

2021

Nurse Executives' Intuitive Decision Making and Leadership Personality Styles During Organizational Change

Chaudron Carter Carter Short
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Nursing Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Health Professions

This is to certify that the doctoral dissertation by

Chaudron Carter Short

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. Janice Long, Committee Chairperson, Nursing Faculty

Dr. Leslie Hussey, Committee Member, Nursing Faculty

Dr. Mary Martin, University Reviewer, Nursing Faculty

Chief Academic Officer and Provost

Sue Subocz, Ph.D.

Walden University

2021

Abstract

Nurse Executives' Intuitive Decision Making and Leadership Personality Styles During

Organizational Change

by

Chaudron Carter Short

MSN, Wilmington University, 2016

MHA, Saint Joseph's University, 2004

MHEd, Saint Joseph's University, 2004

BSN, Holy Family University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Leadership

Walden University

November 2021

Abstract

Within the complex and multifaceted health care environment, nurse executives are challenged to effectively make decisions and lead organizations through change. How nurse executives make those decisions is determined in a variety of ways, one being through intuitive decision making. The purpose of this quantitative correlational study, guided by the dual process theory, was to examine nurse executives' intuitive decision making and leadership personality styles during organizational change. The Agor Intuitive Management Survey and the Multifactorial Leadership Questionnaire were administered to 70 nurse executives recruited by direct email obtained from public hospital organizations' websites and social media platforms. Regression analysis results of the three-part study showed (a) a statistically significant relationship between intuitive decision making and inspirational innovation transformational and laissez-faire passive avoidant leadership styles, (b) a statistically significant relationship between intuitive decision making and years of experience, and (c) a statistically significant relationship between the dominant leadership styles (inspirational innovation transformational leadership style and laissez-faire passive avoidant leadership style) for intuitive and thinking personality styles. The results may promote positive social change as health care organizations incorporate strategies for recognizing leaders with intuitive decision making skills during recruitment of nurse executives. Future research exploring factors that influence laissez faire leader's intuitive decision making, job satisfaction and positive work environment is recommended.

Nurse Executives' Intuitive Decision Making and Leadership Personality Styles During

Organizational Change

by

Chaudron Carter Short

MSN, Wilmington University, 2016

MHA, Saint Joseph's University, 2004

MHEd, Saint Joseph's University, 2004

BSN, Holy Family University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Leadership

Walden University

November 2021

Acknowledgments

First, giving honor to my Lord and Savior Jesus Christ, who is the head of my life. Thank you for your guidance, blessings, and favor over my life.

To my husband, Joe, thank you for your unconditional love and unwavering support throughout every academic and professional achievement. Your confidence in my ability to achieve anything that I set my mind towards means the world to me. I love you and I'm grateful to have you as my life's partner. To my daughter, Ciani, the other half of my heartbeat, the Libra to my Virgo. Thank you for being the daughter you are, I love you.

Special thanks to my committee members: Dr. Janice Long, for accepting the responsibility to be my chair. I'm grateful for your guidance, our telephone calls, your encouragement and dedication throughout this process. Thank you to Dr. Leslie Hussey, my co-chair for your great feedback and guidance. Dr. Mary Martin, university reviewer, thank you for your timely feedback.

Table of Contents

List of Tables	vii
List of Figures	ix
Part 1: Overview	1
Introduction.....	1
Background	2
Literature Review.....	4
Intuitive Decision Making	5
Leadership Personality Styles	6
Leadership Styles Assessment	7
Intuitive Decision-Making Assessment	8
Theoretical Framework.....	9
Overview of the Manuscripts.....	12
Manuscript 1	13
Research Question	13
Nature of the Study	14
Possible Types and Sources of Data	14
Manuscript 2	14
Research Question	15
Nature of the Study	15
Possible Types and Sources of Data	15
Manuscript 3	16

Research Question	16
Nature of the Study	16
Possible Types and Sources of Data	17
Significance.....	17
Summary	20
Part 2: Manuscripts	21
Manuscript 1: Relationships of Intuitive Decision Making and Leadership	
Personality Styles.....	21
Outlet for Manuscript.....	22
Abstract.....	23
Introduction.....	23
Significance/Importance	24
Relevant Scholarship	25
Research Question	27
Nature of the Study and Design	27
Method	28
Population	28
Sample and Power.....	28
Variables/Sources of Data.....	28
Instruments or Measures	29
Design and Analysis	32
Results.....	33

Execution	33
Results.....	34
Discussion.....	44
Interpretation.....	44
Limitations	46
Implications.....	47
Recommendations.....	48
References.....	50
Manuscript 2	56
Intuitive Decision Making and Years of Experience Among Nurse Executives	
During Organizational Change	56
Outlet for Manuscript.....	57
Abstract.....	58
Introduction.....	59
Significance.....	59
Relevant Scholarship	60
Research Question	63
Nature of the Study and Design	63
Methods.....	64
Population	64
Sample and Power.....	64
Sources of Data.....	65

Instruments.....	65
Design and Analysis	69
Results.....	70
Execution	70
Results.....	71
Discussion.....	73
Interpretation.....	73
Limitations	74
Implications.....	75
Recommendations.....	76
Conclusion	76
References.....	77
Manuscript 3	82
Dominant Leadership and Personality Styles Among Nurse Executives During Organizational Change.....	82
Outlet for Manuscript.....	83
Abstract.....	84
Introduction.....	85
Significance/Importance	85
Relevant Scholarship	86
Research Question	88
Nature of the Study and Design	89

Methods.....	90
Population	90
Sample and Power.....	90
Sources of Data.....	90
Instruments.....	91
Design and Analysis	94
Results.....	96
Execution	96
Results.....	96
Discussion.....	100
Interpretation.....	100
Limitations	101
Implications.....	102
Recommendations.....	102
Conclusion	103
References.....	104
Part 3: Summary	109
Integration of Three Studies.....	109
Relations to Conceptual Framework.....	110
Unanticipated Findings	111
Implications for Positive Change.....	112
Area of Future Research	112

Lessons Learned.....	113
Conclusion	113
References.....	115
Appendix A: AIM Survey Permission.....	118
Appendix B: MLQ Survey Permission.....	119
Appendix C: Multifactor Leadership Questionnaire Survey	120
Appendix D: AIM: Agor Intuitive Management Survey	124

List of Tables

Table 1. Sample Table Title.....	35
Table 2. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style.....	36
Table 3. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	37
Table 4. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	38
Table 5. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	39
Table 6. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	40
Table 7. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	41
Table 8. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	42
Table 9. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style	43
Table 10. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style.....	44
Table 11. Results of Demographic Information	72

Table 12. Results for the Linear Regression Analysis of Intuitive Thinking and Years of Experience.....	73
Table 13. Results for the Linear Regression Analysis of Intuitive Thinking and Years of Experience.....	74
Table 14. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style.....	97
Table 15. Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style.....	98
Table 16. Results for the Linear Regression Analysis of Thinking Dominant Personality Style and Leadership Style.....	99
Table 17. Results for the Linear Regression Analysis of Dominant Personality Style and Leadership Style.....	100

List of Figures

Figure 1. Diagram of Dual Systems Theory11

Part 1: Overview

Introduction

The characteristics of the health care environment are multifaceted and complex. Within this environment, organizations must adapt to the changing environment to survive and advance. Nurse executives are challenged to effectively make decisions and lead in today's uncertain health care environment (Hodgkinson & Sadler-Smith, 2018).

The structure for the nurse executive within their practice includes preparing the nursing department for organizational change such as regulatory requirements, value-based purchasing, advancing technology, workforce shortages, designing new care delivery models and clinical roles, financial pressures, and implementing the Institute of Medicine's Future of Nursing Report recommendations (Clavelle et al., 2012; Manning, 2016). In many organizations, the leadership characteristics of the nurse executive are essential to achieving clinical quality and patient outcomes through the formation of structures and processes that support the empowerment of the nursing department and evidence-based practice. Strategizing and making the best possible decision to achieve these metrics for the organization is essential (Clavelle et al., 2012).

Making decisions requires leaders to choose from a set of solutions or alternatives for action based on standards and criteria that meet the highest possibility of success in achieving the organizations' objectives. Each decision brings challenges, and leaders have different methods for looking at the problems (Nita & Solomon, 2015). Intuitive decision-making methods are one of the solutions or alternatives that can foster creativity when faced with problems. Intuitive decision making can help a leader in difficult

situations in which the leader's mind is indecisive, the leader fails to come to a decision, or time is of the essence in weighing all essential possibilities (Nita & Solomon, 2015).

Each decision made by leaders is the result of a robust process influenced by many factors. Some factors include the variety of leadership styles and their effectiveness on performance for organizations (Nanjundeswaraswamy & Swamy, 2014). Leaders tend to integrate various leadership styles into leading others, which are dependent on the situation, while others follow similar techniques irrespective of the given status they have to face (Shurbagi & Zahari, 2012). Every leader has a specific leadership style that is influenced by organizational culture and is likely to produce successful style for the individual and represent a set custom for leaders to adopt during organizational change (Shurbagi & Zahari, 2012). Organizational change is a set of interrelated complex processes requiring the rearrangement of organizations' existing operations and requires organizations and leaders to review their efficiencies. These efficiencies challenge leaders to design an organizational structure that will keep up with the advances of the surrounding market, identify trends, and adapt internally toward the organization's goals (Kovač, 2017).

Background

The phenomenon of intuitive decision making has intrigued philosophers and scientists alike. Based on research, operationalizing decision making shares several cognitive developments. The literature has provided insight into how these developments involve decisions under various types of strains, ranges of intricate complexities, and consequences (Connors et al., 2013, 2018).

There has been a rising interest in understanding intuition in the business arena; however, based on the complexity of the health care environment in which nurse leaders' decisions are made at a faster pace, interest seems lacking. Nurse executives make decisions designed to have substantial checks and balances with minimal risks. According to Lorber et al. (2016), this could lead to nurse executives making slow decisions, decisions needing to go through large committees, or failure to make a decision.

In a risk-averse environment to change, health care nurse executives need to maximize their decision-making potential. Without nurse leaders having an understanding of their leadership personality style and the value that intuition can play in decision making during organizational change, nurse executives may be ineffective and limited in their decision making (Lorber et al., 2016). When leaders and organizations take into account leadership styles in decision making, this information can educate health care executives on the most effective decision-making approaches during organizational change. In addition, the information will enable organizations to define their executives' leadership personality styles, identify which characteristics they need to improve, and identify what decision-making tools may be required to make the most effective decisions to lead their organizations into the future ready to succeed. Pratt (2001) stated that effective use of intuition is critical in distinguishing successful top executives and board members from lower-level performing managers and board members, as well as those individuals that operate in a dysfunctional state. Using intuition for decision making stimulates creative perceptions that are essential to explore

a problem or devise a solution, idea, or related business opportunity (Calabretta et al., 2017).

My research may provide useful information and raise consciousness regarding the importance of designing an organizational change process around leadership personality styles and intuitive decision making. My research may help to validate the need to establish an organizational culture that is favorably disposed and integrates nurse executives' decision making and personality leadership styles. Nurse executives operate and evaluate within a social structure in which values define their effectiveness (Kovač, 2017). These values associated with leadership imply a rejection of the status quo and dependence on nonconventional resolutions to common social problems. Similarly, organizations can help identify and develop effective programs that can help prepare their nurse leaders to make suitable decisions with the information available that best serve their organizations. The future of the health care environment will continue to require the ability to make fast-paced decisions with little or no information available, validated by past trends (Kovač, 2017).

Literature Review

The keywords searched for the literature review related to the purpose of the study. Keywords included *intuition, intuitive, gut feeling, gut instinct, knowing, decisions, decision-making, decision-making processes, leadership, leadership styles, personality styles, nursing leaders, and nursing*. Databases searched included CINAHL, Medline, EBSCO, Google Scholar, Ovid, ProQuest, PsycARTICLES, and Sage. Literature

retrieved from the databases considered for the study included 188 references. There were 58 articles, four books, and two doctoral dissertations used for the research.

Intuitive Decision Making

Complex decision making under pressure can be easy for some and a struggle for others. Research has focused on intuition, decision making, or intuitive decision-making processes, all of which are used interchangeably in the literature. Intuition, decision making, or intuitive decision-making processes are defined as involving quick, complete processing of information in which the receiver is possibly uninformed, being mindful and having an attentiveness to a hunch or gut feeling, and a degree of confidence (Hodgkinson & Sadler-Smith, 2018). Rusetski (2014) defined intuition as the insight that bypasses reasoning and is commonly understood as an incomprehensible hunch or gut feeling that tells someone what to do. Klein (2015) suggested that intuition can be an expression of experience that leaders build patterns from, enabling them to respond quickly to situations and make decisions without prior knowledge or comparative data.

Investigating intuitive decision making has materialized from several fields of study. Nursing science has drawn on the advances of research in decision making to aid in understanding and to inform nursing practice. A background in the development of decision-making research offers an understanding of components essential to decision making for leaders, which can inform future nursing research and practice (Nibbelink & Brewer, 2018). Intuitive processes play a crucial role in an organization's strategic decision making. Traditionally, intuitive processes align with improved performance, especially during rapid complex situations (Schreier et al., 2014).

Research in management has also drawn on advances in the cognitive, social, psychological, and neuroscience domains to reach a broad agreement that defines intuitive decision making as a rational phenomenon. The phenomenon is widely grounded within unintentional deposits of knowledge, which include a multidimensional collaboration of reasoning and affective processes and function under the level of consciousness. In an intuitive decision-making process, leaders recognize that a problem exists through the awareness of appropriate patterns and or cues that nonconsciously activate the rational plans connected with the problem (Calabretta et al., 2017).

Cultivating and sustaining a work environment that encourages intuitive decision making can be challenging. However, in a competitive atmosphere in which maintaining and attracting a superior workforce is vital for a thriving organization, an atmosphere that promotes intuitive decision making is essential (Mick, 2014). Intuition can be difficult to measure scientifically; however, neglecting use of the practice is unacceptable. To deny the use of intuitive decision making because it cannot be measured or tracked seems not to be forward thinking for organizations, and could be damaging to a profession that strives to promote and enhance decisions during organizational change (Hassani et al., 2016).

Leadership Personality Styles

The term *leadership* in the structure of organizations refers to the methods implemented by superiors in daily interactions with their teams. Leadership involves many dimensions and has a long history of being a studied topic. Leadership consists of standards, values, norms, things, or issues perceived in the work environment that may

affect a team's performance, emotions, and behaviors (Yahaya & Ebrahim, 2016).

Uzonwanne (2015) defined leadership as the capacity to set a vision others would want to achieve and the talent to build relationships and organize resources efficiently.

The literature revealed various leadership styles and types of leadership applied in multiple organizations, cultures, and environments. Leaders integrate different leadership and personality styles while leading others, which are dependent on the situation, while others follow similar fashions irrespective of the given situation they have to face. Every leader has a specific leadership personality style influenced by organizational culture, and is likely to produce a leadership style that is successful for the individual and represents a set manner for leaders to adopt (Shurbagi and Zahari, 2012).

Researchers have not addressed the intuition within the decision-making process of nurse executives; in addition, the character trait and personality styles, when making decisions, have not been examined in any depth (Schreier et al., 2018). A leader's personality has the potential to influence their decision-making style. Individuals differ in terms of intelligence level, character, and aptitude. Personality traits are constant thoughts and behaviors of a person, which are stable over a period and relatively consistent across various situations (Loung-Poorunder & Das, 2018; Özbağ, 2016).

Leadership Styles Assessment

Bass and Avolio (2004) have been credited with the full range popular leadership survey tool, the Multifactor Leadership Questionnaire (MLQ). This leadership tool has been widely used in psychology to study leadership behavior; in addition, other disciplines have begun to utilize the tool for leadership assessments. The tool is used to

gauge and measure leadership behaviors. The outcome behaviors have been widely studied to measure leadership style and leadership style effectiveness, especially concerning the organizational change (Bagheri et al., 2015). The MLQ survey contains 45 items: 36 items representing nine distinct leadership scales and three leadership outcome scales. There are five scales identified as characteristics of a transformational leader (idealized influence attributed and behavior, inspirational motivation, individual consideration, and intellectual stimulation), three transactional leadership scales (contingent reward, management by exception-active, and management by exception-passive), and one nonleadership scale (laissez-faire; Muenjohn & Armstrong, 2008). The tool is used to gauge and measure leadership behaviors. The outcome behaviors have been widely studied to measure leadership style and leadership style effectiveness, especially concerning the organizational change (Bagheri et al., 2015).

Intuitive Decision-Making Assessment

Agor began research in the 1980s using the Myers-Briggs Type Indicator (MBTI) tool. Agor was later credited with the development of the Agor Intuitive Management (AIM) Survey. The survey is a personality assessment tool developed as a valid and reliable way to measure intuitive ability and intuition when making management decisions among professionals. Agor conducted a two-phase study using the AIM Survey. During the first phase, he studied approximately 3,000 leaders within 2 years. Agor discovered that top executives were found to rate higher in intuition than low-level managers. The second phase of the study involved interviewing the top 10% of the

intuitive high scorers. Agor found intuition as one of the most dominant traits as these leaders grew within their profession (Sinclair & Ashkanasy, 2005).

Agor (1986) discovered that top executives use intuition when there is a high level of uncertainty, when there are no previous standards or guide, when variables are not scientifically predictable, when facts are limited, when time is limited, when there is pressure to be accurate, or when there are other credible solutions choices. These studies validated that executives used intuition while making decisions (Agor, 1986, 1989). Despite the popularity of the AIM Survey and the MLQ in research, there is little knowledge about leadership personality styles related to decision making among nurse executives. Research has begun to validate that intuition is a way to make decisions among nurse executives. However, little research has been done on the relationship between intuitive decision making and leadership personality styles, the influence of the dominant style on decision making, and the relationship between the nurse executives' dominant leadership style used during organizational change. I sought to determine the importance of these qualities for nurse executives as an appropriate concept for essential decision making.

Theoretical Framework

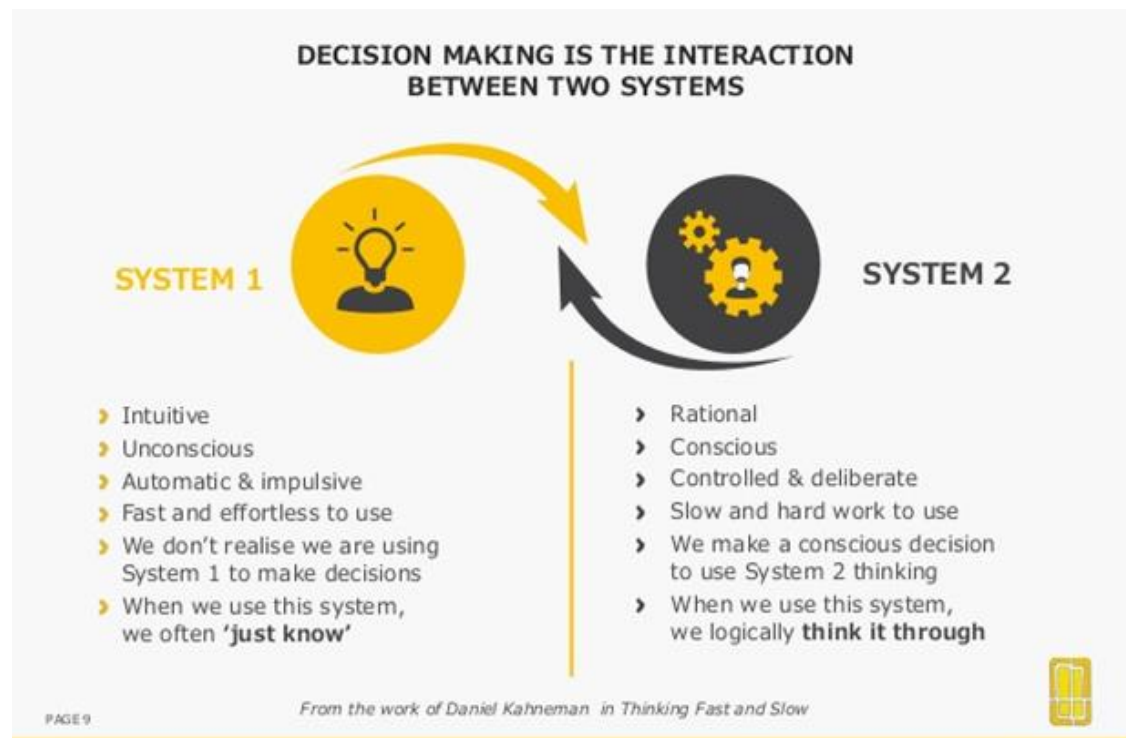
The theoretical framework I chose for the proposed research topic was the dual process theory, which is sometimes called the dual system theory. The early days of philosophical examinations of psychology focused on the idea that two different systems of thought transpired that were “a quick, automatic, associative, and affective-based form of reasoning and a slow, thoughtful, deliberative process” (Gronchi & Giovannelli, 2018,

p. 1). These systems are known today as the dual process theory of thought. Dual system theory encompasses a range of theories having different approaches in thought and terminology. According to Gronchi and Giovannelli (2018), the terms coined were intuition vs. deliberation, System 1 vs. System 2, associative vs. rule-based thinking, and fast vs. slow thinking.

Dual process models are common in the study of psychology and can change based on theorists within disciplines. Several dual process theories were created after James's pivotal work on the dual process theory. Two of those individuals were Kahneman and Tversky, known as the psychologists of decision making and judgment. Recognized for work on the dual process theory, Kahneman (date, as cited in Frankish, 2010) suggested that there are two discrete processing methods available for a cognitive task, which employ various procedures and could produce inconsistent results. Based on Figure 1, the dual systems theory suggests that individuals use two different systems of thinking when making decisions. System 1 is an individual's intuition or gut feeling, which is utilized quickly, is emotional and automatic, and is used from the subconscious. System 2 is an individual's slower and more deliberate thinking, which is intentionally working through and applying different thoughts (Kahneman, 2011).

Figure 1

Diagram of Dual Systems Theory



People make decisions and judgments daily with varying complexities and importance. How and why people make these decisions has generated the interest of researchers for many years. However, to date, no research including the dual process theory or dual systems theory to understand intuitive decision making and leadership personality styles was found (Glöckner & Wittman, 2010).

The core of the dual process theory exists in differences between intuition and reason. The theory defines two distinct processing methods; System 1 is characterized as automatic, impulsive, and fast. System 2 is described as controlled, slow, and conscious. System 1 processes are characterized as intuitive or reflective, and System 2 processes are analytical, reflective, or rule based. There are two distinct processes at work;

however, the system that dominates varies systematically depending on ability and motivation. The core of the dual process theory exists in the distinction between intuition and reason. According to Kahneman (2011), the dual theory framework postulates the difference between intuitive decision making and leadership personality styles of the two classes of processes, System 1 and System 2.

Overview of the Manuscripts

As health care organizations continue to experience persistent and turbulent change, the demands and opportunities for nurse leaders in providing effective, visionary leadership to address the challenges have never been greater (Cummings et al., 2018). Leaders have to adapt to their changing environment to survive and improve the quality of care (Kovač, 2017). The ability of health care leaders to make high-quality rapid decisions in the face of complexity has become a central theme within organizations.

Decision making is important to every health care organization, and decision making guides choices and direction. However, understanding the complexity and influence of decision making is vital to building sound concepts for an effective process to recognize wise choices. Decision making is an essential component of the AIM Survey marker. Leadership personality styles directly influence decisive abilities. Decision making can suppress an individual's sensitivities and inclinations, slowing or skewing the process for desirable positive results (Özbağ, 2016).

According to Sadler-Smith and Shefy (2004), nurse executive intuition is the ability to focus on potentially important, frequently faint indications that may feed the side of creativity, innovation, or imaginative capabilities. However, high-performing

organizations require nurse executives to make fast, high-quality, strategic decisions. The traditional reaction to this challenge has been one of rational examination of the information that is then assembled, analyzed, and interpreted to reach a logical conclusion. However, within the healthcare environment, many factors can affect the effectiveness of an entirely rational process (Sadler-Smith & Shefy, 2004).

The purpose of this three-manuscript dissertation was to examine how nurse executives' intuitive decision making and leadership personality styles influence their decision making during organizational change. The three manuscripts were developed as a parallel study to address the research gap regarding intuition within the decision-making process and taking into account character traits and personality styles when making decisions.

Manuscript 1

Nurse executives within health care organizations are often pressured to make decisions they have never faced during organizational change. Leaders may be tasked to make fast decisions with limited information. For many leaders, these decisions may result in an inability to handle large amounts of information to make the best possible decisions for the organization that are essential in strategic decision making. Leaders have various leadership personality styles, which makes decisions complex.

Research Question

RQ1: What is the relationship between intuitive decision making and leadership personality styles among nurse executives during organizational change?

The AIM was used to gather data on personality styles from nurse executives, and the MLQ was used to gauge and measure leadership behaviors (see Agor, 1989; Bass & Avolio, 1990; Loung-Poorunder & Das, 2018).

Nature of the Study

I used a correlational, simple linear regression quantitative method with a survey design to examine the relationship between intuitive decision making and leadership personality styles among nurse executives during organizational change. The variables for the study were intuitive decision making and leadership personality style.

Possible Types and Sources of Data

Data were collected using the AIM to describe personality styles (see Appendix A) and the MLQ to define leadership styles (see Appendix B). The AIM measures a leader's potential to make intuitive decisions and whether the leader utilizes this intuitive ability to make important decisions (Agor, 1989). The AIM includes multiple choice and demographic questions. The MLQ is used to gauge and measure leadership behaviors. The outcome behaviors have been widely studied to measure leadership style and leadership style effectiveness, especially concerning the organizational change (Bagheri et al., 2015). The survey includes questions measured on a Likert scale.

Manuscript 2

In the field of leadership studies, the research has focused on observing leadership's behavior and actions; however, the influence of a leader's dominant personality style and how it relates to making decisions has been neglected. Researchers have not evaluated this feature of leadership in depth. Additionally, understanding

leadership personality styles and the influence years of experience have on intuitive decision making can promote the needed leadership development in organizational decision making (Schreier et al., 2018).

Research Question

RQ2: What is the relationship between intuitive decision making and years of experience among nurse executives during organizational change?

Nature of the Study

I used a correlational, simple linear regression quantitative method with a survey design to examine the relationship between intuitive decision making and years of experience among nurse executives during organizational change. The variables for the study were intuitive decision making and years of experience.

Possible Types and Sources of Data

Data were collected using the AIM to describe personality styles (see Appendix A) and the MLQ to define leadership styles (see Appendix B). The AIM measures a leader's potential to make intuitive decisions and whether the leader utilizes this intuitive ability to make important decisions (Agor, 1989). The survey includes multiple choice and demographic questions, which include the number of years of experience the nurse has as a nurse executive. The MLQ measures a range of leadership types. The MLQ is used to measure a range of leadership behaviors. The survey includes questions measured on a Likert scale.

Manuscript 3

Within health care organizations, leaders are required to make decisions that impact the work environment and organization as a whole. For the health care organization, there are advantages in considering personality styles coupled with leadership styles when making decisions during organizational change. These are important characteristics to consider because strategic and concrete actions often happen rapidly with little regard for deductive reasoning, fact finding, or other conventional methods for making decisions (Nibbelink & Brewer, 2018). Leaders who use traditional decision-making approaches may suppress or reject the value of their dominant personality and leadership styles when making decisions during organizational change or may not recognize the value and importance of their styles or the impact their leadership has when crucial organizational decisions need to be made (Calabretta et al., 2017).

Research Question

RQ3: What is the relationship between leaders' dominant leadership style and their personality leadership style among nurse executives during organizational change?

Nature of the Study

I used a correlational, simple linear regression quantitative method with a survey design to examine the relationship between nurse executives dominant leadership styles and personality styles. The dominant leadership styles (idealized influence attributed transformational, idealized influence behavior transformational, inspirational innovation transformation, intellectual stimulation, individualized consideration transformational, contingent reward transactional, management by exception active transactional,

management by exception passive avoidant, and laissez-faire leadership) and personality styles (intuitive and thinking) were used to make decisions during organizational change (Creswell & Creswell, 2017).

Possible Types and Sources of Data

Data were collected using the AIM to describe personality styles (see Appendix A) and the MLQ to define leadership styles (see Appendix B). The AIM measures a leader's potential to make intuitive decisions and whether the leader utilize this intuitive ability to make important decisions (Agor, 1989). The survey includes multiple choice and demographic questions. The MLQ measures a range of leadership types. The survey includes questions measured on a Likert scale.

Significance

Health care organizations have functioned in a hierarchical system designed to have decisions made with checks and balances in place to mitigate risks (White & Griffith, 2010). With a bureaucratic approach, nurse executives could make slow decisions, decisions needing to go through large committees, or no decisions. The information needed to make effective decisions may require data to back up the decision to ensure the outcome is effective. However, within a fast-paced environment, decisions are expected to be made by nurse executives rapidly and with the highest effectiveness for the organization to be successful. Under these circumstances, executives are required to make quick decisions with limited data, which have elements or components of risks (Lorber et al., 2016).

For a risk-averse environment to change, health care nurse executives need to maximize their decision-making potential. An understanding of how nurse executives make decisions coupled with their leadership personality styles was needed. The current study may help executive leadership understand the effects that leadership personality styles and effective decision-making approaches on the organization during change. With the repetitive use of intuitive decision making, leaders begin to recognize patterns, form strategies, and provide guidance to identify problems (Taneja & Arora, 2015).

The results of my study may provide data to health care organizations for guidance that may highlight the use of intuitive decision making. The results of the study may help health care organization begin to formulate strategies to add to the recruitment process of nurse executives. Every health care organization is likely to recruit the highest qualified nurse executive candidate; however, complementing the interviews with leadership personality style testing such as the AIM and the MLQ may be beneficial. As organizations begin testing executives during the interview phase, organizations can define the type of executives who will lead their organizations into the fast-paced future of medicine.

Social change refers to the transformation of culture, behavior, social institutions, and social structure over time. According to Walden University (2012), progressive and optimistic social change requires a deliberate method of generating ideas, plans, and activities to endorse the development of society. When there is a positive approach to social change, there are results and improvements of both human and social environments.

Social change has shaped my experience through the transformation of culture and social organizational structures. This study may effect positive social change in health care organizations seeking to provide their nurse executives with the tools and strategies for making the best decisions during organizational change. Society is never static, and social, political, economic, and cultural changes constantly occur (Stephan et al., 2016). Although change is a broad concept, social change is a continuous and unending process in every society. All societies, traditional and modern, are continually evolving. Social change is a process of alteration with no reference to the quality of change. Changes in society relate to changes in culture (Sonenshein, 2016). Although several factors trigger social change, such as demographic, political, social, cultural, economic, and educational, leadership plays a key role (Stephan et al., 2016).

Leadership is a collaborative, service-oriented, values-based process that is about effecting change on behalf of society. Social change among leaders suggests that people in positions of power view leadership as a process rather than a position that endorses equity, social justice, service, and partnership. Social change refers to the transformation of culture, behavior, social institutions, and social structure over time (Dugan et al., 2014).

Nurse executives operate within a social structure in which values define their effectiveness. The values associated with leadership imply a rejection of the status quo and dependence on nonconventional solutions to prevailing social problems. Organizations can help identify and develop effective programs that can help prepare leaders to make the best decisions with the information available (Dugan et al., 2014).

Summary

The idea that nurse executives use their intuition combined with their leadership styles is an appropriate concept for decision making. Research has begun to show that intuition is a way to make decisions among nurse executives. However, very little research had been completed on the relationship between intuitive decision making and leadership personality styles, the effect years of experience on intuitive decision, and the influence of the dominant leadership and personality style of a leader's intuitive decision-making ability utilized during organizational change.

Part 2: Manuscripts

Manuscript 1: Relationships of Intuitive Decision Making and Leadership

Personality Styles

Chaudron Carter Short, MHEd, MHA, MSN, NE-BC

Walden University

Outlet for Manuscript

Journal of Nursing Administration: JONA is a respected source of information on the developments and advances in patient care leadership. The information supplied is geared to nurse executives, directors of nursing, and nurse managers in hospital, community health, and ambulatory care environments. Selected articles are relatively practical in nature, innovative, and solution oriented, and they provide tools and data needed to excel in executive practice in changing health care systems: leadership development; human, material, and financial resource management and relationships; and systems, business, and financial strategies. All articles are peer reviewed, selected, and developed with the guidance of a distinguished group of editorial advisors.

Submission requirements:

American Medical Association (AMA) Manual of Style (10th edition)

Maximum manuscript length is 3,600 words (abstract through references)

No more than four figures or tables

Information regarding submission requirements can be accessed at

<https://www.editorialmanager.com/jona/default.aspx>

Abstract

Objective: The objective of the study was to examine the relationship between intuitive decisions related to personality leadership styles.

Background: In health care, intuitive decision making is an important factor in the nursing profession because it guides choice and direction.

Method: A correlational, quantitative survey design was used to examine the relationship between intuitive decision making and leadership styles among nurse executives during organizational change.

Results: The results indicated no statistically significant relationship between intuitive thinking and the following leadership styles (idealized influence attributed transformational, idealized influence behavior transformational, intellectual stimulation transformational, individualized consideration transformational, contingent reward transactional, management by exception active transactional, and management by exception passive avoidant). However, there was a statistically significant relationship between intuitive thinking and inspirational motivation transformational and laissez-faire leadership passive avoidant.

Conclusion: Nurse executives with leadership styles of being inspirational motivation transformational and laissez-faire passive avoidant utilize intuitive thinking when making decisions during organizational change.

Introduction

Life involves a myriad of decisions, but human decision making is not a constant or straightforward process. In health care, intuitive decision making is an important factor

in the nursing profession because it guides choice and direction. Through assessment, adaptation, integration, and an evaluation process, decision making is a central component of the nursing process, which begins with the leader's ability to impact decisions that extend beyond the boardroom (Simmons, 2010).

Understanding the intricacy and influences of intuitive decision making as a vital component in creating sound constructs toward an effective process that recognizes wise choices, nurse executives have challenges to effectively make intuitive decisions and lead in today's uncertain health care environment (Hodgkinson & Sadler-Smith, 2018).

Organizational change efforts are reactions to the environmental demands and concerns for operational efficiency (Talat et al., 2016). Calabretta et al. (2017) stated that utilizing intuition for decision making stimulates creative perceptions that are essential to explore a problem or devise a solution, idea, or related business opportunity. Recognizing and incorporating the unique human dimensions of intuitive decision making during organizational change is essential for health care success (Simmons, 2010).

A leader's characteristics and style can affect their perceptions and behaviors, all of which contribute to the cognitive process of intuitive decision making (Meeusen et al., 2010). Nurse executives using their intuition combined with their leadership personality styles to make decisions is appropriate.

Significance/Importance

Health care organizations have functioned as a hierarchical system designed to have decisions maintained under a checks and balances system to mitigate risks (White & Griffith, 2010). With a bureaucratic approach, nurse executives could make slow

decisions, decisions needing to go through large committees, or no decisions. The information needed to make effective decisions may require data to back up the decision to ensure the outcome is effective. However, within this fast-paced environment, decisions are expected to be made by nurse executives rapidly and with the highest effectiveness for the organization to be successful. Under these circumstances, executives are required to make quick decisions with limited data, which have elements or components of risks, such as decisions around new innovative technological advancements, investments, human capital, or developments in organizational systems (Sadler-Smith & Shefy, 2004; Lorber et al., 2016).

For a risk-adverse environment to change, health care nurse executives need to maximize their decision-making potential. An initial understanding of how nurse executives make intuitive decisions relates to their personality leadership styles. The results of this study may help organizations understand the effects that leadership styles and effective decision-making approaches have on the organization during change.

Relevant Scholarship

The relationship between intuition and decision making is a valued component in the decision-making process (Nyatanga & Vocht, 2008). Although intuition is essential to identify throughout any decision-making process, decision making can occur in a variety of ways. Woolley and Kostopoulou (2013) described professional intuition as containing three elements: gut feelings, insights, and recognitions.

Nyatanga and Vocht (2008) explained that intuitive decision making or intuition provides the opportunity for valuable ideas and actions that may not occur when

depending on conscious thinking unaided. Many experienced nurse leaders develop patterns of knowing, unconsciously or intuitively, based on previous experience with similar situations. The experienced leader is equipped to access and use stored information from the complexities of experiences retained in the unconscious sector of the mind (Nyatanga & Vocht, 2008). When leaders identify and retrieve these unconscious patterns of knowing, intuition can manifest (Eubanks et al., 2010). Sadler-Smith and Shefy (2004) considered intuitive decision making as a normal part of an executive's thought process. They suggested that intuitive decision making and rational thought processes for an executive are similar if not equally important.

Leadership personality styles influence decision-making abilities. Decision making based on feelings and dispositions can slow or skew the process for pragmatic, positive results. Being a prudent decision maker is a defining characteristic of a leader. With the heightened demands of the current health care markets, the climate requires the nurse leader to make decisions with speed (Özbağ, 2016).

Decision making is an essential component of the AIM personality assessment. The AIM has been used as an assessment tool for understanding personality differences. Researchers in multiple disciplines have used the instrument to enhance and develop collaboration, career development, team building, problem-solving, management training, counseling, and conflict resolution, all of which are essential to successful leadership (Loung-Poorunder & Das, 2018). Although intuition can be difficult to measure scientifically, neglecting its use in practice is unacceptable. Denying intuitive decision making because of unquantifiability is inappropriate (Schreier et al., 2018).

Research Question

What is the relationship between intuitive decision making and leadership personality styles among nurse executives during organizational change?

H₀: There is no relationship between intuitive decision making and leadership personality styles among nurse executives during organizational change.

H_a: There is a relationship between intuitive decision making and leadership personality styles among nurse executives during organizational change.

Nature of the Study and Design

A correlational, simple linear regression quantitative survey design was used to determine whether there was a relationship between intuitive decision making and leadership styles among nurse executives during organization change. The variables were intuitive decision-making score and leadership personality style score. The results from this study may be valuable to health care organizations regarding the impact that intuitive decision making has on nurse executives during organizational change. The results of my study may be used to formulate strategies to add to the recruitment process of nurse executives. Every health care organization is likely to recruit the highest qualified nurse executive candidate; however, complementing the interviews with leadership personality style testing such as the AIM and MLQ may be beneficial. As organizations test executives during the interview phase, organizations can begin to define the type of executives who will lead their organizations into the fast-paced future of medicine.

Method

Population

The target population for the study was health care nurse executives who were currently in decision-making positions.

Sample and Power

A nonprobability purposive sampling strategy was used to ensure identification and selection of individuals who were experts and well informed about the phenomenon being studied (see Etikan et al., 2016). The inclusion criteria for the study were health care nurse executives currently employed in the capacity of decision-making authority for their respective organizations. Excluded from the study were nursing faculty, clinical nurses, and nonnursing executives because the intent was to focus on nurses in health care leadership roles making organizational decisions. For a study to inform the given body of literature, sample size must correspond to appropriate statistical significance, effect size, and power. The power analysis was based on a power level of 0.8, (see Creswell, 2014), an alpha (α) level of 0.05 (see Suresh & Chandrashekara, 2012), and a medium effect size of 0.15, which yielded a sample size of 68 (see Faul et al., 2013).

Variables/Sources of Data

Participants were recruited by direct email obtained from public hospital organizations' websites and social media platforms such as Facebook and LinkedIn. A uniform recruitment letter was provided within the survey link, outlining the purpose, significance, and utilization of data for the study. The letter also outlined participation in the survey was voluntary.

I collected demographic information (Appendix D) which included gender, age, years in leadership, years at current organization, teaching versus non-teaching hospital organizations, and highest nursing degree.

To collect the data, an online survey tool, Survey Monkey was utilized. The data are stored on a password-protected laptop, with a backup to storage on a password protected USB drive. Utilizing password-protected devices for storage and backup will maintain the confidentiality of the study participants' feedback.

Instruments or Measures

Data were collected using the Agor Intuitive Management Survey© (AIM©) to describe decision-making styles (Appendix A) and the Multifactorial Leadership Questionnaire™ (MLQ™) to gauge and measure leadership behaviors (Appendix B). The AIM© survey instrument has two parts to the survey. The first part of the survey consists of 12 questions, which are from the Myers-Briggs Type Indicator® (MBTI®), used to test a leaders' potential to make intuitive decisions. The questions for the survey instrument are duplicated from the MBTI® and uses the reliability and validity of the MBTI® as a valid instrument (Agor, 1986). The MBTI® is a personality assessment tool used worldwide for individual development. MBTI® is a taxonomy tool to assess the psychological preferences of people, identifying their strengths, interests, and preferences in decision making. Carl Gustav Jung, a Swiss psychiatrist, created the personality assessment. Jung projected psychological type theories, which describe the innate differences of people, how people perceive and absorb information, as well as how people make decisions (Church & Waclawski, 1988; Jafrani et al., 2017).

The second part of the survey, which has an additional ten questions, tests whether the leader uses intuitive decision making; how leaders use intuitive decision making; and under what conditions; and if a leader practices any techniques or methods that help to enhance or develop the leaders' intuitive abilities (Agor, 1989).

The survey consists of multiple-choice questions, including three demographic questions, occupation, sex, and ethnicity. The survey respondents had the option to choose from two possible answers for each question in the first part. Part two of the survey provides several options, yes or no, circle all that apply, or give examples to the question asked of the survey respondent. Based on the leaders' response for each question, there was scoring chart which placed the responses in two categories intuitive or thinking potential. The lowest score of each category is 0, with the highest score being 12. The survey measured a leaders' underlying potential to use intuition during decision making based on the concepts of the MBTI® (Agor, 1989). The measurement scales were scored so that the leader can be ranked compared to other executives taking the test. Agor (1989) conducted extensive research of over 5,000 leaders controlling for key variables such as ethnicity, sex, occupation, and management level.

The MLQ™ survey instrument measures a range of leadership types. The survey includes questions measured on a Likert scale. Bass and Avoilo (2004) has been credited with validating the use of the MLQ survey instrument to quantify patterns of leaders within the sectors of business, government administrators, military, principals, religious ministers, sports coaches, and other professions whereby the leaders' style of leadership affects those they lead, satisfaction, team effectiveness, and organizational success.

(Avolio, 2004). The tool is used to gauge and measure leadership behaviors. The outcome behaviors are studied to measure leadership style and leadership style effectiveness, especially in relation to organizational change (Bagheri, Sohrabi, & Moradi, (2015).

The MLQ™ survey contains 45 items; 36 items representing nine distinct leadership scales and three leadership outcome scales. There are five scales identified as characteristic of a transformational leader (idealized influence attributed and behavior, inspirational motivation, individual consideration, and intellectual stimulation); three transactional leadership scales (contingent reward, management by exception-active, and management by exception-passive); and one non-leadership scale (laissez-faire) (Muenjohn & Armstrong, 2008). The MLQ items measuring exclusively leadership behaviors, which are marked from a 0-4 rating Likert scale. The scale points are 0= not at all, 1= once in a while, 2= sometimes, 3= fairly often and 4= frequently, if not always. The MLQ scale scores are average scores for the items on the scale. The score can be derived by totaling the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, Extra Effort has three items, Effectiveness has four items, and Satisfaction has two items. An example would be the items which are included in the Idealized Influence (Attributes) are Items 10,18,21,25; highest score for each question is 4, multiplied by 4 items would score a 16 in the Idealized Influence category (Bass & Avolio, 2014).

Permission was granted to utilize both instruments. The AIM© permission was granted from Sage Publishing (Appendix A). Permission for the use of the MLQ™ was granted from Mind Garden (Appendix B).

Design and Analysis

The data were exported from the Survey Monkey database to IBM Statistical Package for Social Sciences (SPSS) version 25.0 software for analysis. All assumptions of the linear regression were examined and met. They are discussed below.

Research question: What is the relationship between intuitive decision-making and leadership personality styles among nurse executives?

H₀: There will be no relationship between intuitive decision-making and leadership personality styles among nurse executives.

H_a: There will be a relationship between intuitive decision-making and leadership personality styles among nurse executives.

The data received from survey participants were screened for any outlying information, including demographic information. The data were analyzed using linear regression with correlation methods to determine the best linear relationship between the independent variable of intuitive decision making and the dependent variable, personality styles. Correlation coefficients are used to measure the association between the two methods versus their agreement with one another (Twomey & Kroll, 2008). To evaluate if the independent and dependent variables had a relationship, the variables were plotted on a scatter diagram for their relationship and the correlation coefficient measured the closeness of the regression line and the amount of linear association between the two variables (Creswell & Creswell, 2017). The assumptions were checked by examining the scatterplot, whereby the correlations were zero. The residuals were normally distributed, by examination of the histogram.

Analysis of collinearity statistics showed that the assumption was met, as VIF scores were well below 10, and tolerance scores above 0.2. The Durbin-Watson statistic showed that this assumption had been met, as the obtained value was close to 2 (Durbin-Watson = 1.93).

Results

Execution

After receiving Institutional Review Board (IRB) approval from Walden University, study # 09-29-20-0674153, the recruitment flyer with the Survey Monkey link was posted on the Principal Investigator's social media platforms and the social media pages of nursing leadership organization that permitted such advertisement. The advertisement was also configured to allow for individuals to share the flyer on their own social media platforms. In addition, the flyer was also emailed to local hospital Executives, asking if they could participate in the study or send out to their nursing leadership team.

Upon accessing the survey link, participants were presented with an overview of the study, participant rights, and the option for participants to opt out of the study at any time. Demographic variables were collected that included gender, age range, years as a registered nurse and years of experience in leadership; years at current organization and whether it was teaching versus non-teaching, and highest nursing degree.

There were a total of 75 respondents, 5 participants were excluded, 4 participants did not meet criteria and there was 1 participant did not complete over half of the survey.

Results

There were 70 participants who met the inclusion criteria (See Table 1). The average years in nursing with leadership experience (was 14.56 years). There were 15 males, 54 females, and 1 response for both genders. The respondents ethnic background were 36 White/Caucasian, 25 Black/African American, 5 Hispanic/Latino, 1 Asian, and 3 that responded Other. The education of the participant's highest degree as 1 Diploma, 3 Associates, 14 Bachelors, 35 Masters, 13 Doctorate of Nursing Practice (DNP) and 4 represent a Doctorate of Philosophy (PhD). The categories of the participants ages are represented by 8 (25-34), 13 (35-44), 28 (45-54), 20 (55-64) and 1 participant was 65+.

Table 1*Sample Table Title*

Sample characteristic	Number	Percentage
Gender		
Male	15	21.43
Female	54	77.14
Other	1	1.43
Race		
White	36	51.43
Black/African American	25	35.71
Hispanic/Latino	5	7.14
Asian	1	1.43
Other	3	4.29
Nursing education		
Diploma	1	1.43
Associate's	3	4.29
Bachelor's	14	20
Master's	35	50
DNP	13	18.57
PHD	4	5.71
Age		
25–34	8	11.43
35–44	13	18.57
45–54	28	40
55–64	20	28.57
65+	1	1.43

Note. $N = 70$.

A linear regression analysis was conducted to determine if there was an association between intuitive thinking and leadership personality styles among nurse executives during organizational change. Leadership personality styles contain sub categories that make up transformational (idealized influence attributed, idealized influence behavior, inspirational innovation, intellectual stimulation, individual

consideration) transactional (contingent reward, management by exception active, management by exception passive), and laissez faire leadership styles.

The results of the simple linear regression analysis revealed no statistically significant association between idealized influence attributed transformational leadership style and intuitive thinking ($p = .493$). The regression coefficient: $B = .027$, 95% C.I. [-0.52, 0.11] associated with the idealized influence attributed transformational leadership style suggests that with each additional point increase in intuitive thinking, the influence attributed transformational leadership style increased by approximately .027 points. The R^2 value of 0.007 associated with this regression model suggests that idealized influence attributed transformational leadership style accounts for 7% of the variation in intuitive thinking, which means that 93% of the variation in idealized influence attributed transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 2

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Idealized Influence Attributed Transformational	.027	[-0.52, 0.11]	0.007	.475

Note. Not significant $p = .493$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and idealized influence behavior

transformational leadership style among nurse executives during organizational change. The results revealed no statistically significant association between *idealized influence behavior transformational* leadership style and intuitive thinking ($p = .701$). The regression coefficient: $B = .012$, 95% C.I. [-0.50, 0.73] associated with the idealized influence behavior transformational leadership style suggested that with each additional point increase in intuitive thinking, the influence attributed transformational leadership style decreases by approximately .012 points. The R^2 value of 0.002 associated with this regression model suggests that idealized influence behavior transformational leadership style accounts for 2% of the variation in intuitive thinking, which means that 98% of the variation in idealized influence behavior transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 3

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Idealized Influence Behavior Transformational	.012	[-0.50, 0.73]	0.002	.148

Note. Not significant $p = .701$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and inspirational innovation transformational leadership style among nurse executives during organizational change.

The results of the simple linear regression analysis revealed no statistically significant association between inspirational innovation transformational leadership style and intuitive thinking ($p = .096$). The regression coefficient: $B = .063$, 95% C.I. [-0.11, 0.137] associated with the inspirational innovation transformational leadership style suggested that with each additional point increase in intuitive thinking, the influence attributed transformational leadership style decreases by approximately .063 points. The R^2 value of 0.040 associated with this regression model suggests that inspirational innovation transformational leadership style accounts for 4% of the variation in intuitive thinking, which means that 96% of the variation in inspirational innovation transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 4

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Inspirational Innovation Transformational	.063	[-0.11, 0.137]	0.040	2.853

Note. Not significant $p = .096$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and intellectual stimulation transformational leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistically significance association between intellectual stimulation transformational leadership style and intuitive thinking

($p = .148$);). The regression coefficient: $B = .046$, 95% C.I. [-0.17, 0.110] associated with the intellectual stimulation transformational leadership style suggests that with each additional point increase in intuitive thinking, the intellectual stimulation transformational leadership style decreases by approximately .046 points. The R^2 value of 0.031 associated with this regression model suggests that intellectual stimulation transformational leadership style accounts for 3% of the variation in intuitive thinking, which means that 97% of the variation in inspirational innovation transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 5

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Intellectual Stimulation Transformational	.046	[-0.17, .110]	0.031	2.141

Note. Not significant $p = .148$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and individualized consideration leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistical significance association between individualized consideration transformational leadership style and intuitive thinking ($p = .332$). The regression coefficient: $B = .037$, 95% C.I. [-0.38, 0.112] associated with the

individualized consideration transformational leadership style suggests that with each additional point increase in intuitive thinking, the individual consideration transformational leadership style increase by approximately .037 points. The R^2 value of 0.014 associated with this regression model suggests that individualized consideration transformational leadership style accounts for 1.4% of the variation in intuitive thinking, which means that 98.6% of the variation in individualized consideration transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 6

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	R^2	<i>F</i>
Individual Consideration Transformational	.037	[-0.038, .112]	0.014	.955

Note. Not significant $p = .332$.

A linear regression analysis was conducted to investigate if there is an association between intuitive thinking and contingent reward transactional leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistically significance association between contingent reward transactional leadership style and intuitive thinking ($p = .602$). The regression coefficient: $B = -.017$, 95% C.I. [-0.83, 0.48] associated with the contingent reward transactional leadership style suggests that with each additional point increase in intuitive thinking, the contingent reward transactional leadership style decrease by approximately -

.017 points. The R^2 value of 0.004 associated with this regression model suggests that contingent reward transactional leadership style accounts for 0.4% of the variation in intuitive thinking, which means that 99.6% of the variation in contingent reward transactional leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 7

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	R^2	<i>F</i>
Contingent Reward Transactional	-.017	[-.083, .048]	0.004	.275

Note. Not significant $p = .602$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and management by exceptional (active) transactional leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistically significance association between management by exceptional (active) transactional leadership style and intuitive thinking ($p = .864$;). The regression coefficient: $B = .006$, 95% C.I. [-0.60, 0.72] associated with the management by exceptional (active) transactional leadership style suggests that with each additional point increase in intuitive thinking, the management by exceptional (active) transactional leadership style increase by .006 points. The R^2 value of .000 associated with this regression model suggests that management by exceptional (active) transactional leadership style accounts for 0% of the

variation in intuitive thinking, which means that 100% of the variation in management by exceptional (active) transactional leadership style cannot be explained by intuitive thinking. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 8

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Management by exception (active) transactional	.006	[-0.60, .072]	0.000	.030

Note. Not significant $p = .864$.

A linear regression analysis was conducted to investigate if there was an association between intuitive thinking and management by exceptional (passive) avoided leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistically significance association between management by exceptional (passive) avoided leadership style and intuitive thinking ($p = .103$). The regression coefficient: $B = .068$, 95% C.I. [-0.14, 0.150] associated with the management by exceptional (passive) avoided leadership style suggests that with each additional point increase in intuitive thinking, the management by exceptional (passive) avoided leadership style increase by .068 points. The R^2 value of .039 associated with this regression model suggests that management by exceptional (passive) avoided leadership style accounts for .039% of the variation in intuitive thinking, which means that 96.1% of the variation in management by exceptional

(passive) avoided leadership style cannot be explained by intuitive thinking. The confidence interval associated with the regression analysis does contain 0. Therefore, the null hypothesis was retained.

Table 9

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Management by exception (passive) avoided	.068	[-0.14, .150]	0.039	2.730

Note. Not significant $p = .103$.

A linear regression analysis was conducted to investigate if there is an association between intuitive thinking and laissez faire leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed a statistically significant association between laissez-faire leadership style and intuitive thinking ($p = .003$). The regression coefficient: $B = .120$, 95% C.I. [.033, .207] associated with the laissez faire leadership style suggests that with each additional point increase in intuitive thinking, the laissez faire leadership style increase by .120 points. The R^2 value of .101 associated with this regression model suggests that laissez faire leadership style accounts for 10.1% of the variation in intuitive thinking, which means that 89.9% of the variation in laissez faire leadership style cannot be explained by intuitive thinking. The confidence interval associated with the regression analysis does contain the value of 0, which means the null hypothesis was rejected.

Table 10

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Laissez-faire	.120	[.033, .207]	.101	7.634

Note. Significant $p = .033$.

Discussion

Interpretation

The results of the linear regression analysis support the conclusion that intuitive thinking and the following leadership style traits (*idealized influence attributed transformational, idealized influence behavior transformational, intellectual stimulation transformational, individualized consideration transformational, contingent reward transactional, management by exception active transactional, and management by exception passive avoidant*) are not statistically significant. However, there is a relationship between intuitive thinking and laissez-faire passive avoidant (significant at the $p = .033$) leadership style trait. The nursing executive with the laissez-faire passive avoidant leadership style trait is one that makes intuitive decisions by displaying a more reactive systematically response or no response at all to organizational changes. When goals have not been met this leader tends to think them through systematically with careful intentions (Bass & Avolio, 2004). The laissez-faire passive avoidant leader is known to give up responsibility, having a “hands off” approach to leadership (Northouse, 2004).

Robert and Vandenberghe (2020) suggested laissez-faire leadership behaviors have been given minimal attention in the literature. Yang (2015) confirmed the scarce attention to the laissez-faire leader has to do with the negative view of leadership style. However, Yang (2015) argued a different perspective on the laissez-faire leader and their approach to intuitive decision making. Having a “hands off” approach to leadership and intuitive decision making is a sign of subordinate empowerment and professional competence. Akhtar, Khattak, and Ghani, (2014) validated that the laissez-faire leadership style has a positive association on intuitive decision making. In this study, the authors used the MLQ, to test for leadership style, and for decision making the DMS, created by Bruce and Scott (1995) and emotional intelligence questionnaire developed by GENOS EI inventory to test the relationship between leadership styles and decision making styles. The study sample consisted of 150 employees from various organizations, including banks, service industry, and pharmaceutical companies. The study results validated the results of my study results in that the laissez-faire leadership style positively predicted intuitive decision making, (dependent= .743 spontaneous= .043 intuitive= .447 avoidant= .000).

However, it is important to note that neither of the leadership transactional traits, (contingent reward or management by exception) were statistically significant. One possible interpretation for this could be that both leadership traits have a tendency to display behaviors of preventing problems or changes (Northouse, 2004).

Limitations

The study has several limitations that should be noted. The first limitation was the researcher combined two surveys, which included a demographic section. The survey was relatively lengthy and the transition between the two surveys seemed to confuse the participants as some of the participants answered the transitional question between the surveys. The question stated “the next set of questions describe your leadership style as you perceive it. Judge how frequently each statement fits you. The word others may mean your peers, clients, direct reports, supervisors, and/or other individuals.” The second limitation was the absence of previous studies on combining the research tools. In previous studies examining leadership styles or personality styles, this is the first to utilize together the two survey tools (MLQ and AIM). Each tool has been tested in relation to leadership styles or intuitive thinking individually, but no studies found have molded the surveys or concepts together. In addition, during the data collection phase, there was a period of two weeks when no surveys were submitted. The data collection phase was completed during the pandemic. There may have been a limitation in the amount of returned surveys collected as most nurse leaders were focused on the management of their organization. The third limitation to consider was the honesty of the participants with answering the survey questions. In addition, the study was confined to surveying those with the characteristics of being a nurse, employed in a leadership capacity, and had the responsibility to make organizational decisions. The results will not be generalizable to other professions.

Implications

Findings from the regression model has implications under the leadership paradigm. Even though the results of my study had a positive relationship to intuitive thinking, there remain gaps in the literature that fully support the positive nature of the laissez faire leader. The preponderance of previous leadership literature regarding the laissez-faire leader is generally negative; displaying a leadership style of passive behavior, avoidance of decisions, and ineffective leadership. However, when examining the laissez faire leader, the results are not always avoidance, neglect, or indifference towards their followers as seen in my study (Yang, 2015). The non-involvement outlined in the literature about the laissez faire leader could potentially equate to positive effects on their subordinates including self-directed leader, being empowered to make own decisions, and motivation (Yang, 2015).

This study has the potential to promote a positive social change for healthcare organizations seeking to arm their nurse executives with the tools and strategies for making the best decisions during organizational change. Leadership is the foundation for healthcare organizations and it is vitally important for organizations to focus on development for their leaders to cultivate an innate sense of purpose (Stephan, Patterson, Kelly, & Mair, 2016). The study supports previous literature that suggests the laissez faire leadership style is more acceptable to organizations that prefer leaders to be intuitive, take liberty to make their own decisions, thrive and succeed with trusting their decisions (Ahmed et al., 2021).

Recommendations

Recommendations for further research would include experimental or quasi-experimental longitudinal designs that address the effects of laissez-faire passive avoidant leadership styles on intuitive decision making. Future research should also be considered on the attitudes and traits of the laissez-faire leadership style as it relates to intuitive thinking and organizational change. Considering the negative undertone of the laissez-faire leader in the literature, further consideration should be explored as to whether these leaders have been in their roles for a significant amount of time and is perceived as laissez-faire (Chaudhry & Javed, 2012). Another recommendation is for healthcare organizations to adopt pre-hire leadership assessments, as well as ongoing leadership assessments as a way to help develop their current leaders and keep them engaged, and help onboard future leaders in areas they lack. The assessments can also be utilized during performance reviews as a way to groom and enhance top talent.

Conclusion

The aim of the study was to validate if there was a relationship between intuitive decision-making and leadership personality styles among nurse executives. The results of the study show a positive relationship between intuitive thinking (personality style) and laissez-faire passive avoidant leadership style. However, there were a number of leadership traits that were not statistically significant (*idealized influence attributed transformational, idealized influence behavior transformational, intellectual stimulation transformational, individualized consideration transformational, contingent reward transactional, management by exception active transactional, and management by*

exception passive avoidant). These results imply leaders with intuitive thinking personality styles tend to be those that laissez-faire leaders. These leaders either are transformational in nature that can inspire confidence, motivation, and purpose within their followers or laissez-faire, which are leaders that typically manage by exception (Chaudhry & Javed, 2012; Silva & Mendis, 2017). Both leadership styles based on the findings, think intuitively during organizational change.

References

- Agor, W. H. (1986). *The logic of intuitive decision making: A research based approach for top management*. Quorum Books.
- Agor, W. H. (1989). *Intuition in organizations: Leading and managing productively*. SAGE.
- Ahmed, I., Zulfiqar, G. A., Muhammad A., Fouzia, A., Muhammad, A. A., & Qandeel, H. (2021). Impact of authoritative and laissez-faire leadership on thriving at work: The moderating role of conscientiousness. *European Journal of Investigation in Health, Psychology and Education, 11*(3), 667–685. Retrieved from <https://doi.org/10.3390/ejihpe11030048>
- Akhtar, N., Khattak, S. R., & Ghani, A. (2014). Leadership styles as predictor of decision making styles: Moderating role of emotional intelligence. *Journal of Management & Technology, 9*(2), 4–21. Retrieved from <http://libproxy.temple.edu/login?url=https://www.proquest.com/scholarly-journals/leadership-styles-as-predictor-decision-making/docview/2098674034/se-2?accountid=14270>
- Avolio, B. J., & Bass, B. M. (2004). *Multifactor Leadership Questionnaire™. Manual and sampler set* (3rd ed.). Mind Garden.
- Bagheri, R., Sohrabi, Z., & Moradi, E. (2015). Psychometric properties of Persian version of the multifactor leadership questionnaire (MLQ). *Medical Journal of the Islamic Republic of Iran, 29*, 256–265. Retrieved from <http://mjiri.iums.ac.ir>
- Bass, B. M. & Avolio, B. J. (2004). *Multifactor Leadership Questionnaire. Manual and*

sampler set (3rd ed.). Mind Garden.

- Calabretta, G., Gemser, G., & Wijnberg, N. M. (2017). The interplay between intuition and rationality in strategic decision making: A paradox perspective. *Organization Studies*, 38(3–4), 365–401. Retrieved from <https://doi.org/10.1177/0170840616655483>
- Chaudhry, A. Q., & Javed, H. (2012). Impact of transactional and laissez faire leadership style on motivation. *International Journal of Business and Social Science*, 3(7). Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1062.5269&rep=rep1&type=pdf>
- Church, A. H., & Waclawski, J. (1998). The relationship between individual personality orientation and executive leadership behaviour. *Journal of Occupational and Organizational Psychology*, 71(2), 99-125. Retrieved from <https://doi.org/10.1111/j.2044-8325.1998.tb00666.x>
- Creswell, J. W. (2014). *A Concise Introduction to Mixed Methods Research*. SAGE publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Etikan, I., Musa, S. A., Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. doi:10.11648/j.ajtas.20160501.11
- Eubanks, D. L., Murphy, S. T., & Mumford, M. D. (2010). Intuition as an influence on

creative problem-solving: The effects of intuition, positive affect, and training.

Creativity Research Journal, 22(2), 170-184. doi:

org/10.1080/10400419.2010.481513

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2013). *G*Power Version 3.1.9.7*

[computer software]. Universität Kiel, Germany. Retrieved from

<http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>

Jafrani, S., Zehra, N., Zehra, M., Ali, S. M. A., Mohsin, S. A. A., & Azhar, R. (2017).

Assessment of personality type and medical specialty choice among medical students from Karachi; using Myers-Briggs Type Indicator (MBTI) tool. *Journal of Pakistan Medical Associates*, 67(520), 520-526. Retrieved from

<https://www.jpma.org.pk/PdfDownload/8148>

Hodgkinson, G., & Sadler-Smith, E. (2018). The dynamics of intuition and analysis in

managerial and organizational decision making. *Academy of Management*

Perspectives, 32(4). doi:10.5465/amp.2016.0140

Lorber, M., Treven, S., & Mumel, D. (2016). The examination of factors relating to the

leadership style of nursing leaders in hospitals. *Our Economy*, 62(1), 27-36.

doi:10.1515/ngoe-2016-0003

Loung-Poorunder, N., & Das, P. R. (2018). Personality types (A&B) as determinants of

decision making styles of working and non-working women of Mauritius and

India: A comparative study. *Journal of Emerging Trends in Economics and*

Management Sciences, 9(2), 65-70. doi: <https://hdl.handle.net/10520/EJC->

fe6a05662

- Lundmark, R., Richter, A., & Tafvelin, S. (2021). Consequences of Managers' Laissez-faire Leadership During Organizational Restructuring. *Journal of Change Management*, 1-19. Retrieved from <https://doi.org/10.1080/14697017.2021.1951811>
- Meeusen, V. C. H., Brown-Mahoney, C., Van Dam, K., Van Zundert, A. A. J., & Knape, J. T. A. (2010). Personality dimensions and their relationship with job satisfaction amongst Dutch nurse anesthetists. *Journal of Nursing Management*, 18(5), 573-581. doi:10.1111/j.1365-2834.2010.01066.x
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4(1), 3-13. doi:10.1177/1548051810385003
- Northouse, P. (2004). *Leadership: Theory and Practice*. Thousand Oaks, CA: Sage.
- Nyatanga, B., & Vocht, H. D. (2008). Intuition in clinical decision-making: A psychological penumbra. *International Journal of Palliative Nursing*, 14(10), 492-496. Retrieved from <https://doi.org/10.12968/ijpn.2008.14.10.31493>
- Özbağ, G. K. (2016). The role of personality in leadership: five factor personality traits and ethical leadership. *Procedia-Social and Behavioral Sciences*, 235, 235-242. doi:10.1016/j.sbspro.2016.11.019
- Sadler-Smith, E., & Shefy, E. (2004). The intuitive executive: Understanding and applying gut feel in decision making. *Academy of Management Executives*, 18(4),

76-91. doi:10.5465/AME.2004.15268692

Schreier, C., Schubert, A., Weber, J., & Farrar, J. (2018). An investigation of the character traits of decision-makers open to intuition as a tool. *Journal on Business Review*, 3(4), 63-69. doi:10.5176/2010-4804_3.4.343

Simmons, B. (2010). Clinical reasoning: Concept analysis. *Journal of Advanced Nursing*, 66(5), 1151-1158. doi:10.1111/j.1365-2648.2010.05262.x

Silva, S., & Mendis, B. A. K. M. (2017). Relationship between transformational, transaction and laissez-faire leadership styles and employee commitment. *European Journal of Business and Management*, 9(7), 13-21. Retrieved from https://www.researchgate.net/profile/Kanchana-Mendis/publication/334494910_Relationship_Between_Transformational_Transaction_and_Laissez-faire_Leadership_Styles_and_Employee_Commitment/links/5d2e2fb0458515c11c36b829/Relationship-Between-Transformational-Transaction-and-Laissez-faire-Leadership-Styles-and-Employee-Commitment.pdf

Stephan, U., Patterson, M., Kelly, C., & Mair, J. (2016). Organizations driving positive social change: A review and an integrative framework of change processes. *Journal of Management*, 42(5), 1250-1281. Retrieved from <https://doi.org/10.1177/0149206316633268>

Suresh, K., & Chandrashekara, S. (2012). Sample size estimation and power analysis for clinical research studies. *Journal of Human Reproductive Sciences*, 5(1), 7-13. doi:10.4103/0974-1208.97779

- Talat, U., Chang, K., & Nguyen, B. (2017). Decision and intuition during organizational change: An evolutionary critique of dual process theory. *The Bottom Line*. doi:10.1108/BL-08-2017-0016
- Twomey, P. J., & Kroll, M. H. (2008). How to use linear regression and correlation in quantitative method comparison studies. *International Journal of Clinical Practice*, 62(4), 529-538. doi:10.1111/j.1742-1241.2008.01709.x
- White, K. R., & Griffith, J. R. (2010). *The well-managed healthcare organization*. Chicago, IL: Health Administration Press.
- Woolley, A., & Kostopoulou, O. (2013). Clinical intuition in family medicine: More than first impressions. *Annals of Family Medicine*, 11(1), 60-66. doi:10.1370/afm.1433
- Yang, I. (2015). Positive effects of laissez-faire leadership: Conceptual exploration. *Journal of Management Development*, 34(10), 1246-1261. doi.org/10.1108/JMD-02-2015-0016

Manuscript 2

**Intuitive Decision Making and Years of Experience Among Nurse Executives
During Organizational Change**

Chaudron Carter Short, MHEd, MHA, MSN, NE-BC

Walden University

[Notes]

Outlet for Manuscript

The Online Journal of Issues in Nursing: OJIN is a peer-reviewed online publication addressing current topics that affects nursing practice, research, education, and other health care topics. OJIN provides a diversity of viewpoints on the latest topics, which gives readers a full understanding of complex topics. The journal provides a forum for readers to express their views and appreciate views from others. The journal delivers information for nurse executives, directors of nursing, and nurse managers in hospital, community health, and ambulatory care environments.

Submission requirements:

Each manuscript should contain a title page

A one-paragraph bio sketch for the author that includes educational degrees, certifications, and a description of how past experiences and/or one's current position have prepared the author to write the manuscript.

An abstract of 100 to 150 words identifying the issue

Articles should be between 12 and 16 pages typed and double spaced

Follow *American Psychological Association (APA) Manual*

Information regarding submission requirements can be accessed at

<http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN>

Abstract

Objective: The objective of the study was to determine whether there was a relationship between intuitive thinking and years of experience among nurse executives during organizational change

Background: Leaders in today's health care climate are making decisions within an environment of constant change and complexity. During times of rapid growth and change, leaders are required to make decisions relatively quickly and with favorable outcomes. Organizational nurse leaders draw from decision-making skills that are learned and repetitive in nature and react to making a decision during organizational change based on an array of previous judgments.

Method: A correlational, simple linear regression quantitative research design approach was used.

Results: The results indicated a statistically significant relationship between intuitive thinking and years of experience ($p = .042$).

Conclusion: Years of experience contribute to nurse executives' intuitive thinking when making decisions during organizational change.

Introduction

Leaders in today's health care climate are making decisions within an environment of constant change and complexity. During times of rapid growth and change, leaders are required to make decisions relatively quick with favorable outcomes. These decisions require a variety of items such as years of leadership experience. Malewska (2018) suggested that intuitive leaders are different from other types of decision makers. Intuitive decision makers possess characteristics of repetitive use and skills of certain traits. Additionally, the concept of intuitive decision making and its impact on effectiveness involves the experience of the decision maker.

Decisions are a sequential course of events containing several steps that enable nurse executives to review each element that leads to a decision (Uzonwanne, 2015). Intuitive decision making is said to be learned, repetitive in nature, and a customary reactive pattern demonstrated by leaders when challenged with a decision situation (Uzonwanne, 2015). However, the issue surrounds a leader's tendencies and habits that inform their decision (Uzonwanne, 2015). Baval'ár and Orosová (2015) agreed that decision making is not based on leadership personality traits, but is a habit-based inclination to react in a certain way to a specific decision over time.

Significance

The utility of intuitive decision making lies in explaining something significant about the decision maker. The literature is replete with theories on understanding how people differ in arriving at a choice, how satisfied people are with their choice, and how people arrive at their decisions (Baval'ár & Orosová, 2015; Del Missier et al, 2010; Scott

& Bruce, 1995). Decision-making styles are particularly useful; however, there is no way of distinguishing between good or bad decision-making choices. Errors in decision making have been associated with poor decision-making processes that contribute to negative outcomes and are costly to health care organizations (Fan et al., 2018; Uzonwanne, 2015).

The naturalistic research approach of intuitive decision making highlights the importance of experience and expertise during decision making. This theory describes how leaders use past experiences, expertise, and/or patterns that are stored within their memory and are recognized when needed to make decisions (Constantiou et al., 2019). Understanding how nurse executive make their intuitive decisions coupled with their leadership experience may provide guidelines or measures of decision-making methods to help other nurse executives when faced with decision-making challenges.

Relevant Scholarship

Previous literature has demonstrated the experience of the intuitive decision maker and the process by which they make decisions. According to Klein (2015), leaders who have experience rarely employ processes that have multiple options. Leaders typically use their intuition and previous patterns of decision making. The decision maker usually identifies and contemplates options, which is referred as the “pattern recognition process” (Klein, 2015, p. 165). Klein described the pattern recognition process as an action that produces options for consideration. As a result, the experience of the leader should be examined and considered as a significant measure of decision making during organizational change.

Salas (2010) agreed that pattern recognition is a key element of the expert intuitive leader. Past experiences develop retrieval mechanisms or cues that are readily available when decisions need to be made. The skilled leader uses a collection of meaningful complex patterns that the novice leader unlikely would be able to identify. Salas further explained that experienced intuitive leaders have the ability to make sound decisions rapidly with a technique called “situation assessment” (p. 14). Situation assessment refers to the leader’s ability to see the large picture and then attempt to find similarities or previous encounters to draw from. The expert leader will have the ability to respond logically when determining that the situation has been encountered in the past. If the situation is unfamiliar, the decision maker is inclined to rely on pattern recognition.

Elrais (2017) conducted a study to assess the factors affecting decision making among nurse managers, including its relation to decision-making styles and years of experience. Utilizing a descriptive correlational research design, Elrais included 85 nurse managers with at least 1 year of experience from seven different hospitals. Elrais utilized two tools for data collection: the Factors Affecting Decision Making Questionnaire and the General Decision-Making Style Inventory Survey. The Factors Affecting Decision Making Questionnaire has two parts: one that contains questions on personal data, (age, marital status, level of education, years of experiences, and previous attendance of training courses) and one that contains questions on job characteristics. The second part consists of 71 statements classified into four types of factors affecting decision making: structural factors (34 items), process factors (11 items), outcome factors (three items), and individual factors (23 items). The General Decision-Making Style Inventory Survey

is designed to assess decision-making styles of nurse managers, and consists of 25 items divided into five decisional styles: rational (five items), dependent (five items), avoidant (five items), intuitive (five items), and spontaneous (five items).

The results of the study indicated a statistically significant correlation between participants' years of experience and intuitive decision making. However, no correlation was found regarding decision making and intuitive style. The results from personal and job characteristics showed 35.3% of the nurse managers were between 30 and 40 years of age, 88% were married, and 76.5% were diploma-prepared nurses with 20–30 years of experience. The correlation between the General Decision-Making Style Inventory Survey and factors affecting decision making among nurse managers indicated a statistically significant correlation between factors that affected decision making, dependency avoidance, and spontaneous decision-making styles.

Researchers have also sought to understand how leaders arrive at various decisions and whether they are satisfied (Franken & Muris, 2005; Kahneman, 2011). Decision-making styles would be particularly useful if linked to leadership personality styles. The literature indicated that poor decisions and decision-making processes contribute to negative outcomes (Fan et al., 2018; Uzonwanne, 2015).

Erenda et al. (2018) conducted a quantitative study to identify the presence of intuitive decision making among top middle management of the Slovenian auto industry by identifying the effects of their behavioral competencies, emotional intelligence, and intuitiveness. The sample was 138 respondents, 81.3% of whom were men between the ages of 31-50. A descriptive statistical analysis, factor analysis, regression analysis, and

variance analysis were conducted that indicated 79.3% of the time survey respondents are guided by intuition when making important decisions. Statistical significance occurred for sex and years of leadership experience. Behavioral competencies were found not to be statistically significant on intuitiveness. Erenda et al. suggested that top middle management with significant years of experience are more often guided by intuition.

Research Question

What is the relationship between intuitive decision making and years of experience among nurse executives during organizational change?

H₀: There is no relationship among intuitive decision making and years of experience among nurse executives during organizational change.

H_a: There is a relationship among intuitive decision making and years of experience among nurse executives during organizational change.

Nature of the Study and Design

I used a correlational, quantitative approach with a survey design to examine whether there is a relationship between intuitive decision making and leadership styles among nurse executives during organization change. The variables for the study were the intuitive decision making score and years of leadership experience. The results from this study may be valuable to health care organizations regarding the impact that intuitive decision making has on nurse executives during organizational change. The results of the research may help health care organizations formulate strategies to add to the recruitment process of nurse executives. Every health care organization is likely to recruit the highest qualified nurse executive candidate; however, complementing the interviews and years of

experience with leadership personality style testing such as the AIM and the MLQ may be beneficial. As organizations test executives during the interview phase, organizations can begin to define the type of executives who will lead their organizations into the fast-paced future of medicine.

Methods

Population

The target population for the study was health care nurse executives who were currently in decision-making positions.

Sample and Power

A non-probability purposive sampling was used for the study to ensure identification and selection of individuals that were experts and well informed about the phenomenon being studied (Etikan, Musa, & Alkassim, 2016). The inclusion criteria for the study was healthcare nurse executives currently employed in the capacity of decision-making authority for their respective organizations. Excluded from the study were nursing faculty, clinical nurses, and non-nursing executives as the intent is to focus on nurses in healthcare leadership roles, making organizational decisions.

For a study to inform the given body of literature, sample size must correspond to appropriate statistical significance, effect size, and power. G*Power 3.1.9.7, (Faul, Erdfelder, Buchner, & Lang, 2013) was used to find the sample size for linear regression: fixed model, R² deviation from zero. The power analysis was calculated using a power level of 0.8 (Creswell, 2014), an alpha (α) level of significance 0.05 (Suresh &

Chandrashekhara, 2012), and a medium effect size of 0.15. For this study, the sample size was calculated, which yielded a sample size of 68.

Sources of Data

Participants were recruited by direct emailing collected from public hospital organizations websites and social media platforms such as Facebook and LinkedIn. A uniform recruitment header (Appendix C) provided the survey link, its purpose, significance, and utilization of data. The header also explain participation in the survey was voluntary.

The demographic information collected during the survey (Appendix D) included, gender, age, years in leadership, years at current organization, teaching versus non-teaching hospital organizations, highest nursing degree, and highest academic degree.

Data were collected utilizing Survey Monkey to send out the surveys. The data is stored on a password-protected laptop, with a backup to storage on a password protected USB drive. Utilizing password protected devices for storage and backup will maintain confidentiality of study participant's feedback.

Instruments

Data were collected using the Agor Intuitive Management Survey© (AIM©) to describe decision making styles (Appendix A) and the Multifactorial Leadership Questionnaire™ (MLQ™) to gauge and measure leadership behaviors (Appendix B). The AIM© survey instrument has two parts to the survey. The first part of the survey consists of 12 questions, which are from the Myers-Briggs Type Indicator® (MBTI®), used to test a leaders' potential to make intuitive decisions. The questions for the survey

instrument are duplicated from the MBTI® and uses the reliability and validity of the MBTI® as a valid instrument (Agor, 1986). The MBTI® is a personality assessment tool used worldwide for individual development. MBTI® is a taxonomy tool to assess the psychological preferences of people, identifying their strengths, interests, and preferences in decision making. Carl Gustav Jung, a Swiss psychiatrist, created the personality assessment. Jung projected psychological type theories, which described the innate differences of people, how people perceive and absorb information, as well as how people make decisions (Church & Waclawski, 1988; Jafrani, Zehra, Zehra, Ali, Mohsin, & Azhar, 2017).

The second part of the AIM© survey, which is an additional ten questions tests whether the leader actually uses intuitive decision making; how do leaders use intuitive decision making; and under what conditions; if a leader practice any techniques or methods that help to enhance or develop the leaders' intuitive abilities (Agor, 1989).

The survey consists of multiple choice questions, which includes three demographic questions, occupation, sex, and ethnicity. The survey respondents have the option to choose from two possible answers for each question in the first part. Part two of the survey provides several options, yes or no, circle all that apply, or give examples to the question asked of the survey respondent. Based on the leaders' response for each question, there is a scoring chart which places the responses in two categories intuitive or thinking potential. The lowest score of each category is 0, with the highest score being 12. The survey measures a leaders' underlying potential to use intuition during decision making based on the concepts of the MBTI® (Agor, 1989). The measurement scales are

scored so that the leader can be ranked compared to other executives taking the test. Agor (1989) conducted extensive research of over 5,000 leaders controlling for key variables such as ethnicity, sex, occupation, and level of management.

The AIM© Survey which is duplicated from the MBTI® has been revised a few times since the original survey in 1942. Based on results from a sample range of 3,009 people each from the four preference scales, form M established in 1998, has internal consistency reliability of .90 or greater. In 2001, form Q was published and identified a person's four-letter type and yields a detailed depiction of individual differences by 20 different feature types. Based on results from a national sample consisting of 1,378 people, the median internal consistency of the 20 features was .77 (Quenk, Hammer, & Majors, 2001).

The MLQ™ survey instrument measures a range of leadership types. The survey includes questions measured on a Likert scale. Bass and Avolio (2004) has been credited with validating the use of the MLQ survey instrument to quantify patterns of leaders within the sectors of business, government administrators, military, principals, religious ministers, sports coaches, and other professions whereby the leaders style of leadership affects those they lead, satisfaction, team effectiveness, and organizational success. (Bass Avolio, 2004). The tool is used to gauge and measure leadership behaviors. The outcome behaviors are studied to measure leadership style and leadership style effectiveness especially in relation to organizational change (Bagheri, Sohrabi, & Moradi, 2015). The MLQ™ survey contains 45 items; 36 items representing nine distinct leadership scales and three leadership outcome scales. There are five scales identified as characteristic of a

transformational leader (idealized influence attributed and behavior, inspirational motivation, individual consideration, and intellectual stimulation); three transactional leadership scales (contingent reward, management by exception-active, and management by exception-passive); and one non-leadership scale (laissez-faire) (Muenjohn & Armstrong, 2008). The MLQ items measuring exclusively leadership behaviors, which are marked from a 0-4 rating Likert scale. The scale points are 0= not at all, 1= once in a while, 2= sometimes, 3= fairly often and 4= frequently, if not always. The MLQ scale scores are average scores for the items on the scale. The score can be derived by totaling the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, Extra Effort has three items, Effectiveness has four items, and Satisfaction has two items. An example would be the items which are included in the Idealized Influence (Attributes) are Items 10,18,21,25; highest score for each question is 4, multiplied by 4 items would score a 16 in the Idealized Influence category (Bass & Avolio, 2011).

The MLQ is an established survey instrument. According to Avolio and Bass (1991) the MLQ manual displays validity and reliability paradigms with factor analyses for the survey. One of the largest studies to validate the MLQ conducted by Antonaki, Avolio, and Sivasubramaniam (2003) supported the nine-factor leadership model reliability scores for the MLQ subscales ranged from moderate to good; (N=2,154) with reliabilities for the total items and for each leadership factor scale ranged from .74 to .94. All of the scales' reliabilities were generally high, exceeding the standard cut-offs, which were consistent with internal consistency.

A reliability analysis was carried out on the values utilized from both surveys utilized in this study, comprising of 8-items. Cronbach's alpha showed the questionnaire to reach acceptable reliability, $\alpha = .797$. All items appeared to be worthy of retention, resulting in a decrease in the alpha if deleted.

Permission was sought for use of both instruments, the AIM© permission was sought and granted from Sage Publishing (Appendix A). Permission for use of the MLQ™ was sought and granted from Mind Garden (Appendix B).

Design and Analysis

The data were exported from the Survey Monkey database to IBM Statistical Package for Social Sciences (SPSS) version 25.0 software for analysis. The assumptions considered with linear regression includes a linear relationship, independence of errors, homoscedasticity, and normality. They were all tested and met assumptions.

Research question: What is the relationship between intuitive decision making and years of experience among nurse executives during organizational change?

H₀: There will be no relationship between intuitive decision-making and years of experience among nurse executives during organizational change.

H_a: There will be a relationship between intuitive decision-making and years of experience among nurse executives during organizational change.

The data received from survey participants were screened for any outlying information, including demographic information. The data were analyzed using linear regression with correlation methods to determine the best linear relationship between the independent variable of intuitive decision making and the dependent variable, personality

styles. Correlation coefficients are used to measure the association between the two methods versus their agreement with one another (Twomey & Kroll, 2008). To evaluate if the independent and dependent variables have a relationship, the variables were plotted on a scatter diagram for their relationship and the correlation coefficient measured the closeness of the regression line and the amount of linear association between the two variables (Creswell & Creswell, 2017). The assumptions were checked by examining the scatterplot, whereby the correlations were zero. The residuals were normally distributed, by examination of the histogram.

Analysis of collinearity statistics shows that the assumption has been met, as VIF scores were well below 10, and tolerance scores above 0.2. The Durbin-Watson statistic showed that this assumption had been met, as the obtained value was close to 2 (Durbin-Watson = 1.93).

Results

Execution

After receiving Institutional Review Board (IRB) approval from Walden University, study # 09-29-20-0674153, the recruitment flyer with the Survey Monkey link was posted on the Principal Investigator's social media platforms and the social media pages of nursing leadership organization that permitted such advertisement. The advertisement was also configured to allow for individuals to share the flyer on their own social media platforms. In addition, the flyer was also emailed to local hospital executives, asking if they could participate in the study or send out to their nursing leadership team.

Upon accessing the survey link, participants were presented with an overview of the study, participant rights, and the option for participants to opt out of the study at any time. Demographic variables were collected that included gender, age range, years as a registered nurse and years of experience in leadership; years at current organization and whether it was teaching versus non-teaching, and highest nursing degree. There were a total of 75 respondents, 5 participants were excluded, 4 participants did not meet criteria and there was 1 participant did not complete over half of the survey

Results

A linear regression analysis was conducted to investigate if there is an association between *intuitive thinking personality style* and *years of experience* among nurse executives during organizational change. The demographics of the 70 participants include the mean years of experience is 14.56 years; gender represents 15 males, 54 females, and 1 response of both. The respondents ethnic background is made up of 35 White/Caucasian, 25 Black/African American, 5 Hispanic/Latino, 1 Asian, and 3 that represent Other. The participants record their highest degree as 1 Diploma, 3 Associates, 14 Bachelors, 35 Masters, 13 Doctorate of Nursing Practice (DNP) and 4 held a Doctorate of Philosophy (PhD). The age categories of the participants is represented by 8 (25-34), 13 (35-44), 28 (45-54), 20 (55-64) and 1 participant was 65+. There were 55 participants that worked for academic teaching organizations, while 15 participants report working for a non-academic organization.

Table 11*Results of Demographic Information*

Sample characteristic	Number	Percentage
Gender		
Male	15	21.43
Female	54	77.14
Other	1	1.43
Race		
White	36	51.43
Black/African American	25	35.71
Hispanic/Latino	5	7.14
Asian	1	1.43
Other	3	4.29
Nursing education		
Diploma	1	1.43
Associate's	3	4.29
Bachelor's	14	20
Master's	35	50
DNP	13	18.57
PHD	4	5.71
Age		
25–34	8	11.43
35–44	13	18.57
45–54	28	40
55–64	20	28.57
65+	1	1.43
Organization		
Academic	55	38.5
Nonacademic	15	10.5

Note. $N = 70$.

The results of the simple linear regression analysis revealed a statistically significant association between years of experience and intuitive thinking ($p = .042$). The regression coefficient: $B = 1.108$, 95% C.I. [.040, 2.176] associated with intuitive thinking suggests that with each additional year increase in leadership, intuitive thinking increase by 1.108 points. The R^2 value of .059 associated with this regression model suggests that years of experience accounts for about 6% of the variation in intuitive thinking, which also suggests that the influence of years of experience alone does not explain a leader's ability to think intuitively. The confidence interval associated with the regression analysis does not contain 0. Therefore, the null hypothesis was rejected.

Table 12

Results for the Linear Regression Analysis of Intuitive Thinking and Years of Experience

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	10.17	20.15	14.56	1.937	70
Residual	-13.713	20.395	.000	7.716	70
Std. Predicted Value	-2.264	2.885	.000	1.000	70
Std. Residual	-1.764	2.624	.000	.993	70

a. Dependent Variable: Years of Experience

Discussion

Interpretation

The results of the linear regression analysis support the conclusion that intuitive decision making and years of experience among nurse executives during organizational change is statistically significant. The participants in the study had a mean score of 14.56

years of leadership experience. The minimum at 10.17 and maximum at 20.15 years of leadership experience respectively.

Table 13

Results for the Linear Regression Analysis of Intuitive Thinking and Years of Experience

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Years of experience	1.108	[.040, 2.176	.059	4.286

Note. Significant $p = .033$.

These results validate previous literature that demonstrated leaders with relevant years of experience typically use their intuition, which draws from patterns of recognition during decision making (Klein, 2015). Sibbald, Wathen, and Kothari (2017) also supported the idea that experience and leadership style contributes to the success of organizations. Sales (2010) supported the same conclusion that having years of experience to draw from develops retrieval mechanisms that are readily available when decisions have to be made.

Limitations

The study has a few limitations that should be noted. First, the researcher combined two surveys, which included a demographic section. The survey was relatively lengthy and the transition between the two surveys seemed to confuse the participants as some of the participants answered the transitional question between the surveys. The question stated “the next set of questions describe your leadership style as you perceive it. Judge how frequently each statement fits you. The word others may mean your peers, clients, direct reports, supervisors, and/or other individuals.” The second limitation to

note was during the data collection phase, there was a period of two weeks when no surveys were submitted. The data collection phase was completed during the pandemic. I believe this limited the number of surveys collected as most nurse leaders were focused on the management of their organization. The third limitation to consider was the honesty of the participants in self-reporting. In addition, the study was confined to surveying those with the characteristics of being a nurse, employed in a leadership capacity, and have the responsibility to make organizational decisions. The results will not be generalizable to other professions.

Implications

Findings from the regression model has the potential to promote social change in the healthcare arena by organizations understanding the positive effects years of experience has on intuitive decision making. As nurse executives gain valuable experience to make intuitive decisions during organization change, they will have more opportunities to accumulate data from past experiences which will allow intuition, recall, or gut feelings to resonate. Intuitive decision making during organizational change can be highly complex for the nurse executive when faced with ethical dilemmas, ambiguous or insufficient information or when data are available. However, experienced leaders have the ability to identify patterns from past decisions, identify relevant information and quickly process unanticipated events (Pretz & Folse, 2011; Rusetski, 2014; Klein, 2015).

Intuitive decision making is quick, with an automatic performance of learned behaviors, which allows leaders to instantly decide the course of action. Being able to make quick decisions, compresses years of experience into step wise decisions. In

contrast, the less experienced leader will rely on large amounts of data, or what has been learned from schooling or books to make decisions. The researchers surveyed 1530 senior level managers from 433 companies from utility, banking, and computer companies, with a 61.4 response rate. On a scale of seven points, the average response values were 5.61 utility, 5.66 banking, and 5.29 computer companies. The gut feeling mean score was 5.55. The findings validated that senior managers utilize intuitive synthesis within their decision making approach (Khatri & Ng, 2000; Tabesh, & Vera, 2020).

Recommendations

Future research should be considered on exploring what the minimum or maximum years of experience that would statistically influence intuitive decision making independently. In addition, the researcher captured from the survey participants' years of leadership experience and not years of relevant nursing experience. Further consideration could include whether years of nursing experience influenced intuitive decision making.

Conclusion

The aim of the study was to validate if there was a relationship between intuitive decision making and years of experience among nurse executives during organizational change. The results of the study revealed a statistically significant association between years of experience and intuitive thinking. The conclusion is congruent with the previous literature that validate intuition have shown that experts in leadership are more likely to approach decisions that are difficult through an interplay of intuition, which is also called the dual process theory (Okoli & Watt, 2018).

References

- Agor, W. H. (1989). *Intuition in organizations: Leading and managing productively*. SAGE.
- Antonakis, J., Avolio, B., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *Leadership Quarterly, 14*, 261–295. Retrieved from [https://doi.org/10.1016/S1048-9843\(03\)00030-4](https://doi.org/10.1016/S1048-9843(03)00030-4)
- Avolio, B., & Bass, B. (1991). *The full-range of leadership development*. Center for Leadership Studies. Full Range Leadership Development.
- Bagheri, R., Sohrabi, Z., & Moradi, E. (2015). Psychometric properties of Persian version of the multifactor leadership questionnaire (MLQ). *Medical Journal of the Islamic Republic of Iran, 29*, 256–265. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4715420/>
- Bass, B. M., & Avolio, B. J. (2004). *Multifactor Leadership Questionnaire. Manual and sampler set* (3rd ed.). Mind Garden.
- Bavol'ár, J., & Orosová, O. G. (2015). Decision-making styles and their associations with decision-making competencies and mental health. *Judgment and Decision Making, 10*(1), 115–122. Retrieved from <https://www.sas.upenn.edu/~baron/journal/14/141103/jdm141103.pdf>
- Church, A. H., & Waclawski, J. (1998). The relationship between individual personality orientation and executive leadership behaviour. *Journal of Occupational and Organizational Psychology, 71*(2), 99–125. Retrieved from

<https://doi.org/10.1111/j.2044-8325.1998.tb00666.x>

- Constantiou, I., Shollo, A., & Vendelø, M. T. (2019). Mobilizing intuitive judgement during organizational decision making: When business intelligence is not the only thing that matters. *Decision Support Systems, 121*, 51–61. Retrieved from <https://doi.org/10.1016/j.dss.2019.04.004>
- Creswell, J. W. (2014). *A Concise Introduction to Mixed Methods Research*. SAGE publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Del Missier, F., Mäntylä, T., & Bruine de Bruin, W. (2010). Executive functions in decision making: An individual differences approach. *Thinking & Reasoning, 16*(2), 69-97. doi:org/10.1080/13546781003630117
- Elrais, H. R. (2017). Factors affecting decision making among Nurse Managers and its relation to decision making styles. *Port Said Scientific Journal of Nursing, 4*(2), 241-266. doi:10.21608/PSSJN.2017.33084
- Erenda, I., Metelko, A., Roblek, V., & Meško, M. (2018). The Leadership Competencies and Intuitive Decision-Making of Top and Middle Level Managers in The Automotive Industry. In *Governing Business Systems* (pp. 119-140). Springer, Cham. Retrieved from https://doi.org/10.1007/978-3-319-66036-3_7
- Etikan, I., Musa, S. A., Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4. doi:10.11648/j.ajtas.20160501.11

- Fan, J., Zhang, L. F., & Chen, C. (2018). Thinking styles: Distinct from personality? *Personality and Individual Differences, 125*, 50-55. doi:
<https://doi.org/10.1016/j.paid.2017.12.026>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2013). *G*Power Version 3.1.7* [computer software]. Universität Kiel, Germany. Retrieved from
<http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>
- Franken, I. H., & Muris, P. (2005). Individual differences in decision-making. *Personality and Individual Differences, 39*(5), 991-998.
 doi:10.1016/j.paid.2005.04.004
- Jafrani, S., Zehra, N., Zehra, M., Ali, S. M. A., Mohsin, S. A. A., & Azhar, R. (2017). Assessment of personality type and medical specialty choice among medical students from Karachi; using Myers-Briggs Type Indicator (MBTI) tool. *Journal of Pakistan Medical Associates, 67*(520), 520-526. Retrieved from
<https://www.jpma.org.pk/PdfDownload/8148>
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Macmillan.
- Khatri, N., & Ng, H. A. (2000). The role of intuition in strategic decision making. *Human Relations, 53*(1), 57-86. Retrieved from
<https://doi.org/10.1177/0018726700531004>
- Klein, G. (2015). A naturalistic decision making perspective on studying intuitive decision making. *Journal of Applied Research in Memory and Cognition, 4*(3), 164-168. Retrieved from <https://doi.org/10.1016/j.jarmac.2015.07.001>

- Malewska, K. (2018). The profile of an intuitive decision maker and the use of intuition in decision-making practice. *Management*, 22(1). doi:10.2478/manment-2018-0003
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4(1), 3-13. doi:10.1177/1548051810385003
- Okoli, J. and Watt, J. (2018). Crisis decision-making: The overlap between intuitive and analytical strategies. *Management Decision*, 56(5), 1122–1134. doi: 10.1108/MD-04-2017-0333
- Pretz, J. E., & Folse, V. N. (2011). Nursing experience and preference for intuition in decision making. *Journal of Clinical Nursing*, 20(19-20), 2878-2889. Retrieved from <https://doi-org.ezp.waldenulibrary.org/10.1111/j.1365-2702.2011.03705.x>
- Quenk, N. L., Hammer, A. L., & Majors, M. S. (2001). MBTI® Step II Manual. Mountain View, CA: CPP, Inc.
- Rusetski, A. (2014). Pricing by intuition: Managerial choices with limited information. *Journal of Business Research*, 67(8), 1733-1743. Retrieved from <https://doi.org/10.1016/j.jbusres.2014.02.020>
- Schreier, C., Schubert, A., Weber, J., & Farrar, J. (2018). An investigation of the character traits of decision-makers open to intuition as a tool. *Journal on Business Review*, 3(4), 63-69. doi:10.5176/2010-4804_3.4.343
- Scott, S. G., & Bruce, R. A. (1995). Decision-making style: The development and

assessment of a new measure. *Educational and psychological measurement*, 55(5), 818-831. Retrieved from <https://doi.org/10.1177/0013164495055005017>

Sibbald, S. L., Wathen, C. N., & Kothari, A. (2017). Managing knowledge in transitions: Experiences of health care leaders in succession planning. *Health Care Manager*, 36(3), 231-237. doi: 10.1097/HCM.0000000000000167

Suresh, K., & Chandrashekara, S. (2012). Sample size estimation and power analysis for clinical research studies. *Journal of Human Reproductive Sciences*, 5(1), 7–13. doi:10.4103/0974-1208.97779

Tabesh, P., & Vera, D. M. (2020). Top managers' improvisational decision-making in crisis: A paradox perspective. *Management Decision*, 26(10), 2235-2256. doi: 10.1108/MD-08-2020-1060

Uzonwanne, F. (2015). Leadership styles and decision making models among corporate leaders in non-profit organizations in North America. *Journal of Public Affairs*, 15(3), 287-299. doi: 10.1002/pa.1530

Manuscript 3

**Dominant Leadership and Personality Styles Among Nurse Executives During
Organizational Change**

Chaudron Carter Short, MHEd, MHA, MSN, NE-BC

Walden University

Outlet for Manuscript

Nurse Leader is the endorsed journal of the American Organization for Nursing Leadership. The journal delivers publications to meet the needs of all nurses on the leadership learning curve, from administrators making the transition from management to leadership to established leaders seeking to take their skills and experience to a higher level. Selected articles feature best practices, policy changes impacting leaders, and leadership innovations in an easy-to-read format with a focus on outcomes. All articles are peer reviewed, selected, and developed with the guidance of a distinguished group of editorial advisors.

Submission requirements:

Manuscript length should be between 2,000 and 3,000 words including references. Designate each illustration and table by placing the citation “Figure 1” or “Table 2,” as appropriate, in the text.

Information regarding submission requirements can be accessed at

<https://www.nurseleader.com/content/authorinfo#idp1167744>

Abstract

Objective: The objective of this study was to determine whether there was a relationship between a nurse leader's dominant personality (inspirational innovation transformational and laissez faire leadership passive avoidant) and personality style (intuitive and thinking) used to make decisions during organizational change.

Background: In today's fast-paced health care environment, sound decisions by leaders have to be made effectively and strategically. The approaches to how these decisions are made can be based on many factors. Understanding how nurse executives arrive at sound decisions and the impact between their leadership style and personality styles during organizational change is an element to further explore.

Method: A correlational, quantitative survey design was used.

Results: The results of the simple linear regression analysis revealed no statistically significant association between inspirational innovational transformation leadership style and intuitive thinking or thinking personality style. The results did show statistically significant results for laissez-faire leadership passive avoidant for intuitive thinking and thinking styles.

Conclusion: Laissez-faire passive avoidant leaders have both intuitive thinking and thinking leadership styles. The results of the study revealed a statistically significant association between laissez-faire leadership passive avoidant and intuitive thinking. The conclusion is consistent with previous literature that indicated laissez-faire leaders display intuitive decision making.

Introduction

Research has shown that personality influences decision-making styles (Fan et al., 2017). Making a decision is a common aspect of a leader's responsibility and is critical to an organization's effectiveness during change (Uzonwanne, 2015). Today's fast-paced environment of health care does not permit leaders to forecast and predict changes, or have long lengthy deliberations about strategic approaches to make decisions (Kovač, 2017).

With the complexity of decision-making approaches, leadership style is a key component in determining performance (Verma et al., 2015). Health care organizations depend on their leaders to make sound decisions and be innovative to drive the success of the organization. How leaders arrive at these decisions either rationally or with intuitiveness is a reflection of their leadership and personality styles. It will be beneficial for health care organizations to consider how leaders think and evaluate their style for making decisions (Kouzes & Posner, 2012).

Significance/Importance

Health care organizations have functioned in a hierarchical system designed to have decisions maintained by substantial checks and balances to mitigate risks (White & Griffith, 2010). Although mitigating risks is important for health care organizations to be successful, the need for nurse leaders to make effective decisions is related. The utility of making a sound decision rests with the decision maker and their personality. Researchers have sought to understand how decision makers arrive at their selected choice, whether the decision was effective or not, and whether errors occurred (Klein, 2015). Researcher

have not examined the relationship between a leader's personality and their leadership styles as it relates to decision making during organizational change.

Decision making is a process by which solutions are identified to reach a desired goal or outcome (Klein, 2015; Phillips et al., 2016). The idea that leaders make decisions according to their personality and leadership styles is generally out of alignment with the norm. In the fast-paced scientific world of health care, making decisions is not a “magical sixth sense or paranormal process” (Matzler et al., 2007, p. 14). Decision making is a multifaceted form of intellectual reasoning from experience, facts, learned behaviors, perceptions, patterns, techniques and generalizations stored within an individual (Nita & Solomon, 2015). Understanding how nurse executives arrive at sound decisions and the impact between their leadership style and personality styles during organizational change may benefit health care organizations.

Relevant Scholarship

Rabbani et al. (2016) investigated the relationship between leadership style and personality traits of managers. They collected data from 25 health care managers holding a doctoral degree. The participants ranged in age between 35 and 40 years. A correlational cross-sectional method was used to analyze the data. The Big Five Personality Traits questionnaire, which is a Likert-type questionnaire, was used to determine personality type. Results revealed no significant relationship between dominant leadership style and personality type ($p = 0.07$). Rabbani et al. suggested that personality traits are related to effective leadership, and they urged organizations to pay close attention to personality traits of their leaders individually as an essential variable.

There are many theories that describe leadership style, which are based on personality or behavior. Lorber et al. (2016) conducted a quantitative cross-sectional study using two survey questionnaires with a variety of testing scales, one for the leader at the executive level and one for the employees. The questionnaires contained 50 closed-ended questions that included demographic data, 21 items for leadership style using the MLQ, 10 items describing characteristics of successful leadership, six items describing emotional intelligence, seven items for decision-making process, and 10 items for communication. The survey was distributed in 12 hospitals to 1,100 employees, which included 85 leaders and 1,015 nursing employees, with a response rate of 56% (75 nurse leaders and 565 nursing employees). The results from a Spearman correlation analysis showed strong positive correlations between leadership style, leadership communication, decision-making process, emotional intelligence, and leadership personal characteristics. Lorber et al. concluded that leadership style, leadership communication, decision-making process, leadership emotional intelligence, and leadership personal characteristics were important. Personality style has an impact on leadership styles, and leadership style positively influences organizational outcomes, nursing practice, and quality of care.

Simic et al. (2017) validated prior research studies that examined personality traits of managers and the influence on leadership styles. They conducted a study of 160 low-, middle-, and high-level managers to examine the relationship between manager personality traits and leadership styles. They used the MLQ to measure leadership styles and The Big Five to measure personality traits. The MLQ provided a summary score of answers reduced to three management styles of transformational, transactional, and

laissez-faire; the Big Five provided an analysis of five personality trait dimensions: neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience. The results showed a statistically significant relationship between personality traits and leadership styles. The correlations of transformational style and extraversion and neuroticism had the largest correlation coefficients. In addition, transformational leadership style was significantly correlated to agreeableness, conscientiousness and openness to experience. Transactional style was significantly correlated to extraversion, agreeableness, and conscientiousness. The results revealed a manager's leadership style showed the highest correlation with transformational leadership. This type of leadership style more often can be found in leaders who are conscientious and are open to change (Simic, et al., 2017).

Research Question

What is the relationship between nurse leaders' dominant leadership style (inspirational innovation transformational and laissez-faire leadership passive avoidant) and personality style (intuitive and thinking) used to make decisions during organizational change?

H₀: There is no relationship between nurse leaders' dominant leadership style (inspirational innovation transformational and laissez-faire leadership passive avoidant) and personality style (intuitive and thinking) used to make decisions during organizational change.

H_a: There is a relationship between nurse leaders' dominant leadership style (inspirational innovation transformational and laissez-faire leadership passive avoidant)

and personality style (intuitive and thinking) used to make decisions during organizational change.

Nature of the Study and Design

A correlational, quantitative survey design was used to examine whether there was a relationship between nurse leaders' dominant personality style (intuitive thinking and thinking) and leadership style (inspirational innovation transformational and laissez-faire leadership passive avoidant) during organization change. The variables for the study were leadership styles (inspirational innovation transformational and laissez-faire leadership passive avoidant) and personality styles (intuitive thinking and thinking).

The results from this study may be valuable to health care organizations regarding the impact that intuitive decision making has on nurse executives during organizational change. The results of my study may reveal the importance of nurse leaders' dominant leadership style and their personality style during organizational change and may be the basis of new strategies to add to the recruitment process of nurse executives. Every health care organization is likely to recruit the highest qualified nurse executive candidate; however, complementing the interviews with leadership personality style testing such as the AIM and the MLQ would provide screening selection for the most desirable personality traits that would meet the needs of the organization (Scepura, 2020). As organizations test executives during the interview phase, organizations can begin to define the type of executives who will lead their organizations into the fast-paced future of medicine.

Methods

Population

The target population for the study was health care nurse executives who were currently in decision-making positions.

Sample and Power

A non-probability purposive sampling was used for the study to ensure identification and selection of individuals that are experts and well informed about the phenomenon being studied (Etikan, Musa, & Alkassim, 2016). The inclusion criteria for the study was healthcare nurse executives currently employed in the capacity of decision-making authority for their respective organizations. Excluded from the study were nursing faculty, clinical nurses, and non-nursing executives as the intent was to focus on nurses in healthcare leadership roles, making organizational decisions.

For a study to inform the given body of literature, a sample size must correspond to appropriate statistical significance, effect size, and power. A power analysis was conducted (Faul, Erdfelder, Buchner, & Lang, 2013) using a power level of 0.8, (Creswell, 2014) an alpha (α) level of significance 0.05 (Suresh & Chandrashekara, 2012) and a medium effect of .3 which yielded a sample size of 68.

Sources of Data

Participants were recruited using direct email addresses collected from public hospital organizations websites and social media platforms such as Facebook and LinkedIn. A uniform recruitment letter was provided in the survey link, with its purpose,

significance, and utilization of data. The letter also explained that participation in the survey was voluntary.

The demographic information collected during the survey included gender, age, years in leadership, years at current organization, teaching versus non-teaching hospital organizations, highest nursing degree, and highest academic degree.

An online survey tool, Survey Monkey was used for data collection. The data is stored on a password-protected laptop, with a backup to storage on a password protected USB drive. Utilizing password protected devices for storage and backup will maintain confidentiality of study participant's feedback.

Instruments

The study utilized the Agor Intuitive Management Survey© (AIM©) to describe decision making styles (Appendix A) and the Multifactorial Leadership Questionnaire™ (MLQ™) to define leadership styles (Appendix B). The AIM© survey instrument has two parts. The first part of the survey consists of 12 questions, which are from the Myers-Briggs Type Indicator® (MBTI®), used to test a leader's potential to make intuitive decisions. The questions for the survey instrument were duplicated from the MBTI® and uses the reliability and validity of the MBTI® as a valid instrument (Agor, 1986). The MBTI® is a personality assessment tool used worldwide for individual development. MBTI® is a taxonomy tool to assess the psychological preferences of people, identifying their strengths, interests, and preferences in decision making. Jung, a Swiss psychiatrist, created the personality assessment. Jung projected psychological type theories, which describes the innate differences of people, how people perceive and absorb information,

as well as how people make decisions (Church & Waclawski, 1988; Jafrani, Zehra, Zehra, Ali, Mohsin, & Azhar, 2017).

The second part of the survey, which are an additional ten questions tests whether the leader actually uses intuitive decision making; how do leaders use intuitive decision making; and under what conditions; if a leader practice any techniques or methods that help to enhance or develop the leaders' intuitive abilities (Agor, 1989).

The survey consists of multiple choice questions, which includes three demographic questions, occupation, sex, and ethnicity. The survey respondents have the option to choose from two possible answers for each question in the first part. Part two of the survey provides several options, yes or no, circle all that apply, or give examples to the question asked of the survey respondent. Based on the leaders' response for each question, there is a scoring chart which places the responses in two categories intuitive or thinking potential. The lowest score of each category is 0, with the highest score being 12. The survey measures a leaders' underlying potential to use intuition during decision making based on the concepts of the MBTI® (Agor, 1989). The measurement scales are scored so that the leader can be ranked compared to other executives taking the test. Agor (1989) conducted extensive research of over 5,000 leaders controlling for key variables such ethnicity, sex, occupation, and level of management.

The AIM© Survey which is duplicated from the MBTI® has been revised a few times since the original survey in 1942. Based on results from a sample range of 3,009 people each from the four preference scales, form M established in 1998, has internal consistency reliability of .90 or greater. In 2001, form Q was published and identified a

person's four-letter type and yields a detailed depiction of individual differences by 20 different feature types. Based on results from a national sample consisting of 1,378 people, the median internal consistency of the 20 features was .77 (Quenk, Hammer, & Majors, 2001).

The MLQ™ survey instrument measures a range of leadership types. The survey includes questions measured on a Likert scale. Bass and Avolio (2004) has been credited with validating the use of the MLQ survey instrument to quantify patterns of leaders within the sectors of business, government administrators, military, principals, religious ministers, sports coaches, and other professions whereby the leaders style of leadership affects those they lead, satisfaction, team effectiveness, and organizational success. (Bass & Avolio, 2004). The tool is used to gauge and measure leadership behaviors. The outcome behaviors are studied to measure leadership style and leadership style effectiveness especially in relation to organizational change (Bagheri, Sohrabi, & Moradi, (2015). The MLQ™ survey contains 45 items; 36 items representing nine distinct leadership scales and three leadership outcome scales. There are five scales identified as characteristic of a transformational leader (idealized influence attributed and behavior, inspirational motivation, individual consideration, and intellectual stimulation); three transactional leadership scales (contingent reward, management by exception-active, and management by exception-passive); and one non-leadership scale (laissez-faire) (Muenjohn & Armstrong, 2008). The MLQ items measure leadership behaviors exclusively, which are marked from a 0-4 rating Likert scale. The scale points are 0= not at all, 1= once in a while, 2= sometimes, 3= fairly often and 4= frequently, if not always.

The MLQ scale scores are average scores for the items on the scale. The score can be derived by totaling the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, extra effort has three items, effectiveness has four items, and satisfaction has two items. An example would be the items which are included in the Idealized Influence (Attributes) are Items 10,18,21,25; highest score for each question is 4, multiplied by 4 items would score a 16 in the Idealized Influence category (Bass & Avolio, 2011).

Permission was granted to utilize both of these instruments. For the AIM© permission was granted from Sage Publishing (Appendix A) and permission for the use of the MLQ™ was granted from Mind Garden (Appendix B).

Design and Analysis

The data were exported from the Survey Monkey database to IBM Statistical Package for Social Sciences (SPSS) version 25.0 software for analysis. The assumptions considered with linear regression includes a linear relationship, independence of errors, homoscedasticity, and normality. They were all tested and met assumptions.

Research question: What is the relationship between a nurse leaders' dominant leadership style (inspirational innovation transformational and laissez faire leadership passive avoidant) and personality style (intuitive and thinking) used to make decisions during organizational change?

*H*₀: There will be no relationship between a nurse leaders' dominant leadership style (inspirational innovation transformational and laissez faire leadership passive

avoidant) and personality style (intuitive and thinking) used to make decisions during organizational change?

H_a: There will be a relationship between the dominant leadership styles (inspirational innovation transformational and laissez faire leadership passive avoidant) and personality styles (intuitive and thinking) used to make decisions during organizational change?

The data received from survey participants were screened for any outlying information, including demographic information. The data were analyzed using linear regression with correlation methods to determine the best linear relationship between the independent variable of intuitive decision making and the dependent variable, personality styles. Correlation coefficients are used to measure the association between the two methods versus their agreement with one another (Twomey & Kroll, 2008). To evaluate if the independent and dependent variables have a relationship, the variables were plotted on a scatter diagram for their relationship and the correlation coefficient measured the closeness of the regression line and the amount of linear association between the two variables (Creswell & Creswell, 2017). The assumptions were checked by examining the scatterplot, whereby the correlations were zero. The residuals were normally distributed, by examination of the histogram.

Analysis of collinearity statistics shows that the assumption has been met, as VIF scores were well below 10, and tolerance scores above 0.2. The Durbin-Watson statistic showed that this assumption had been met, as the obtained value was close to 2 (Durbin-Watson = 1.93).

Results

Execution

After receiving Institutional Review Board (IRB) approval from Walden University, the recruitment flyer with the Survey Monkey link was posted on the Principal Investigator's social media platforms and the social media pages of nursing leadership organization that permitted such advertisement. The advertisement was also configured to allow for individuals to share the flyer on their own social media platforms. In addition, the flyer was also emailed to local hospital Executives, asking if they could participate in the study or send out to their nursing leadership team.

Upon accessing the survey link, participants were presented with an overview of the study, participant rights, and the option for participants to opt out of the study at any time. Demographic variables were collected that included gender, age range, years as a registered nurse and years of experience in leadership; years at current organization and whether it was teaching versus non-teaching, and highest nursing degree. There were a total of 75 respondents, 5 participants were excluded, 4 participants did not meet criteria and there was 1 participant did not complete over half of the survey

Results

The results of the simple linear regression analysis revealed no statistically significant association between inspirational innovation transformational leadership style and intuitive thinking ($p = .096$). The regression coefficient: $B = .063$, 95% C.I. [-0.11, 0.137] associated with the inspirational innovation transformational leadership style suggested that with each additional point increase in intuitive thinking, the influence

attributed transformational leadership style decreases by approximately .063 points. The R^2 value of 0.040 associated with this regression model suggests that inspirational innovation transformational leadership style accounts for 4% of the variation in intuitive thinking, which means that 96% of the variation in inspirational innovation transformational leadership style cannot be explained by intuitive thinking alone. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was retained.

Table 14

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	R^2	<i>F</i>
Inspirational Innovation Transformational	.063	[-0.11, 0.137]	0.040	2.853

Note. Not significant $p = .096$.

A linear regression analysis was conducted to investigate if there is an association between intuitive thinking and laissez faire leadership style among nurse executives during organizational change. The results of the simple linear regression analysis revealed a statistically significant association between laissez-faire leadership style and intuitive thinking ($p = .033$). The regression coefficient: $B = .120$, 95% C.I. [.033, .207] associated with the laissez faire leadership style suggests that with each additional point increase in intuitive thinking, the laissez faire leadership style increase by .120 points. The R^2 value of .101 associated with this regression model suggests that laissez faire leadership style accounts for 10.1% of the variation in intuitive thinking, which means that 89.9% of the variation in laissez faire leadership style cannot be explained by

intuitive thinking. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the null hypothesis was rejected.

Table 15

Results for the Linear Regression Analysis of Intuitive Thinking and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Laissez Faire	.120	[.033, .207]	.101	7.634

Note. Significant $p = .033$.

A linear regression analysis was conducted to investigate if there is an association between inspirational innovational transformation and thinking personality score among nurse executives during organizational change. The results of the simple linear regression analysis revealed no statistical significance association between inspirational innovational transformation leadership style and thinking personality score ($p = 0.96$). The regression coefficient: $B = -.063$, 95% C.I. [-.137, 0.11] inspirational innovational transformation leadership style suggests that with each additional point increase in thinking personality score, the inspirational innovational transformation leadership style decrease by -.063 points. The R^2 value of .040 associated with this regression model suggests that inspirational innovational transformation leadership style accounts for 63% of the variation in intuitive thinking personality style, which means that 37% of the variation in inspirational innovational transformation leadership style cannot be explained by intuitive thinking personality style. The confidence interval associated with the regression analysis does contain 0. Therefore, the hypothesis was retained.

Table 16

Results for the Linear Regression Analysis of Thinking Dominant Personality Style and Leadership Style

Variable	<i>B</i>	95% CI	<i>R</i> ²	<i>F</i>
Inspirational Innovation Transformational	-.063	[-.137, .011]	0.040	2.853

Note. Not significant $p = .096$.

A linear regression analysis was conducted to determine if there is an association between laissez faire leadership passive avoidant and thinking personality score among nurse executives during organizational change. The results of the simple linear regression analysis revealed a statistically significant association between the laissez-faire leadership style and both intuitive and thinking ($p = .007$) personality styles. The regression coefficient: $B = -.839$, 95% C.I. [-1.445, -.233] associated with the laissez faire leadership style suggests that with each additional point decrease in thinking personality score, the laissez faire leadership style decreased by -.839 points. The R^2 value of .101 associated with this regression model suggests that laissez faire leadership style accounts for 10% of the variation in intuitive thinking, which means that 90% of the variation in laissez faire leadership style cannot be explained by thinking personality style. The confidence interval associated with the regression analysis does contain the value of 0. Therefore, the hypothesis is rejected.

Table 17

Results for the Linear Regression Analysis of Dominant Personality Style and Leadership Style

Variable	<i>B</i>	95% CI	R ²	F
Laissez Faire Leadership Passive Avoidant	-.839	[-1.445, -.233]	.101	7.634

*Significant $p = .007$

Discussion

Interpretation

The results of the linear regression analysis support the conclusion that the dominant leadership style of inspirational innovation transformational and personality styles intuitive and thinking are not statistically significant. However, there is a significant relationship between a nurse leaders' dominant leadership style of laissez faire leadership passive avoidant and intuitive and thinking personality styles, which were both (significant at the $p = .007$).

The result of the study is supported by previous literature by Chaudhry and Javed, (2012) and Zareen, et al. (2015) that suggest the laissez-faire leadership style has begun to emerge as more effective among their followers. The laissez faire leader is seen as most valuable when decisions are easy and intuitive, or when large scale situations demand their attention (Chaudhry & Javed, 2012). In these situations of decision making, the laissez faire leader have been known to perform as a skilled leader (Zareen, et al., 2015).

Limitations

The study has a number of limitations I combined two surveys, which included a demographic section. The survey was relatively lengthy and the transition between the two surveys seemed to confuse the participants as some of the participants answered the transitional question between the surveys. The question stated “the next set of questions describe your leadership style as you perceive it. Judge how frequently each statement fits you. The word others may mean your peers, clients, direct reports, supervisors, and/or other individuals.” The second limitation was the absence of previous studies on combining the research tools. In previous studies examining leadership styles or personality styles, this is the first to utilize together the two survey tools (MLQ and AIM). Each tool has been tested in relation to leadership styles or intuitive thinking individually, but no studies found have molded the surveys or concepts together. In addition, during the data collection phase, there was a period of two weeks when no surveys were submitted. The data collection phase was completed during the pandemic which may have limited the amount of return surveys collected as most nurse leaders were focused on the management of their organization. The third limitation to consider was the honesty of the participants completing the study. In addition, the study was confined to surveying those with the characteristics of being a nurse, employed in a leadership capacity, and have the responsibility to make organizational decisions. The results are being generalizable to other professions.

Implications

Findings from the regression model has implications under the leadership paradigm. The findings of my study are statistically significant among the laissez faire leader and intuitive and thinking personality styles. Although the literature is limited within the positive aspects of the laissez faire leadership style, the preponderance of previous leadership literature regarding the laissez faire leader is generally negative, displaying a leadership style of passive behavior, avoidance of decisions, and effective leadership (Yang, 2015). However, the literature is beginning to evolve within the laissez faire leadership paradigm. Yang (2015) suggested the laissez faire leader is not necessarily a leader that is non-involved or avoidance of decisions, but one that is not burdensome of their followers, allowing autonomy and freedom of self-direction.

This study has the potential to promote a positive social change for healthcare organizations seeking to explore leadership styles and decision making among nurse executives. As organizations explore the idea of testing for hiring practices, the laissez faire leader should not be exempt as an effective leader. Although the research is limited regarding the effectiveness of the laissez faire leader, the literature is beginning to emerge and denote an inverse perspective. In addition, the results of this study can contribute to the social impact of the laissez faire leader within the literature of nursing, nursing leadership and decision making.

Recommendations

Future research should be considered on exploring what determining factors influence the laissez faire leader's job satisfaction or motivation that will create a positive

work environment. Previous research findings do not support the laissez faire leadership style in a positive way; however, organizations could benefit with creating and strengthening work environments through interacting with the laissez faire leader regarding their own behaviors and decision making abilities (Pishgooie, Atashzadeh-Shoorideh, Falcó-Pegueroles, & Lotfi, 2019).

Conclusion

The aim of the study was to validate if there was a relationship between the dominant leadership styles (*inspirational innovation transformational and laissez faire leadership passive avoidant*) and personality styles (*intuitive and thinking*). The results of the study revealed a statistically significant association between laissez faire leadership passive avoidant and intuitive thinking. The conclusion is congruent with previous literature that validate laissez faire leaders display intuitive decision making.

References

- Agor, W. H. (1986). *The logic of intuitive decision making: A research-based approach for top management*. Quorum Books.
- Agor, W. H. (1989). *Intuition in organizations: Leading and managing productively*. SAGE.
- Bagheri, R., Sohrabi, Z., & Moradi, E. (2015). Psychometric properties of Persian version of the multifactor leadership questionnaire (MLQ). *Medical Journal of the Islamic Republic of Iran*, 29, 256–265. Retrieved from <http://mjiri.iums.ac.ir/>
- Bass, B. M., & Avolio, B. J. (2004). *Multifactor Leadership Questionnaire. Manual and sampler set* (3rd ed.). Mind Garden.
- Church, A. H., & Waclawski, J. (1998). The relationship between individual personality orientation and executive leadership behaviour. *Journal of Occupational and Organizational Psychology*, 71(2), 99–125. Retrieved from <https://doi.org/10.1111/j.2044-8325.1998.tb00666.x>
- Clavelle, J., Drenkard, K., Tullai-McGuinness, S., & Fitzpatrick, J. J. (2012). Transformational leadership practices of chief nursing officers in Magnet organizations. *Journal of Nursing Administration*, 42(4), 195-201. doi:10.1097/NNA.0b013e31824ccd7b
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE Publications.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.

- Etikan, I., Musa, S. A., Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. Retrieved from <https://doi.org/10.11648/j.ajtas.20160501.11>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2013). *G*Power Version 3.1.7* [computer software]. Universität Kiel, Germany. Retrieved from <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>
- Hodgkinson, G., & Sadler-Smith, E. (2018). The dynamics of intuition and analysis in managerial and organizational decision making. *Academy of Management Perspectives*, 32(4). doi:10.5465/amp.2016.0140
- Jafrani, S., Zehra, N., Zehra, M., Ali, S. M. A., Mohsin, S. A. A., & Azhar, R. (2017). Assessment of personality type and medical specialty choice among medical students from Karachi; using Myers-Briggs Type Indicator (MBTI) tool. *Journal of Pakistan Medical Associates*, 67(520), 520-526. Retrieved from <https://www.jpma.org.pk/PdfDownload/8148>
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Macmillan.
- Klein, G. (2015). A naturalistic decision making perspective on studying intuitive decision making. *Journal of Applied Research in Memory and Cognition*, 4(3), 164-168. Retrieved from <https://doi.org/10.1016/j.jarmac.2015.07.001>
- Kouzes, J., & Posner, B. (2012). *The leadership challenge* (5th ed.). San Francisco, CA: Jossey-Bass.
- Kovač, J. (2017). Dimensions of organizational change. *Management Journal of*

- Contemporary Management Issues*, 5(1), 73-81. Retrieved from <https://hrcak.srce.hr/184672>
- Lorber, M., Treven, S., & Mumel, D. (2016). The examination of factors relating to the leadership style of nursing leaders in hospitals. *Our Economy*, 62(1), 27-36. doi:10.1515/ngoe-2016-0003
- Manning, J. (2016). The influence of nurse manager leadership style on staff nurse work engagement. *Journal of Nursing Administration*, 46(9), 438-443. doi: 10.1097/NNA.0000000000000372
- Matzler, K., Bailom, F., & Mooradian, T. A. (2007). Intuitive decision making. *MIT Sloan Management Review*, 49(1), 13. Retrieved from <http://sloanreview.mit.edu/the-magazine/files/pdfs/49108SxW.pdf>.
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the multifactor leadership questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4(1), 3-13. doi:10.1177/1548051810385003
- Nita, A. M., & Solomon, I. G. (2015). The role of intuition and decision making in Public Administration. *Juridical Current*, 18(2). Retrieved from http://revcurentjur.ro/old/arhiva/attachments_201502/recjurid152_7F.pdf
- Phillips, W. J., Fletcher, J. M., Marks, A. D. G., & Hine, D. W. (2016). Thinking styles and decision making: A meta-analysis. *Psychological Bulletin*, 142(3), 260-290. doi:org/10.1037/bul0000027
- Pishgooie, A. H., Atashzadeh-Shoorideh, F., Falcó-Pegueroles, A., & Lotfi, Z. (2019).

Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover. *Journal of Nursing Management*, 27(3), 527-534. doi: 10.1111/jonm.12707

Rabbani, M., Riahi, L., & Delgoshaei, B. (2016). Relationship between Type of Personality and Leadership Style in Urban Health Care Centers of Iran University of Medical Sciences (IUMS). *International Journal of Research*, 3(6), 51-55. Retrieved from <http://www.ijrbsm.org/pdf/v3-i6/6.pdf>

Sceपुरa, R. C. (2020). The challenges with pre-employment testing and potential hiring bias. *Nurse Leader*, 18(2), 151-156. doi:10.1016/j.mnl.2019.11.014

Simic, J., Ristic, M. R., Milosevic, T. K., & Ristic, D. (2017). The relationship between personality traits and managers' leadership styles. *European Journal of Social Science Education and Research*, 4(6), 194-199. Retrieved from <https://www.researchgate.net/publication/320576072>

Suresh, K., & Chandrashekara, S. (2012). Sample size estimation and power analysis for clinical research studies. *Journal of Human Reproductive Sciences*, 5(1), 7-13. doi:10.4103/0974-1208.97779

Pishgooie, A. H., Atashzadeh-Shoorideh, F., Falcó-Pegueroles, A., & Lotfi, Z. (2019). Correlation between nursing managers' leadership styles and nurses' job stress and anticipated turnover. *Journal of Nursing Management*, 27(3), 527-534. doi: 10.1111/jonm.12707

Verma, N., Bhat, A. B., Rangnekar, S., & Barua, M. K. (2015). Association between leadership style and decision making style in Indian organizations. *Journal of*

Management Development, 34(3), 246-269. doi:10.1108/JMD-03-2012-0038

White, K. R., & Griffith, J. R. (2010). *The well-managed healthcare organization*.

Chicago, IL: Health Administration Press.

Uzonwanne, F. (2015). Leadership styles and decision making models among corporate

leaders in non-profit organizations in North America. *Journal of Public Affairs*,

15(3), 287-299. doi:10.1002/pa.1530

Yang, I. (2015). Positive effects of laissez-faire leadership: Conceptual exploration.

Journal of Management Development. doi.org/10.1108/JMD-02-2015-0016

Zareen, M., Razzaq, K., & Mujtaba, B. (2015). Impact of transactional, transformational

and laissez-faire leadership styles on motivation: A Quantitative Study of Banking

Employees in Pakistan. *Public Organization Review*, 15(4), 531–549. Retrieved

from <https://doi-org.ezp.waldenulibrary.org/10.1007/s11115-014-0287-6>

Part 3: Summary

Integration of Three Studies

The purpose of this three-manuscript dissertation was to examine how nurse executives' intuitive decision making and leadership personality styles influence their decision making during organizational change. The three manuscripts were developed as parallel studies to examine the influence of intuition within the decision-making process while considering character traits and personality styles when making decisions. The integration of these three studies provided new knowledge regarding intuitive decision making and leadership personality styles, intuitive decision making and years of experience, and leadership and personality styles of nurse leaders during organizational change.

Intuitive decision making has been studied in many disciplines; however, the uniqueness of the current study added to the body of knowledge (see Khatri & Ng, 2000; Yang, 2015). The relationship between intuitive decision making and leadership personality styles (idealized influence attributed transformational, idealized influence behavior transformational, intellectual stimulation transformational, individualized consideration transformational, contingent reward transactional, management by exception active transactional, and management by exception passive avoidant) revealed no statistically significant relationship. However, statistical significance was reached with the relationships between two leadership styles, which were inspirational innovation transformational leadership style and intuitive thinking personality style, as well as laissez-faire passive avoidant leadership style and intuitive thinking personality style. The

second study revealed statistical significance with the relationship between intuitive thinking and years of experience. The third study revealed the most surprising results in that personality styles (intuitive thinking and thinking) were significantly related to laissez-faire leadership passive avoidant leadership style and were not significantly related to inspirational innovation transformational leadership style.

There were no studies that had included the AIM and MLQ and addressed the subject matter presented in the three manuscripts. I used these tools to examine intuitive decision making, leadership and personality styles, and leadership years of experience. The results of the three studies affirmed that leadership personality styles influence decision-making abilities. Intuitive decision making can help a leader in difficult situations in which their mind is indecisive, they fail to come to a decision, or time is of the essence in weighing all essential possibilities (Nita & Solomon, 2015).

Relations to Conceptual Framework

All three studies were guided by the dual process theory, which includes two distinct processing methods. System 1 is characterized as automatic, impulsive, and fast. System 2 is described as controlled, slow, and conscious. According to Gronchi and Giovannelli (2018), the terms coined were intuition vs. deliberation, System 1 vs. System 2, associative vs. rule-based thinking, and fast vs. slow thinking. System 1 processes are characterized as intuitive or reflective, and System 2 processes are analytical, reflective, or rule based (Kahneman, 2011).

As leaders make decisions, both intuitive and thinking, these behaviors are organized by two parallel systems. System 1 is intuitive and controls the response that is

habit forming, emotional, automatic, and used from the subconscious. On the other hand, leaders who makes decisions with thinking behaviors, such as System 2, desire a thorough process of outcome reassessment and criteria-based decisions (Dickinson & Pérez, 2018; Kahneman, 2011). According to Akinci and Sadler-Smith (2019), consciousness and leadership behaviors are directed by both systems. However, various factors influence which system is utilized at what time, including the leader's thinking style, passion, and circumstances surrounding the decision.

Unanticipated Findings

The unanticipated findings of the three studies revealed that most of the results were not statistically significant. In addition, the largest unanticipated finding was that the leadership style of laissez-faire leadership passive avoidant was statistically significant for all correlations. There was very little supportive research that validates the significance of laissez-faire leadership. Most recent literature supported the theory that the laissez-faire leader is less intuitive and less productive, has less engagement, and has lower levels of commitment than the transformational leader (Breevaart & Zacher, 2019; Silva & Mendis, 2017). Other researchers refuted the well-known description of a laissez-faire leader. Riaz and Haque (2016) described leaders with a laissez-faire leadership style as having a direct effect on intuitive thinking. Riaz and Haque suggested that individuals with a laissez faire leadership style have a “dominant cognitive system” (p. 907). Yang (2015) suggested that the dominant view of the laissez-faire leader is biased.

Implications for Positive Change

The results of these studies contribute to the literature on nursing leadership and intuitive thinking, and demonstrate the importance of intuitive thinking and decision-making styles as predictors for health care organizations to focus on when hiring nurse leaders. Health care is a fast-paced environment, and decisions are expected to be made by nurse executives rapidly and with the highest effectiveness for the organization to be successful (Sadler-Smith & Shefy, 2004; Lorber et al., 2016). Nurse executives operate within a social structure in which values define their effectiveness. The values associated with leadership imply a rejection of the status quo and dependence on nonconventional solutions to prevailing social problems. Organizations can identify and develop effective programs that can prepare leaders to make the best decisions with the information available (Dugan et al., 2014). The results of the current study have the potential for positive social change for health care organizations to utilize intuitive decision making as a gauge for organizational change. This study may help organizations begin to formulate strategies to aide in the recruitment process of nurse executives during the recruitment phase by using tools such as the AIM or MLQ in addition to years of experience.

Area of Future Research

There was no research found utilizing the AIM and MLQ survey tools. Future research utilizing these tools is warranted in the leadership arena. The MLQ has been widely used and combined with other survey tools; however, the AIM has not been used in recent years. Another area for future research would be to study the combination of leadership and personality styles using other survey tools. The final area of future

research would be to study the relationship between intuitive decision making and laissez-faire leadership because these variables have not been studied together.

Lessons Learned

I used the AIM and the MLQ, which had not been used together in research to date. The AIM has small amounts of research data, but was widely utilized when developed. This impeded my ability to acquire current literature on the AIM. Other current validated surveys tools would have provided me with the information needed on intuition, such as the Smith Intuition Instrument (Pretz et al., 2014). Another tool which is widely used is the Myers-Briggs Type Indicator Personality Survey tool. This tool was designed to identify a person's personality type, strengths, and preferences (Jafrani et al., 2017). Another lesson learned was I should have chosen one survey and not two, and I should have altered the research questions. The qualitative process of data collection was beyond my scope of this study. Therefore, I had to rely on a statistician to help me understand the many facets of interpreting and reporting the data.

Conclusion

Most of my research findings were not statistically significant. The findings that were statistically significant, such as the laissez-faire passive avoidant leadership style being the dominant leadership style that emerged, were not consistent with the leadership literature. However, I was able to locate current research that demonstrated some positive aspects of the laissez-faire leadership style, such as Yang (2015) who provided a different perspective on the laissez-faire leader and their approach to intuitive decision making. Having a hands-off approach to leadership and intuitive decision making is a sign of

subordinate empowerment and professional competence. The statistically significant finding for years of experience and intuitive decision making was not surprising and confirmed the literature. The findings could also lead to further research on the intuitiveness of the tenured nurse executive.

References

- Akinci, C., & Sadler-Smith, E. (2019). Collective intuition: Implications for improved decision making and organizational learning. *British Journal of Management*, *30*(3), 558–577. Retrieved from <https://doi.org/10.1111/1467-8551.12269>
- Breevaart, K., & Zacher, H. (2019). Main and interactive effects of weekly transformational and laissez-faire leadership on followers' trust in the leader and leader effectiveness. *Journal of Occupational and Organizational Psychology*, *92*(2), 384–409. Retrieved from <https://doi.org/10.1111/joop.12253>
- Dickinson, A., & Pérez, O. D. (2018). Actions and habits: Psychological issues in dual-system theory. In *Goal-directed decision making* (pp. 1–25). *Academic Press*. Retrieved from <https://doi.org/10.1016/B978-0-12-812098-9.00001-2>
- Dugan, J. P., Bohle, C. W., Woelker, L. R., & Cooney, M. A. (2014). The role of social perspective-taking in developing students' leadership capacities. *Journal of Student Affairs Research and Practice*, *51*(1), 1–15. Retrieved from <https://doi.org/10.1515/jsarp-2014-0001>
- Gronchi, G., & Giovannelli, F. (2018). Dual process theory of thought and default mode network: A possible neural foundation of fast thinking. *Frontiers in Psychology*, *9*, 1237. Retrieved from <https://doi.org/10.3389/fpsyg.2018.01237>
- Jafrani, S., Zehra, N., Zehra, M., Ali, S. M. A., Mohsin, S. A. A., & Azhar, R. (2017). Assessment of personality type and medical specialty choice among medical students from Karachi: Using Myers-Briggs Type Indicator (MBTI) tool. *Journal of Pakistan Medical Associates*, *67*(520), 520–526. Retrieved from

<https://www.jpma.org.pk/PdfDownload/8148>

Kahneman, D. (2011). *Thinking, fast and slow*. New York: Macmillan.

Khatri, N., & Ng, H. A. (2000). The role of intuition in strategic decision making. *Human relations*, 53(1), 57-86. Retrieved from

<https://doi.org/10.1177/0018726700531004>

Lorber, M., Treven, S., & Mumel, D. (2016). The examination of factors relating to the leadership style of nursing leaders in hospitals. *Our Economy*, 62(1), 27-36.

doi:10.1515/ngoe-2016-0003

Nanjundeswaraswamy, T. S., & Swamy, D. R. (2014). Leadership styles. *Advances in management*, 7(2), 57. Retrieved from

<https://www.sciencedirect.com/science/article/pii/S0261517717301309#cebib0010>

Nita, A. M., & Solomon, I. G. (2015). The role of intuition and decision making in Public Administration. *Juridical Current*, 18(2). Retrieved from

http://revcurentjur.ro/old/arhiva/attachments_201502/recjurid152_7F.pdf

Pretz, J. E., Brookings, J. B., Carlson, L. A., Humbert, T. K., Roy, M., Jones, M., & Memmert, D. (2014). Development and validation of a new measure of intuition: The types of intuition scale. *Journal of Behavioral Decision Making*, 27(5), 454-467. Retrieved from <https://doi.org/10.1002/bdm.1820>

Riaz, M. N., & Haque, A. U. (2016). Leadership styles as predictors of decision making styles among top, middle and lower managers. *Pakistan Business Review*, 17(4).

Retrieved from <https://core.ac.uk/download/pdf/268591452.pdf>

- Sadler-Smith, E., & Shefy, E. (2004). The intuitive executive: Understanding and applying gut feel in decision making. *Academy of Management Executives*, 18(4), 76-91. doi:10.5465/AME.2004.15268692
- Shurbagi, A. M. A., & Zahari, I. B. (2012). The relationship between transformational leadership, job satisfaction and the effect of organizational culture in national oil corporation of Libya. In International Conference on Management, Applied and Social Sciences (ICMASS'2012) (pp. 24-25). doi:10.5539/ibr.v5n9p89
- Silva, S., & Mendis, B. A. K. M. (2017). Relationship between transformational, transaction and laissez-faire leadership styles and employee commitment. *European Journal of Business and Management*, 9(7), 13-21. Retrieved from <https://www.researchgate.net/publication/334494910>
- Yang, I. (2015). Positive effects of laissez-faire leadership: Conceptual exploration. *Journal of Management Development*. doi:org/10.1108/JMD-02-2015-0016

Appendix A: AIM Survey Permission

EXTERNAL MESSAGE. DO NOT open attachments or click links from unknown senders or unknown emails.

Dear Chaudron Carter Short,

Thank you for your request. I am happy to report that you can consider this email as *gratis* permission to use the AIM survey as detailed below in your upcoming thesis or dissertation research as is required to complete your degree at Walden University.

Please note that this permission does not cover any 3rd party material that may or may not be found within the work. Distribution of the questionnaire is limited to 300 people and must be controlled, meaning only to the participants engaged in the research or enrolled in the educational activity. All copies of the material should be collected and destroyed once all data collection and research on this project is complete. Any other type of reproduction or distribution of questionnaire content is not authorized without written permission from the publisher

You must properly credit the original source, SAGE Publications, Inc. If you wish to include the questionnaire itself in your final thesis/dissertation report, please contact us again for that request

Please contact us for any further usage of the material and good luck on your thesis/dissertation!

Kind regards,

Mary Ann Price
Rights Coordinator
SAGE Publishing
2600 Virginia Ave NW, Suite 600
Washington, DC 20037
USA

T: 202-729-1403
www.sagepublishing.com

Los Angeles | London | New Delhi
Singapore | Washington DC | Melbourne

Appendix B: MLQ Survey Permission

For use by Chaudron Carter only. Received from Mind Garden, Inc. on June 3, 2020



www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Multifactor Leadership Questionnaire

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.

Sample Items:

As a leader

- I talk optimistically about the future.
- I spend time teaching and coaching.
- I avoid making decisions.

The person I am rating....

- Talks optimistically about the future.
- Spends time teaching and coaching.
- Avoids making decisions

Copyright © 1995 by Bernard Bass & Bruce J. Avolio. All rights reserved in all media.
Published by Mind Garden, Inc. www.mindgarden.com

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix C: Multifactor Leadership Questionnaire Survey

For use by Chaudron Carter only. Received from Mind Garden, Inc. on June 3, 2020

**MLQ Multifactor Leadership Questionnaire™
Leader Form (5x-Short)**

My Name: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. **If an item is irrelevant, or if you are unsure or do not know the answer, leave the answer blank.**

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits you. The word "others" may mean your peers, clients, direct reports, supervisors, and/or all of these individuals.

Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 1. | I provide others with assistance in exchange for their efforts..... | 0 | 1 | 2 | 3 | 4 |
| 2. | I re-examine critical assumptions to question whether they are appropriate | 0 | 1 | 2 | 3 | 4 |
| 3. | I fail to interfere until problems become serious | 0 | 1 | 2 | 3 | 4 |
| 4. | I focus attention on irregularities, mistakes, exceptions, and deviations from standards | 0 | 1 | 2 | 3 | 4 |
| 5. | I avoid getting involved when important issues arise | 0 | 1 | 2 | 3 | 4 |
| 6. | I talk about my most important values and beliefs | 0 | 1 | 2 | 3 | 4 |
| 7. | I am absent when needed..... | 0 | 1 | 2 | 3 | 4 |
| 8. | I seek differing perspectives when solving problems | 0 | 1 | 2 | 3 | 4 |
| 9. | I talk optimistically about the future..... | 0 | 1 | 2 | 3 | 4 |
| 10. | I instill pride in others for being associated with me | 0 | 1 | 2 | 3 | 4 |
| 11. | I discuss in specific terms who is responsible for achieving performance targets..... | 0 | 1 | 2 | 3 | 4 |
| 12. | I wait for things to go wrong before taking action | 0 | 1 | 2 | 3 | 4 |
| 13. | I talk enthusiastically about what needs to be accomplished..... | 0 | 1 | 2 | 3 | 4 |
| 14. | I specify the importance of having a strong sense of purpose | 0 | 1 | 2 | 3 | 4 |
| 15. | I spend time teaching and coaching..... | 0 | 1 | 2 | 3 | 4 |

Continued =>

For use by Chaudron Carter only. Received from Mind Garden, Inc. on June 3, 2020

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
	0	1	2	3	4
16. I make clear what one can expect to receive when performance goals are achieved.....	0	1	2	3	4
17. I show that I am a firm believer in "If it ain't broke, don't fix it.".....	0	1	2	3	4
18. I go beyond self-interest for the good of the group.....	0	1	2	3	4
19. I treat others as individuals rather than just as a member of a group.....	0	1	2	3	4
20. I demonstrate that problems must become chronic before I take action.....	0	1	2	3	4
21. I act in ways that build others' respect for me.....	0	1	2	3	4
22. I concentrate my full attention on dealing with mistakes, complaints, and failures.....	0	1	2	3	4
23. I consider the moral and ethical consequences of decisions.....	0	1	2	3	4
24. I keep track of all mistakes.....	0	1	2	3	4
25. I display a sense of power and confidence.....	0	1	2	3	4
26. I articulate a compelling vision of the future.....	0	1	2	3	4
27. I direct my attention toward failures to meet standards.....	0	1	2	3	4
28. I avoid making decisions.....	0	1	2	3	4
29. I consider an individual as having different needs, abilities, and aspirations from others.....	0	1	2	3	4
30. I get others to look at problems from many different angles.....	0	1	2	3	4
31. I help others to develop their strengths.....	0	1	2	3	4
32. I suggest new ways of looking at how to complete assignments.....	0	1	2	3	4
33. I delay responding to urgent questions.....	0	1	2	3	4
34. I emphasize the importance of having a collective sense of mission.....	0	1	2	3	4
35. I express satisfaction when others meet expectations.....	0	1	2	3	4
36. I express confidence that goals will be achieved.....	0	1	2	3	4
37. I am effective in meeting others' job-related needs.....	0	1	2	3	4
38. I use methods of leadership that are satisfying.....	0	1	2	3	4
39. I get others to do more than they expected to do.....	0	1	2	3	4
40. I am effective in representing others to higher authority.....	0	1	2	3	4
41. I work with others in a satisfactory way.....	0	1	2	3	4
42. I heighten others' desire to succeed.....	0	1	2	3	4
43. I am effective in meeting organizational requirements.....	0	1	2	3	4
44. I increase others' willingness to try harder.....	0	1	2	3	4
45. I lead a group that is effective.....	0	1	2	3	4

For use by Chaudron Carter only. Received from Mind Garden, Inc. on June 3, 2020

MLQ Multifactor Leadership Questionnaire Scoring Key (5x) Short

My Name: _____ Date: _____

Organization ID #: _____ Leader ID #: _____

Scoring: The MLQ scale scores are average scores for the items on the scale. The score can be derived by summing the items and dividing by the number of items that make up the scale. All of the leadership style scales have four items, Extra Effort has three items, Effectiveness has four items, and Satisfaction has two items.

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

Idealized Influence (Attributed) total/4 =	Management-by-Exception (Active) total/4 =
Idealized Influence (Behavior) total/4 =	Management-by-Exception (Passive) total/4 =
Inspirational Motivation total/4 =	Laissez-faire Leadership total/4 =
Intellectual Stimulation total/4 =	Extra Effort total/3 =
Individualized Consideration total/4 =	Effectiveness total/4 =
Contingent Reward total/4 =	Satisfaction total/2 =

1.	Contingent Reward	0	1	2	3	4
2.	Intellectual Stimulation	0	1	2	3	4
3.	Management-by-Exception (Passive)	0	1	2	3	4
4.	Management-by-Exception (Active)	0	1	2	3	4
5.	Laissez-faire	0	1	2	3	4
6.	Idealized Influence (Behavior)	0	1	2	3	4
7.	Laissez-faire	0	1	2	3	4
8.	Intellectual Stimulation	0	1	2	3	4
9.	Inspirational Motivation	0	1	2	3	4
10.	Idealized Influence (Attributed)	0	1	2	3	4
11.	Contingent Reward	0	1	2	3	4
12.	Management-by-Exception (Passive)	0	1	2	3	4
13.	Inspirational Motivation	0	1	2	3	4
14.	Idealized Influence (Behavior)	0	1	2	3	4
15.	Individualized Consideration	0	1	2	3	4

Continued =>

For use by Chaudron Carter only. Received from Mind Garden, Inc. on June 3, 2020

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
	0	1	2	3	4
16.			Contingent Reward	0	1 2 3 4
17.			Management-by-Exception (Passive)	0	1 2 3 4
18.	Idealized Influence (Attributed)	0	1 2 3 4		
19.			Individualized Consideration	0	1 2 3 4
20.			Management-by-Exception (Passive)	0	1 2 3 4
21.	Idealized Influence (Attributed)	0	1 2 3 4		
22.			Management-by-Exception (Active)	0	1 2 3 4
23.	Idealized Influence (Behavior)	0	1 2 3 4		
24.			Management-by-Exception (Active)	0	1 2 3 4
25.	Idealized Influence (Attributed)	0	1 2 3 4		
26.			Inspirational Motivation	0	1 2 3 4
27.			Management-by-Exception (Active)	0	1 2 3 4
28.			Laissez-faire	0	1 2 3 4
29.			Individualized Consideration	0	1 2 3 4
30.			Intellectual Stimulation	0	1 2 3 4
31.			Individualized Consideration	0	1 2 3 4
32.			Intellectual Stimulation	0	1 2 3 4
33.			Laissez-faire	0	1 2 3 4
34.	Idealized Influence (Behavior)	0	1 2 3 4		
35.			Contingent Reward	0	1 2 3 4
36.			Inspirational Motivation	0	1 2 3 4
37.			Effectiveness	0	1 2 3 4
38.			Satisfaction	0	1 2 3 4
39.			Extra Effort	0	1 2 3 4
40.			Effectiveness	0	1 2 3 4
41.			Satisfaction	0	1 2 3 4
42.			Extra Effort	0	1 2 3 4
43.			Effectiveness	0	1 2 3 4
44.			Extra Effort	0	1 2 3 4
45.			Effectiveness	0	1 2 3 4

Appendix D: AIM: Agor Intuitive Management Survey

PART I: YOUR INTUTIVE ABILITY

1. When working on a project, do you prefer to:
 - a. Be told what the problem is, but left free to decide how to solve it?
 - b. Get very clear instructions about how to go about solving the problem before you start?
2. When working on a project, do you prefer to work with colleagues who are:
 - a. Realistic?
 - b. Imaginative?
3. Do you admire people most who are:
 - a. Creative?
 - b. Careful?
4. Do the friends you choose tend to be:
 - a. Serious and hard working?
 - b. Exciting and often emotional?
5. When you ask a colleague for advice on a problem you have, do you:
 - a. Seldom or never get upset if he/she questions your basic assumptions?
 - b. Often get upset if he/she questions your basic assumptions?
6. When you start your day, do you usually:
 - a. Seldom make or follow a specific plan to follow?
 - b. Make a plan first to follow?

7. When working with numbers, do you find that you:
 - a. Seldom make or follow a specific plan to follow?
 - b. Make a plan first to follow?
8. Do you find that you:
 - a. Seldom daydream during the day and really don't enjoy doing so when you do it?
 - b. Frequently daydream during the day and enjoy doing so?
9. When working on a problem do you:
 - a. Prefer to follow the instructions or rules when they are given to you?
 - b. Often enjoy circumventing the instructions or rules when they are given to you?
10. When you are trying to put something together, do you prefer to have:
 - a. Step-step written instructions on how to assemble the item?
 - b. A picture of how the item is supposed to look once assembled?
11. Do you find that the person who irritates you the most is the one who appears to be:
 - a. Disorganized?
 - b. Organized?
12. When an unexpected crisis comes up that you have to deal with, do you:
 - a. Feel anxious about the situation?
 - b. Feel excited by the challenge of the situation?

PART II. DO YOU USE YOUR INTUITIVE ABILITY TO MAKE IMPORTANT DECISIONS?

13. Do you believe that you use intuition frequently to guide your most important decisions? (Check one.)
- Yes _____ No _____
14. If yes, in which circumstances or situations do you use your intuition to make your most important decisions? (Circle the letter(s) of all choices that apply.)
- a. Where there is a high degree of certainty
 - b. Where there is little previous precedent
 - c. Where variables are less scientifically predictable or where “facts” are limited
 - d. Where there are several plausible alternative solutions to choose from with good arguments for each.
 - e. Where time is limited and there is pressure to be right
 - f. Other (specify):
15. What kinds of feelings or signals do you get when you “know” that a particular decision is “right”? What do you rely on for cues? Circle the letter(s) of all choices that apply.)
- a. Excitement
 - b. Warmth

- c. Peaceful / Calm
- d. High energy
- e. Sudden flash of insight
- f. Other (specify):

16. Give an example (or two) of a very important decision where you followed your intuition and it proved to be the “right” decision.

17. What feelings or signals do you get when you “know” you are heading in the wrong direction or should delay your decision for a while? (Circle the letter(s) of all choices that apply.)

- a. Anxious
- b. Upset stomach
- c. Mixed or conflicting signals
- d. Other (specify)

18. What kinds of conditions have obstructed the use of your intuition in important decision-making situations? (Circle the letter(s) of all choices that apply.)

- a. When angry
- b. Under stress
- c. Too ego involved in the decision
- d. Rushed my decision

e. Lack of confidence

f. Other (specify):

19. Do you tend to “keep it a secret” that you use intuition to make decisions, or do you feel comfortable sharing this fact with others? (Check one.)

Keep it a secret _____ Share with others _____

Please explain: _____

20. When using your intuition to make a decision, where have you found it functions best? (Circle the letter of the choice that applies.)

a. At the very beginning when I am trying to assess the future or the options available to me.

b. At the very end when I am trying to sift through and digest all the cues and information available to me.

c. It really varies depending on the problem or issue at hand (specify):

21. When making a major decision, do you use any particular technique or method(s) to help draw on your intuitive ability more effectively? (Check one.)

Yes _____ No _____

If yes, please describe:

22. Do you use or regularly practice any particular technique or method(s) to help develop further your intuitive ability? (Check one.)

Yes _____ No _____

If Yes, please describe:

23. Depending on whether you are a business or government executive, answer the appropriate section of this item. If you are a student, select the answer that best indicates your expected occupational specialty and goal for management level.

Business Executive: Select one Occupational Specialty and one Management Level in which you are currently functioning. Circle one letter for each category.

Occupational Specialty

- a. General Administration
- b. Financial / Budget
- c. Planning
- d. Personnel / Organization Development
- e. Production
- f. Other (specify):

Management Level

- a. Top
- b. Middle
- c. Lower

Government Executive: Select one Occupational Specialty, one Government Level and one Management Level in which you are currently functioning. Circle one letter for each category.

Occupational Specialty

- a. General Administration

- b. Policy Program Planning
- c. Urban and Regional Planning
- d. Fiscal and Budget
- e. Management Analysis
- f. Personnel Administration
- g. Law Enforcement
- h. Health and Hospital Administration
- i. Other (specify):

Government Level

- a. Federal
- b. State
- c. Local
- d. County

Management Level

- a. Top
- b. Middle
- c. Lower

24. I like my occupation and feel it is right for me. (Check one.)

Yes _____ No _____

25. Is your sex...

- a. Female?
- b. Male?

26. Ethnic background. (Circle the one with which you identify most closely.)

- a. American Indian, Alaskan Native
- b. Asian American, Asian Indian, Oriental, Southeast Asian
- c. Filipino
- d. Pacific Islander
- e. Black Non-Hispanic
- f. Mexican American, Chicano
- g. Latin American, Puerto Rican, Cuban, other Hispanic
- h. White Non-Hispanic, Caucasian, European, Middle Eastern, North African
- i. Other