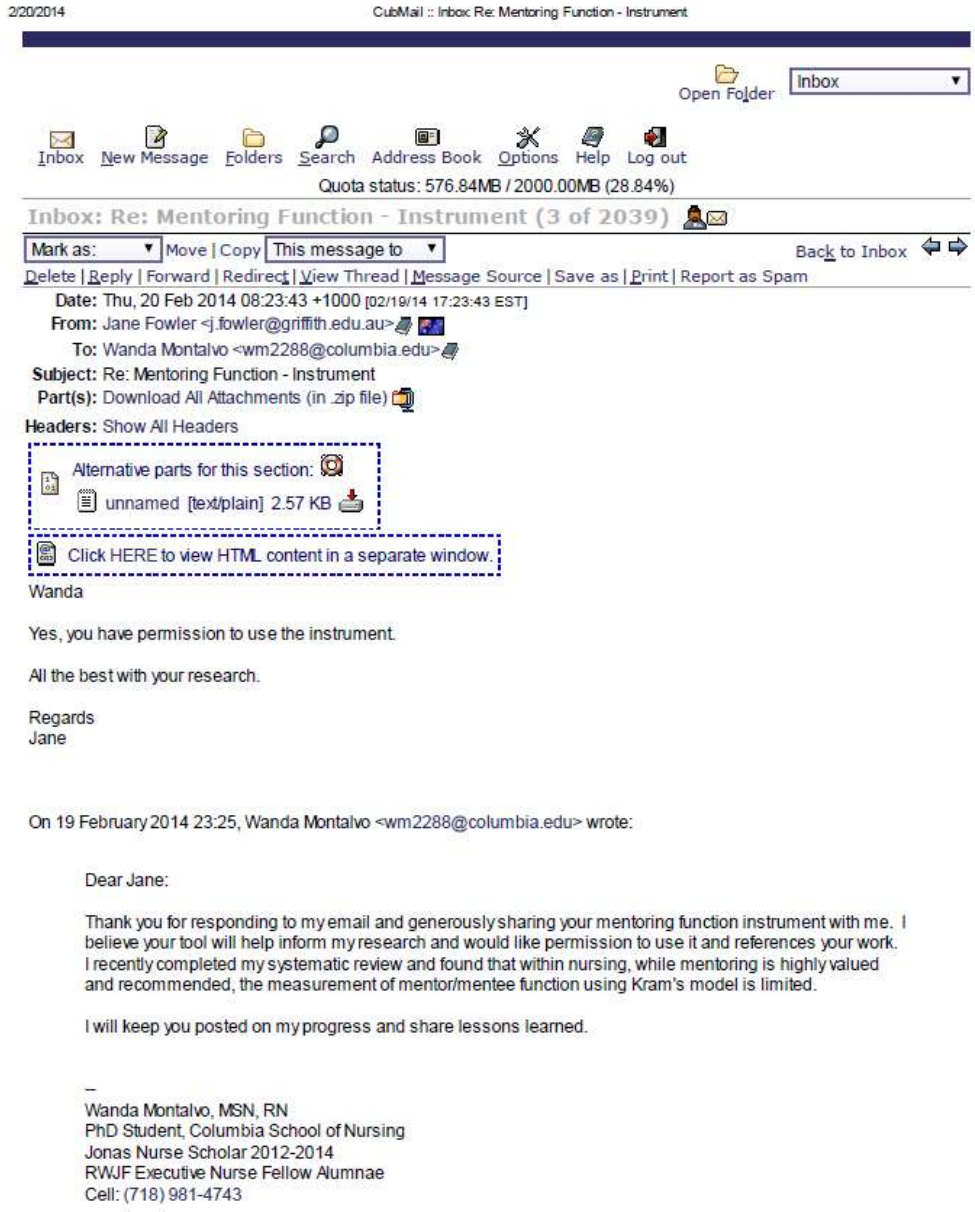
The LPI measures the frequency of 30 specific leadership behaviors on a 10-point scale, with six behavioral statements for each of The Five Practices. You and the observers you selected rated how frequently you engage in each of these important behaviors associated with The Five Practices. The response scale is:

RESPONSE SCALE	1-Almost Never	3-Seldom	5-Occasionally	7-Fairly Often	9-Very Frequently
	2-Rarely	4-Once in a While	6-Sometimes	8-Usually	10-Almost always

1.	Sets a personal example of what he/she expects of others	**Model**
4.	Develops cooperative relationships among the people he/she works with	**Enable**
5.	Praises people for a job well done	**Encourage**
8.	Challenges people to try out new and innovative ways to do their work	**Challenge**
9.	Actively listens to diverse points of view	**Enable**
10.	Makes it a point to let people know about his/her confidence in their abilities	**Encourage**
11.	Follows through on promises and commitments he/she makes	**Model**
14.	Treats others with dignity and respect	**Enable**
20.	Publicly recognizes people who exemplify commitment to shared values	**Encourage**
21.	Builds consensus around a common set of values for running our organization	**Model**
22.	Paints the "big picture" of what we aspire to accomplish	**Inspire**
30.	Gives the members of the team lots of appreciation and support for their contributions	**Encourage**
2.	Talks about future trends that will influence how our work gets done	**Inspire**
3.	Seeks out challenging opportunities that test his/her own skills and abilities	**Challenge**
6.	Spends time and energy making certain that the people he/she works with adhere to the principles and standards that we have agreed on	**Model**
7.	Describes a compelling image of what our future could be like	**Inspire**
12.	Appeals to others to share an exciting dream of the future	**Inspire**
13.	Searches outside the formal boundaries of his/her organization for innovative ways to improve what we do	**Challenge**
15.	Makes sure that people are creatively rewarded for their contributions to the success of projects	**Encourage**
19.	Supports the decisions that people make on their own	**Enable**
24.	Gives people a great deal of freedom and choice in deciding how to do their work	**Enable**
25.	Finds ways to celebrate accomplishments	**Encourage**
26.	Is clear about his/her philosophy of leadership	**Model**
27.	Speaks with genuine conviction about the higher meaning and purpose of our work	**Inspire**
29.	Ensures that people grow in their jobs by learning new skills and developing themselves	**Enable**
16.	Asks for feedback on how his/her actions affect other people's performance	**Model**
17.	Shows others how their long-term interests can be realized by enlisting in a common vision	**Inspire**
18.	Asks "What can we learn?" when things don't go as expected	**Challenge**
23.	Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on	**Challenge**
28.	Experiments and takes risks, even when there is a chance of failure	**Challenge**

Pertinent Communication

Approval for Mentoring Research Instrument



2/20/2014 CubMail :: Inbox Re: Mentoring Function - Instrument

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Inbox: Re: Mentoring Function - Instrument (3 of 2039)

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Date: Thu, 20 Feb 2014 08:23:43 +1000 [02/19/14 17:23:43 EST]
From: Jane Fowler <j.fowler@griffith.edu.au>
To: Wanda Montalvo <wm2288@columbia.edu>
Subject: Re: Mentoring Function - Instrument
Part(s): Download All Attachments (in .zip file)
Headers: Show All Headers

Alternative parts for this section:
unnamed [text/plain] 2.57 KB

Click HERE to view HTML content in a separate window.

Wanda

Yes, you have permission to use the instrument.

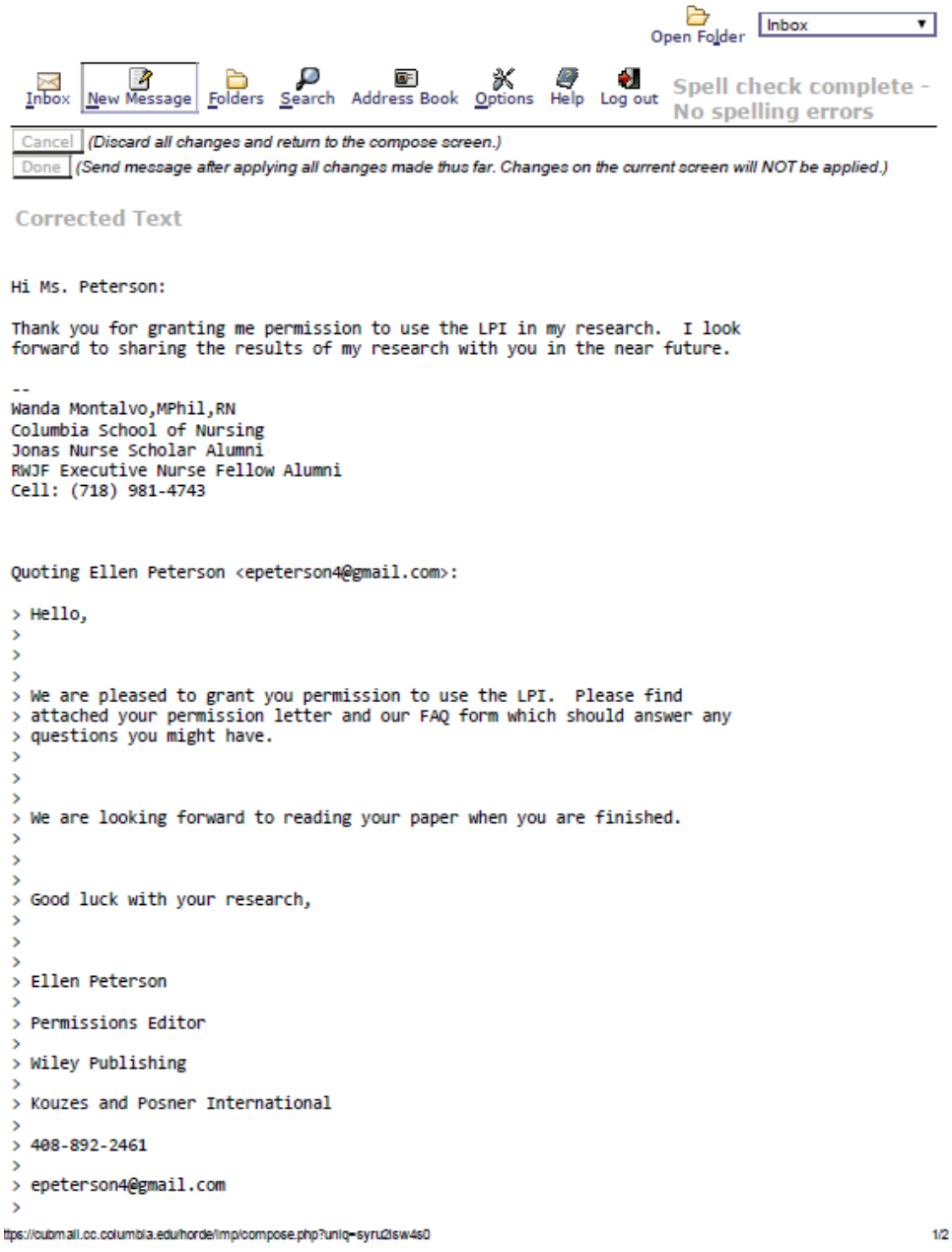
All the best with your research.

Regards
Jane

On 19 February 2014 23:25, Wanda Montalvo <wm2288@columbia.edu> wrote:

> Dear Jane:
>
> Thank you for responding to my email and generously sharing your mentoring function instrument with me. I believe your tool will help inform my research and would like permission to use it and references your work. I recently completed my systematic review and found that within nursing, while mentoring is highly valued and recommended, the measurement of mentor/mentee function using Kram's model is limited.
>
> I will keep you posted on my progress and share lessons learned.
>
> –
> Wanda Montalvo, MSN, RN
> PhD Student, Columbia School of Nursing
> Jonas Nurse Scholar 2012-2014
> RWJF Executive Nurse Fellow Alumnae
> Cell: (718) 981-4743

Approval for Leadership Practice Inventory



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Spell check complete - No spelling errors

Cancel *(Discard all changes and return to the compose screen.)*

Done *(Send message after applying all changes made thus far. Changes on the current screen will NOT be applied.)*

Corrected Text

Hi Ms. Peterson:

Thank you for granting me permission to use the LPI in my research. I look forward to sharing the results of my research with you in the near future.

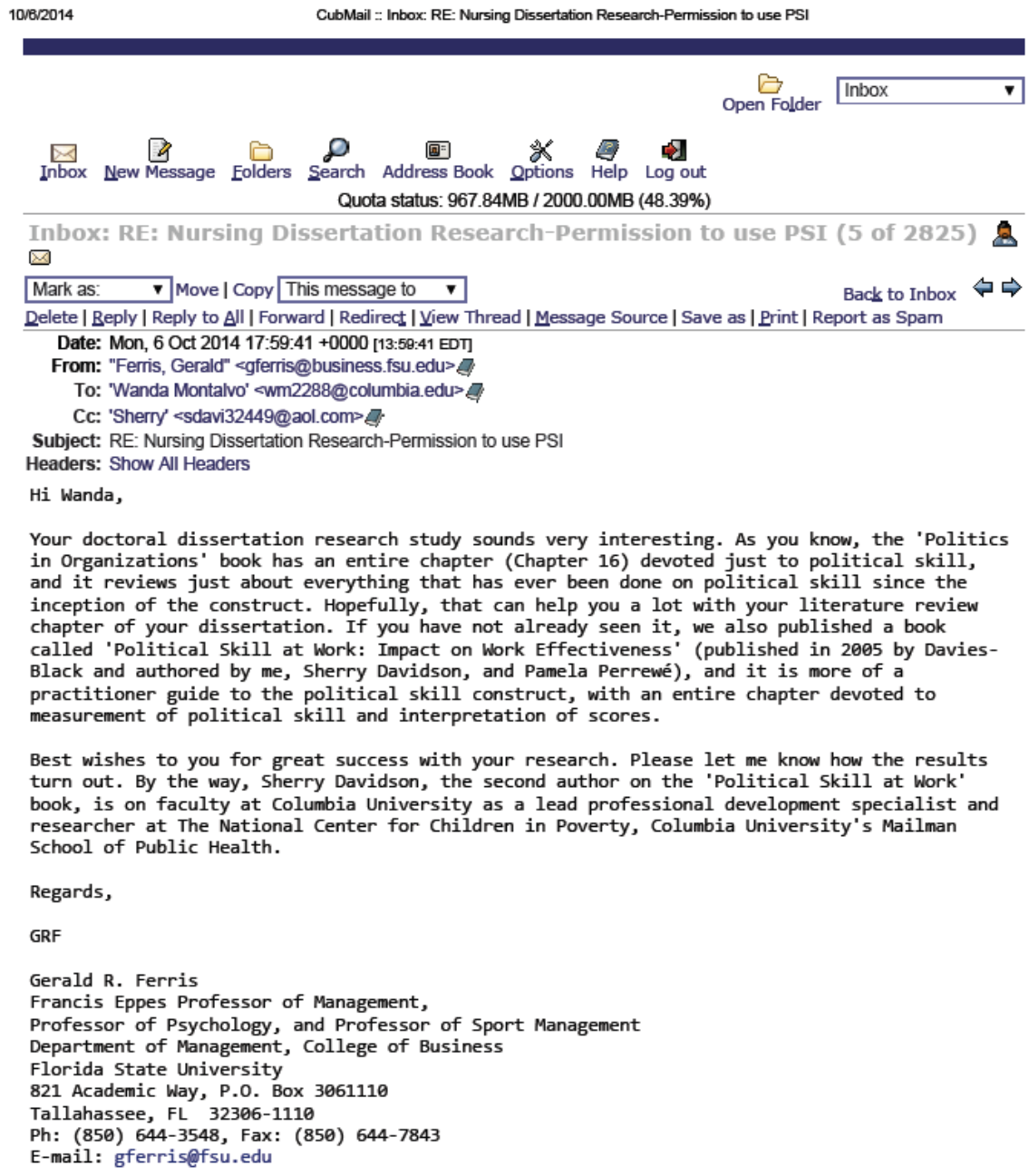
--
Wanda Montalvo,MPhil,RN
Columbia School of Nursing
Jonas Nurse Scholar Alumni
RWJF Executive Nurse Fellow Alumni
Cell: (718) 981-4743

Quoting Ellen Peterson <epeterson4@gmail.com>:

> Hello,
>
>
>
> We are pleased to grant you permission to use the LPI. Please find
> attached your permission letter and our FAQ form which should answer any
> questions you might have.
>
>
>
> We are looking forward to reading your paper when you are finished.
>
>
>
> Good luck with your research,
>
>
>
> Ellen Peterson
>
> Permissions Editor
>
> Wiley Publishing
>
> Kouzes and Posner International
>
> 408-892-2461
>
> epeterson4@gmail.com
>

ttps://cubmail.cc.columbia.edu/horde/imp/compose.php?uniq=syru2lsw4s0 1/2

Approval for Political Skill Inventory



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Date: Mon, 6 Oct 2014 17:59:41 +0000 [13:59:41 EDT]
From: "Ferris, Gerald" <gferris@business.fsu.edu>
To: 'Wanda Montalvo' <wm2288@columbia.edu>
Cc: 'Sherry' <sdavi32449@aol.com>
Subject: RE: Nursing Dissertation Research-Permission to use PSI
Headers: Show All Headers

Hi Wanda,

Your doctoral dissertation research study sounds very interesting. As you know, the 'Politics in Organizations' book has an entire chapter (Chapter 16) devoted just to political skill, and it reviews just about everything that has ever been done on political skill since the inception of the construct. Hopefully, that can help you a lot with your literature review chapter of your dissertation. If you have not already seen it, we also published a book called 'Political Skill at Work: Impact on Work Effectiveness' (published in 2005 by Davies-Black and authored by me, Sherry Davidson, and Pamela Perrewé), and it is more of a practitioner guide to the political skill construct, with an entire chapter devoted to measurement of political skill and interpretation of scores.

Best wishes to you for great success with your research. Please let me know how the results turn out. By the way, Sherry Davidson, the second author on the 'Political Skill at Work' book, is on faculty at Columbia University as a lead professional development specialist and researcher at The National Center for Children in Poverty, Columbia University's Mailman School of Public Health.

Regards,

GRF

Gerald R. Ferris
Francis Eppes Professor of Management,
Professor of Psychology, and Professor of Sport Management
Department of Management, College of Business
Florida State University
821 Academic Way, P.O. Box 3061110
Tallahassee, FL 32306-1110
Ph: (850) 644-3548, Fax: (850) 644-7843
E-mail: gferris@fsu.edu

Approval to use AONE Three-dimensional Administration Curriculum Model

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NAME AND ADDRESS OF PERSON MAKING REQUEST:

Name: Wanda Montalvo, MSN, MPhil, RN (email: wm2288@columbia.edu)
Address: 630 West 168th Street - (Columbia School of Nursing)
City: New York State: NY Zip: 10032

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Title: Future Nursing Administration Graduate Curricula. Part 2
Author: Herrin, D., Jones, K., Krepper, R., Sherman, R., Reineck, C
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Invitation to Participate in Study with Consent

Dear Jonas Scholar Alum:

My name is Wanda Montalvo, a fellow Jonas Scholar alum and a doctoral candidate at Columbia University School of Nursing. My dissertation focuses on leadership and political skill preparedness of the doctoral nurse, inclusive of both the PhD and DNP. I know alums are on different timelines (e.g. still in school or graduated) and this research is intended to be inclusive of all these stages.

I'm seeking your participation in this research study and created a brief 90 second introductory video describing the survey: http://youtu.be/WLMAXeMGW3A. My name, email and phone number appear at the bottom of this email.

Please read the **research information** below and click the survey link provided to complete a 10 minute Part I survey. Upon completion of Part I, you will receive a link to the Leadership Practice Inventory (Part II). The Leadership Practice Inventory costs $15.00 but is ***absolutely FREE*** to you along a customized confidential self-report, development planner and workbook.

I affirm that I have read the below information and that my participation in this research is voluntary and that I may refuse to participate or withdraw from participation at any time.
Follow this link to participate in Survey: $ 1://Surveylink?d=TaketheSurvey

or copy and paste the URL below into your internet browser: $l://SurveyURL

Follow the link to opt out of future emails: $l://OptOutLink?d=Click here to unsubscribe

RESEARCH INFORMATION:
Procedures: The main purpose of this study is to investigate the correlation between leadership, mentoring, and political skill development of doctoral nurses. If you decide to participate in this study, you will be asked to complete a three part survey via secure Columbia University server. Participants will be provided with a unique link to complete the Leadership Practice Inventory.
Compensation: As a Thank you, all participants completing this three part survey will be provided with a confidential report based on his or her survey responses using the Five Practices of Exemplary Leadership® model. In addition, three Amazon gift cards will be provided to **one unique random winner as follows:** week one ($75.00); week two ($50.00); week three ($25.00).
Benefits: To the best of our knowledge, no previous nursing research has described the

mentoring functions provided during the mentorship of doctoral nurses; nor the correlation between mentoring to leadership and political skill development. This research responds to the IOM Future of Nursing report to develop transformation nurse leaders, and will help inform key stakeholders on the mentoring functions that support the development of doctoral nurses as emerging nurse leaders.

Risks/Discomforts: There are no anticipated physical, social, or legal risks to this study and is considered to have minimal risk. Participants can choose to not participate in the study or opt out at any time. All responses will remain confidential and by completing this survey, you are giving your consent to participate in my study.

Confidentiality: Participants privacy is of utmost importance, all data obtained is confidential with no personal identifiers. Under no circumstances whatsoever will participants be identified by name in the course of this research study, or in any publication thereof. All data will be securely stored, and will be used for professional purposes only.

Results: The collected data will be analyzed with the assistance of my dissertation advisor, Dr. Bobbie Berkowitz. The data will be used to prepare a dissertation to be submitted to Columbia University, and publication of findings in peer reviewed journal. An abstract of research findings will be publically available via Columbia University Academic Commons.

Questions: If you have any questions about this research, please feel free to contact me either by email or phone.

Wanda Montalvo, MSN, MPhil, RN
Doctoral Candidate
wm2288@cumc.columiba.edu
(718) xxx-xxxx

Bobbie Berkowtiz, PhD, RN, FAAN
Dean and Professor, Columbia University School of Nursing
Sr. Vice President, Columbia University Medical Center
bb2509@cumc.columbia.edu

References

1. Rosenbaum S. The patient protection and Affordable Care Act: Implications for public health policy and practice. *Public Health Rep.* 2011;126(1):130-135.

2. Center for Medicid and Medicare (CMS). Center for Clinical Standards and Quality. www.cms.gov/Medicare?Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo, ed 2015

3. IOM (Institute of Medicine), 2011 *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: The National Academies Press

4. Cronenwett L, Sherwood, G., Pohl, J., Barnsteiner, J., Moore, S., Sullivan, D., Ward, D. Quality and safety education for advanced nursing practice. *Nursing Outlook.* 2009;56(6):338-348.

5. American Association of Colleges of Nursing (AACN). *The Essentials of Doctoral Education for Advanced Nursing Practice.* Washington, DC: American Association of Colleges of Nursing;2006.

6. American Association of Colleges of Nursing (AACN) *The Essentials of Master's Education in Nursing* Washington, D.C.: AACN;2011.

7. United States Department of Labor Bureau of of Labor Statistics. Occupational Outlook Handbook. 2014-2015 Edition.

8. Nooney J. The U.S. Nursing Workforce: Trends in Supply and Education. In: (HRSA) HRSA, ed: Bureau of Health Professions; Oct 2013.

9. O*NET Online. Summary Report for Clinical Nurse Specialists for Advanced Pratice Registered Nurse. http://www.onetonline.org/link/summary/29-1171.00, ed 2013.

10. Fang D, Li, Y., Arietti, R., Bednash, G.D. *Graduations in Baccalaureate and Graduate Programs in Nursing.* Washington, D.C.: American Association of Colleges of Nursing;2014.

11. American Association of College of Nursing (AACN): Essential Series. 2011; http://www.aacn.nche.edu/education-resources/essential-series.

12. American Organization of Nurse Executives (AONE). The AONE Nurse Executive Competencies. 2011.

13. BALLEIN Search Partners and AONE. Why senior nursing officers matter: A national survey of nursing executives. Oak Brook, IL: Ballein Search Partners;2003.

14. Hutchinson M, Jackson D. Transformational leadership in nursing: towards a more critical interpretation. *Nursing inquiry.* 2013;20(1):11-22.

15. Schwartz DB, Spencer T, Wilson B, Wood K. Transformational leadership: implications for nursing leaders in facilities seeking magnet designation. *AORN Journal.* 2011;93(6):737-748.

16. Weiss HM, Williams CA, Wetzel DE, Drake AC, Cumberlander LB, Gordon CL. Veterans Health Administration mentoring model for new nurse executives. *Nursing Administration Quarterly.* 2008;32(3):226-229.

17. Benner P. From Novice to Expert: Excellence and power in clinical nursing practice. Menlo Park, CA: Addison-Wesley; 1985.

18. Ferris GR., Treadway, DC, Perrewe, PL, Brouer, RL, Douglas, C and Lux S. Political skill in organizations. *Journal of management.* 2007;33(3):290-320.

19. Boyle. Nursing leaders as mentors: How are we doing? *Nursing administration quarterly.* 1990;15(1):44-48.

20. Reverby S. *The dilemma of American nursing, 1850-1945.* Cambridge; New York: Cambridge University Press; 1987.

21. Kelly K, Turner A, Speroni KG, McLaughlin MK, Guzzetta CE. National survey of hospital nursing research, part 2: facilitators and hindrances. *The Journal of nursing administration.* 2013;43(1):18-23.

22. Smith S, Hecker-Fernandes JR, Zorn C, Duffy L. Precepting and mentoring needs of nursing faculty and clinical instructors: fostering career development and community. *The Journal of nursing education.* 2012;51(9):497-503.

23. Sullivan Havens D, Jones, C.B., Carlson, J. Chief Nursing Officer Retention & Turnover, 2013: Is the Crisis Still Brewing. Inspiring Leadership AONE 2014 Annual Conference; Orlando, FL.

24. Wright BW. Power, Trust, and Science of Unitary Human Beings Influence Political Leadership: A Celebration of Barrett's Power Theory. *Nursing Science Quarterly.* 2010;23(1):60-62.

25. Harvey P, Harris, R.B. Harris, K.J., Wheeler, A.R. Attenuating the Effects of Social Stress: The Impact of Political Skill. *Journal of occupational health psychology.* 2007;12(2):105-115.

26. McDonald KM. Considering Context in Quality Improvement Interventions and Implementation: Concepts, Frameworks, and Application. *Academic Pediatrics.* 2013;13(6, Supplement):S45-S53.

27. Krugman M, Heggem L, Kinney LJ, Frueh M. Longitudinal charge nurse leadership development and evaluation. *The Journal of nursing administration.* 2013;43(9):438-446.

28. Eby LT, Lockwood A. Protégés' and mentors' reactions to participating in formal mentoring programs: A qualitative investigation. *Journal of vocational behavior.* 2005;67(3):441-458.

29. Bing MN, Davison HK, Minor I, Novicevic MM, Frink DD. The prediction of task and contextual performance by political skill: A meta-analysis and moderator test. *Journal of vocational behavior.* 2011;79(2):563-577.

30. Gentry WA, Gilmore DC, Shuffler ML, Leslie JB. Political skill as an indicator of promotability among multiple rater sources. *Journal of organizational behavior.* 2012;33(1):89-104.

31. Todd SY. Career success implications of political skill. *The Journal of social psychology.* 2009;149(3):279-304.

32. Young AM, Perrewé PL. The Exchange Relationship between Mentors and Protégés: The Development of a Framework. *Human Resource Management Review.* 2000;10(2):177-209.

33. Eby LT, Allen TD, Evans SC, Ng T, Dubois D. Does Mentoring Matter? A Multidisciplinary Meta-Analysis Comparing Mentored and Non-Mentored Individuals. *J Vocat Behav.* 2008;72(2):254-267.

34. Yoder L. Mentoring: a concept analysis. *Nursing Administration Quarterly.* 1990;15(1):9-19.

35. Scandura TA. An investigation of the moderating effects of gender on the relationships between mentorship initiation and protégé perceptions of mentoring functions. *Journal of vocational behavior.* 2001;59(3):342-363.

36. Kram KE. Phases of the Mentor Relationship. *Academy of Management journal.* 1983;26(4):608-625.

37. Douglas TaC, D. *Career Cycles and Mentoring. In B. Ragins & K. Kram (Eds). The Handbook of Mentoring at Work: Theory, Research, and Practice. (pp. 95-123).* Thousand Oaks, CA: SAGE Publications, Inc.; 2008.

38. Leonardo D, Godshalk, V., Sosik, J. Mentoring and Leadership: Standing at the Crossroads of Theory, Research, and Practice. In B. Ragins & K. Kram (Eds) *The Handbook of Mentoring at Work: Theory, Research, and Practice.* (pp. 149-179). 2008; http://dx.doi.org/10.4135/9781412976619.

39. Fowler JL, O'Gorman JG. Mentoring Functions: A Contemporary View of the Perceptions of Mentees and Mentors. *British journal of management.* 2005;16(1):51-57.

40. Armstrong SJ. Formal Mentoring Systems: An Examination of the Effects of Mentor/Protege Cognitive Styles on the Mentoring Process. *Journal of management studies.* 2002;39(8):1111-1137.

41. Wanberg CR, Welsh ET, Hezlett SA. Mentoring research: A review and dynamic process model. *Research in personnel and human resources management.* 2003;22:39-124.

42. Wanberg CR, Kammeyer-Mueller J, Marchese M. Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior.* 2006;69(3):410-423.

43. Stewart BM. An evolutionary concept analysis of mentoring in nursing. *Journal of professional nursing.* 1996;12(5):311-321.

44. Kopp EM, Hinkle JL. Understanding Mentoring Relationships. *Journal of Neuroscience Nursing.* 2006;38(2):126-131.

45. Ferris GR. Development and validation of the political skill inventory. *Journal of management.* 2005;31(1):126-152.

46. American Nurses Credentialing Center (ANCC). Forces of Magnetism. 1983; http://www.nursecredentialing.org/ForcesofMagnetism.aspx.

47. American Nurses Association Fact Sheet. 2011; http://nursingworld.org/NursingbytheNumbersFactSheet.aspx.

48. Fowler J, F.J. *Survey Research Methods.* 5th Edition ed. Thousand Oaks, CA: Sage; 2014.

49. Luthra V. Business Dictionary. 2007; Online business dictionary with over 20K terms. Available at: www.businessdictionary.com.

50. Dreher GF, Cox Jr TH. Race, Gender, and Opportunity: A Study of Compensation Attainment and the Establishment of Mentoring Relationships. *Journal of Applied Psychology.* 1996;81(3):297-308.

51. Latham CL. Nurses supporting nurses: creating a mentoring program for staff nurses to improve the workforce environment. *Nursing administration quarterly.* 2008;32(1):27-39.

52. Latham CL, Ringl, K., Hogan, M. Professionalization and retention outcomes of a university-service mentoring program partnership. *Journal of professional nursing.* 2011;27(6):344-353.

53. Vance C. Leader as mentor. *Nursing leadership forum.* 2002;7(2):83-90.

54. Jones CB, Havens, D.S., Thompson, P.A. Chief nursing officer retention and turnover: A crisis brewing? Results of a national survey. *Journal of Healthcare Management.* 2008;53(2):89-105.

55. Whitman MV. Psychological entitlement and abusive supervision: Political skill as a self-regulatory mechanism. *Health care management review.* 2013;38(3):248-257.

56. Shirey M, Ebright PR, McDaniel AM. Nurse manager cognitive decision-making amidst stress and work complexity. *Journal of nursing management.* 2013;21(1):17-30.

57. Ferris GR, Brouer RL, Laird MD, Hochwarter WA. *The consequences of organizational politics perceptions as a workplace stressor.* 2006.

58. Treadway DC, Hochwarter WA, Kacmar CJ, Ferris GR. Political will, political skill, and political behavior. *Journal of Organizational Behavior.* 2005;26(3):229-245.

59. Treadway DC, Hochwarter WA, Ferris GR, et al. Leader political skill and employee reactions. *The Leadership Quarterly.* 2004;15(4):493-513.

60. Shirey MR. Stress and coping in nurse managers: Two decades of research. *Nursing Economics.* 2006;24(4):193-+.

61. Brooks BA, Crawford LH, Nicklas GE, Soldwisch S. Nursing Leadership Education An Innovative Executive Solution. *J. Nurs. Adm.* 2014;44(12):669-672.

62. NSI Nursing Solutions Inc. Staffing and workforce studies. 2014; www.nsinursingsolutions.com/administrators/admin-research/staffingandworkforcestudies.aspx.

63. Adeniran R, Smith-Glasgow ME, Bhattacharya A, Xu Y. Career advancement and professional development in nursing. *Nursing outlook.* 2013;61(6):437-446.

64. Epitropaki OaMR. Transformational-transactional leadership and upward influence: The role of Relative Leader-Member Exchanges (RLMX) and Perceived Organizaitonal Support (POS). *The Leadership quarterly.* 2013;24:299-315.

65. Bolton EB. A Conceptual Analysis of the Mentor Relationship in the Career Development of Women. *Adult education quarterly (American Association for Adult and Continuing Education).* 1980;30(4):195-207.

66. Rosserter R. Nursing Shortage Fact Sheet. 2014. http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf.

67. Burger D. Relationship between patient mortality and nurses' level of education: Response. *Journal of the American Medical Association.* 2004;291(11):1321.

68. Buerhaus PI, Staiger, D.O., Auerbach, D.L. *The future of the nursing workforce in the United States: Data, trends and implications.* Sudbury, MA2009.

69. Reilly MJ. *An investigation of the relationship among social support, motivation, perceived competence, and pursuit of a baccalaureate degree among associate degree nurse graduates* [D.N.S.]. Ann Arbor, City University of New York; 2012.

70. Lankau MS, T. *Mentoring as a Forum for Personal Learning in Organizations. In B. Ragins & K. Kram (Eds). The Handbook of Mentoring at Work: Theory, Research, and Practice. (pp. 95-123).* Thousand Oaks, CA: SAGE Publications, Inc.; 2008.

71. Varghese J. What Predicts Actual Turnover in Nurse Leaders? Eastern Nurse Research Society 27th Annual Scientific Session, Philadelphia, PA. 2014.

72. Titzer J, Phillips T, Tooley S, Hall N, Shirey M. Nurse manager succession planning: synthesis of the evidence. *Journal of Nursing Management.* 2013;21(7):971-979.

73. Herrin D. Future nursing administration graduate curricula, part 2: foundation and strategies. *The Journal of nursing administration.* 2006;36(11):498-505.

74. Thomas J, Herrin D. The Robert Wood Johnson executive nurse fellows program - A model for learning in an executive master of science in nursing program. *The Journal of nursing administration.* 2008;38(3):112-115.

75. Antrobus S, Masterson A, Bailey J. Scaling the political ladder. *Nursing Management.* 2004;11(7):23-28.

76. Roosevelt E, Ragins, BR, Kram, KE. *The Roots and Meaning of Mentoring. The Handbook of Menotring at Wok: Theory, Research, and Practice.* SAGE Publications, Inc. Thousand Oaks, CA

77. Kram KE. *Mentoring at work.* Glenview, IL: Foresman; 1985.

78. Ragins BR, Cotton JL, Miller JS. Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management journal.* 2000;43(6):1177-1194.

79. Fielden SL, Davidson MJ, Sutherland VJ. Innovations in coaching and mentoring: implications for nurse leadership development. *Health Serv Manage Res.* 2009;22(2):92-99.

80. Lankau MaS, T. *Mentoring as a Forum for Personal Learning in Organizations. In B. Ragins & K. Kram (Eds). The Handbook of Mentoring at Work: Theory, Research, and Practice. (pp. 95-123).* Thousand Oaks, CA: SAGE Publications, Inc.; 2008.

81. Weng RH, Huang CY, Tsai WC, Chang LY, Lin SE, Lee MY. Exploring the impact of mentoring functions on job satisfaction and organizational commitment of new staff nurses. *Bmc Health Services Research.* 2010;10.

82. Huybrecht S, Loeckx W, Quaeyhaegens Y, De Tobel D, Mistiaen W. Mentoring in nursing education: Perceived characteristics of mentors and the consequences of mentorship. *Nurse Education Today.* 2011;31(3):274-278.

83. Sawatzky J, Enns CL. A mentoring needs assessment: validating mentorship in nursing education. *Journal of professional nursing.* 2009;25(3):145-150.

84. Eby LT, Durley JR, Evans SC, Ragins BR. The relationship between short-term mentoring benefits and long-term mentor outcomes. *Journal of Vocational Behavior.* 2006;69(3):424-444.

85. Allen TD. Career benefits associated with mentoring for protege: a meta-analysis. *Journal of applied psychology.* 2004;89(1):127-136.

86. Andrews M. Mentorship in nursing: a literature review. *Journal of advanced nursing.* 1999;29(1):201-207.

87. Byrne MW, Keefe MR. A mentored experience (KO1) in maternal-infant research. *Journal of Professional Nursing.* 2003;19(2):66-75.

88. Fagan MM. The Mentor Connection - Zey, MG. *The Academy of Management review.* 1986;11(1):221-222.

89. Zey M. *The Mentor Connection.* Homewood, IL: Dow Jones Irwin; 1984.

90. Ragins BR, Scandura TA. Burden or blessing? Expected costs and benefits of being a mentor. *Journal of organizational behavior.* 1999;20(4):493-509.

91. Ragins BR, Cotton JL. Gender and willingness to mentor in organizations. *Journal of Management.* 1993;19(1):97-111.

92. Eby LTD, Allen TD, Hoffman BJ, et al. An Interdisciplinary Meta-Analysis of the Potential Antecedents, Correlates, and Consequences of Protege Perceptions of Mentoring. *Psychological Bulletin.* 2013;139(2):441-476.

93. Young AM. What did you expect? An examination of career-related support and social support among mentors and protégés. *Journal of management.* 2000;26(4):611-632.

94. Erdem F, Aytemur JO. Mentoring - A relationship based on trust: Qualitative research. *Public Personnel Management.* 2008;37(1):55-65.

95. Ensher EA, Grant-Vallone EJ, Marelich WD. Effects of perceived attitudinal and demographic similarity on proteges' support and satisfaction gained from their mentoring relationships. *Journal of Applied Social Psychology.* 2002;32(7):1407-1430.

96. Chen CM, Lou MF. The effectiveness and application of mentorship programmes for recently registered nurses: a systematic review. *Journal of nursing management.* 2014;22(4):433-442.

97. Hodges B. Factors that can influence mentorship relationships: Beverly Hodges describes the difficulties that can hamper the mentoring function when expectations are poorly communicated between mentor and mentee. *Paediatric Care.* 2009;21(6):32-35.

98. Talley HC. Mentoring: The courage to cultivate new leaders. *American Association of Nurse Anesthetists.* 2008;76(5):331-334.

99. Scandura TA. Dysfunctional mentoring relationships and outcomes. *Journal of Management.* 1998;24(3):449-467.

100. Douglas TC, D. *Career Cycles and Mentoring. In B. Ragins & K. Kram (Eds). The Handbook of Mentoring at Work: Theory, Research, and Practice. (pp. 95-123).* Thousand Oaks, CA: SAGE Publications, Inc.; 2008.

101. Vance CN. The mentor connection. *The Journal of nursing administration.* 1982;12(4):7-13.

102. Vance C, Olson RK. *The mentor connection in nursing.* New York, NY: Springer Publishing Company; 1998.

103. Vance C. *Fast facts for career success in nursing: Making the most of mentoring in a nutshell.* New York, NY: Springer Publishing Company; 2010.

104. Byrne MW, Keefe MR. Building research competence in nursing through mentoring. *Journal of Nursing Scholarship.* 2002;34(4):391-396.

105. Barker ER. Mentoring—a complex relationship. *Journal of the American Academy of Nurse Practitioners.* 2006:18(2):169-174.

106. Scandura TA. Mentorship and career mobility: An empirical investigation. *Journal of Organizational Behavior.* 1992;13(2):169-174.

107. Dickson J, Kirkpatrick-Husk K, Kendall D, Longabaugh J, Patel A, Scielzo S. Untangling Protege Self-Reports of Mentoring Functions: Further Meta-Analytic Understanding. *Journal of Career Development.* 2014;41(4):263-281.

108. Haggard DL, Dougherty TW, Turban DB, Wilbanks JE. Who Is a Mentor? A Review of Evolving Definitions and Implications for Research. *Journal of Management.* 2011;37(1):280-304.

109. Huang CY, Weng RH. Exploring the antecedents and consequences of mentoring relationship effectiveness in the healthcare environment. *Journal of Management & Organization.* 2012;18(5):685-701.

110. Ferris GR, Blickle G, Schneider PB, Kramer J, Zettler I. Political skill construct and criterion-related validation: a two-study investigation. *Journal of managerial psychology.* 2008;23(7):744-771.

111. Moss JA, Barbuto Jr JE. Testing the Relationship Between Interpersonal Political Skills, Altruism, Leadership Success and Effectiveness: A Multilevel Model. *Journal of Behavioral & Applied Management.* 2010;11(2):155-174.

112. Blass FR, Ferris GR. Leader reputation: the role of mentoring, political skill, contextual learning, and adaptation. *Human Resource Management.* 2007;46(1):5-19.

113. Ferris GR, Hochwarter, W.A., Buckley, M.R. Theory in the organizational sciences: How will we know it when we see it? *Organizational Psychology Review.* 2012;2:94-106.

114. Perrewe PL. Gender and career success: The facilitative role of polical skill. *Organizational dynamics.* 2004;33(4 spec.iss.):366-378.

115. Beecroft P, Santner S, Lacy ML, Kunzman L, Dorey F. New graduate nurses' perceptions of mentoring: Six-year programme evaluation. Journal of advanced nursing. 2006;55(6):736-747

116. Race TK. Changing tides: improving outcomes through mentorship on all levels of nursing. *Critical care nursing quarterly.* 2010;33(2):163-176.

117. Jakubik LD. Mentoring beyond the first year: Predictors of mentoring benefits for pediatric staff nurse proteges. *Journal of Pediatric Nursing.* 2008;23(4):269-281.

118. Sawatzky J-AV, Enns CL. A mentoring needs assessment: Validating mentorship in nursing education. *Journal of Professional Nursing.* 2009;25(3):145-150.

119. Beech BM. Mentoring Programs for Underrepresented Minority Faculty in Academic Medical Centers A Systematic Review of the Literature. *Academic medicine.* 2013;88(4):541-549.

120. Benner P. A response by P. Benner to K. Cash, "Benner and expertise in nursing: a critique". *International journal of nursing studies.* 1996;33(6):669-674.

121. Jakubik, LD. Development and Testing of the Jakubik Mentoring Benefits Questionnaire Among Pediatric Nurses. *Journal of nursing measurement.* 2012;20(2):113.

122. Jakubik LD. *The relationships among quality, quantity, and type of mentoring and mentoring benefits for pediatric staff nurse proteges* [D.N.Sc.]. Ann Arbor, Widener University School of Nursing; 2007.

123. Villarruel AM. Leadership development of Hispanic nurses. *Nursing administration quarterly.* 2004;28(3):173-180.

124. Scandura TA, Ragins BR. The Effects of Sex and Gender Role Orientation on Mentorship in Male-Dominated Occupations. *Journal of Vocational Behavior.* 1993;43(3):251-265.

125. Newman M & Roberts T. *Critical appraisal 1: Is the quality of the study good enough for you to use the findings?* Churchill Livingstone: New York, NY; 2002.

126. Caine RM. *A comparative survey of mentoring and job satisfaction: Perceptions of clinical nurse specialists* [Ed.D.]. Ann Arbor, Pepperdine University; 1989.

127. Osipow SH, Spokane AR. Occupational Stress Inventory. Psychological Assessment Resources, 1987.

128. Hogan M. *Four skills of cultural diversity competence: A process for understanding and practice.* Belmont, CA: Thompason Brooks/Cole; 2007.

129. Erickson JI, Duffy ME, Gibbons MP, Fitzmaurice J, Ditomassi M, Jones D. Development and psychometric evaluation of the professional practice environment (PPE) scale. *Journal of Nursing Scholarship.* 2004;36(3):279-U272.

130. Havens DS, Vasey J. The Staff Nurse Decicional Involvement Scale - Report of psychometric assessments. *Nursing Research.* 2005;54(6):376-383.

131. Hatcher BJ, Bleich, M.R., Connolly, C., Davis, K. Wisdom at Work: The importance of the older and experienced nurse in the workplace. Princeton, NJ: Robert Wood Johnson Foundation; 2006.

132. Jakubik LD. Development and Testing of the Jakubik Mentoring Benefits Questionnaire Among Pediatric Nurses. *Journal of nursing measurement.* 2012;20(2):113-122.

133. Pfeffer J. Explaining Organizational Behavior. *Administrative science quarterly.* 1983;28(2):321-325.

134. Ferris GR, Treadway, D.C. *Politics in organizations: history, construct specification, and research directions.* New York: Taylor & Francis Group, LLC; 2012.

135. Kolodinsky RW, Treadway DC, Ferris GR. Political skill and influence effectiveness: Testing portions of an expanded Ferris and Judge (1991) model. *Human relations (New York).* 2007;60(12):1747-1777.

136. Mintzberg H. The Organization as Political Arena. *Journal of Management Studies.* 1985;22(2):133-154.

137. Mintzberg H. *Power in and around organizations.* Englewood Cliffs, NJ:: Prentice-Hall; 1983.

138. Harrell-Cook G, Ferris GR, Dulebohn JH. Political behaviors as moderators of the perceptions of organizational politics - work outcomes relationships. *Journal of Organizational Behavior.* 1999;20(7):1093-1105.

139. Ferris GR, Davidson SL, Perrewe PL. *Political Skill at Work: Impact on Work Effectiveness.* Mountain View, CA: Davies-Black Publishing; 2005.

140. Ferris GR, Frink DD, Galang MC, Zhou J, Kacmar KM, Howard JL. Perceptions of organizational politics: Prediction, stress-related implications, and outcomes. *Human Relations.* 1996;49(2):233-266.

141. Blickle G. Role of Political Skill in Job Performance Prediction Beyond General Mental Ability and Personality in Cross-Sectional and Predictive Studies. *Journal of applied social psychology.* 2011;41(2):488-514.

142. Higgins CA, Judge TA, Ferris GR. Influence tactics and work outcomes: a meta-analysis. *Journal of Organizational Behavior.* 2003;24(1):89-106.

143. Hochwarter WA, Ferris GR, Zinko R, Arnell B, James M. Reputation as a moderator of political behavior-work outcomes relationships: a two-study investigation with convergent results. *Journal of Applied Psychology.* 2007;92(2):567.

144. Ferris GR, Munyon TP, Basik K, Buckley MR. The performance evaluation context: Social, emotional, cognitive, political, and relationship components. *Human Resource Management Review.* 2008;18(3):146-163.

145. Chopin SM. Effects of Mentoring on the Development of Leadership Self-Efficacy and Political Skill. *Journal of leadership studies.* 2012;6(3):17-32.

146. Lombardo MaM, C. *The dynamics of management derailment.* Greensboro, NC: Center for Creative Leadership;1988.

147. Isaacson K. GETTING HIRED. *Women in business (Kansas City, Mo.).* 2004;56(2):14.

148. Douglas C, Ammeter AP. An examination of leader political skill and its effect on ratings of leader effectiveness. *The Leadership Quarterly.* 2004;15(4):537-550.

149. Douglas. Leader Effectiveness Measure. *The Leadership quarterly.* 2004;15:537-550.

150. Ammeter AP, Douglas C, Gardner WL, Hochwarter WA, Ferris GR. Toward a political theory of leadership. *The Leadership Quarterly.* 2002;13(6):751-796.

151. Liu Y, Liu J, Wu L. Are You Willing and Able? Roles of Motivation, Power, and Politics in Career Growth. *Journal of management.* 2010;36(6):1432-1460.

152. Smith AD. A qualitative study of high-reputation plant managers: Political skill and successful outcomes. *Journal of operations management.* 2009;27(6):428-443.

153. Ferris GR, Perrewe PL, Anthony WP, Gilmore DC. Political skill at work. *Organizational Dynamics.* 2000;28(4):25-37.

154. Treadway DC. Political skill and the job performance of bullies. *Journal of managerial psychology.* 2013;28(3):273-289.

155. Crosby FE, & Shields, C. J. Preparing the next generation of nurse leaders: An educational needs assessment. *The Journal of Continuing Education in Nursing.* 2010;41(8):363-368.

156. McDonagh KJ. The Leadership Labyrinth Leveraging the Talents of Women to Transform Health Care. *Nursing administration quarterly.* 2013;37(1):6-12.

157. Benner P. Educating nurses: a call for radical transformation-how far have we come? *The Journal of nursing education.* 2012;51(4):183-184.

158. Hauck S, Winsett RP, Kuric J. Leadership facilitation strategies to establish evidence-based practice in an acute care hospital. *Journal of Advanced Nursing.* 2013;69(3):664-674.

159. Castner J, Foltz-Ramos K, Schwartz DG, Ceravolo DJ. A Leadership Challenge Staff Nurse Perceptions After an Organizational TeamSTEPPS Initiative. *J. Nurs. Adm.* 2012;42(10):467-472.

160. Clavelle JT, Drenkard K, Tullai-McGuinness S, Fitzpatrick JJ. Transformational leadership practices of chief nursing officers in Magnet® organizations. *The Journal of nursing administration.* 2012;42(4):195-201.

161. Posner BZ, Kouzes JM. Development and validation of the leadership practices inventory. *Educational and Psychological Measurement.* 1988;48(2):483-496.

162. Posner BZ, Kouzes JM. Psychometric Properites of the leadershi Practices Inventory - Updated. *Educational and Psychological Measurement.* 1993;53(1):191-199.

163. Posner BZ, Kouzes JM. An extension of the leadership practices inventory to individual contributors. *Educational and Psychological Measurement.* 1994;54(4):959-966.

164. Herman S, Gish M, Rosenblum R. Effects of Nursing Position on Transformational Leadership Practices. *Journal of Nursing Administration.* 2015;45(2):113-119.

165. Bormann L, Abrahamson K. Do staff nurse perceptions of nurse leadership behaviors influence staff nurse job satisfaction? The case of a hospital applying for Magnet® designation. *The Journal of nursing administration.* 2014;44(4):219-225.

166. Tourangeau AE, McGilton K. Measuring leadership practices of nurses using the leadership practices inventory. *Nursing Research.* 2004;53(3):182-189.

167. Cummings GG. Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review. *International journal of nursing studies.* 2010;47(3):363.

168. Kanste O, Kaariainen M, Kyngas H. Statistical testing of the full-range leadership theory in nursing. *Scand J Caring Sci.* Vol 23. Sweden2009:775-782.

169. Bally JMG. The role of nursing leadership in creating a mentoring culture in acute care environments. *Nursing economic$.* 2007;25(3):143-149.

170. Thomas DA. The truth about mentoring minorities race matters. *Harvard Business Review.* 2001;79(4):98-107.

171. Cummings GG, MacGregor T, Davey M, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies.* 2010;47(3):363-385.

172. Bass BM, Avolio BJ. Multifactor Leadership Questionnaire (MLQ) . Redwood City. *CA: Mind Garden.* 1995.

173. Kanste O, Miettunen J, Kyngas H. Psychometric properties of the Multifactor Leadership Questionnaire among nurses. *Journal of Advanced Nursing.* 2007;57(2):201-212.

174. Dillman DA. *Mail and Internet surveys: The tailored design method--2007 Update with new Internet, visual, and mixed-mode guide.* John Wiley & Sons; 2011.

175. Munro BH. *Statistical methods for health care research.* Vol 1: Lippincott Williams & Wilkins; Philadelphia, PA: 2005.

176. Polit DF, Beck CT. *Nursing research: Principles and methods.* Lippincott Williams & Wilkins; Philadelphia, PA: 2004.

177. Fowler JL, Gudmundsson AJ, O'Gorman JG. The relationship between mentee-mentor gender combination and the provision of distinct mentoring functions. *Women in Management Review.* 2007;22(8):666-681.

178. Brouer RL, Duke A, Treadway DC, Ferris GR. The moderating effect of political skill on the demographic dissimilarity — Leader–member exchange quality relationship. *The Leadership Quarterly.* 2009;20(2):61-69.

179. Brouer RL, Douglas, C., Treadway, D.C., Ferris, G.R. Leader political skill, relationship quality, and leadership effectiveness: A two-study model test and constructive replication. *Journal of leadership & organizational studies.* 2013;20(2):185-198.

180. Semadar A, Robins G, Ferris GR. Comparing the validity of multiple social effectiveness constructs in the prediction of managerial job performance. *Journal of Organizational Behavior.* 2006;27(4):443-461.

181. Ahearn KK. Leader political skill and team performance. *Journal of management.* 2004;30(3):309-327.

182. Perrewe. Political Skill Inventory. *Journal of occupational health psychology.* 2005;10(3):239-250.

183. Harris KJ. The impact of political skill on impression management effectiveness. *Journal of applied psychology.* 2007;92(1):278-285.

184. Munro BH. *Statistical methods for health care research.* Philadelphia, PA: Lippincott Williams & Wilkins; 2005.

185. Waltz CF, Strickland, O.L., Lenz, E.R. *Measurement in nursing and health research.* New York: Springer Pub.; 2010.

186. American Association of Colleges of Nursing (AACN). Race/Ethnicity Data on Students Enrolled in Nursing Programs. 2013.

187. McNamara MS, Fealy GM, Casey M, et al. Mentoring, coaching and action learning: interventions in a national clinical leadership development programme. *Journal of Clinical Nursing.* 2014;23(17-18):2533-2541.

188. Grossman SC. *Mentoring in Nursing: A Dynamic and Collaborative Process (2nd Edition).* New York, NY: Springer Publishing Company; 2012.