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Nurse Managers' Self and Authentic Leadership in Relation to Their Job Satisfaction

L'Ouverture Ellis
Walden University

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Walden University

College of Social and Behavioral Sciences

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L'Ouverture O. Ellis

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2019

Abstract

Nurse Managers' Self and Authentic Leadership in Relation to Their Job Satisfaction

by

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MPS, The University of Arkansas Clinton School of Public Service, 2007

MSPH, Tulane University School of Public Health and Tropical Medicine, 2004

BS, Xavier University of Louisiana, 2003

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Industrial and Organizational Psychology—General

Walden University

November 2019

Abstract

There is a high cost to nurse manager turnover and added to this challenge is the difficult tasks that hospitals have of recruiting and retaining nurse managers. These difficulties make it challenging for healthcare providing institutions to achieve consistent positive patient and staff outcomes. The current study examined the relationship between self-leadership, authentic leadership, and job satisfaction with nurse managers. Three elements making up the theoretical framework of this research were self-leadership, authentic leadership, and job satisfaction. The 2 predictor variables were self-leadership and authentic leadership. An evaluation of whether a relationship existed between the predictors and the criterion, job satisfaction, was made. A total of 76 nurse managers completed an online survey, and a linear regression was used to analyze the data. Results indicated that self-leadership was not a statistically significant predictor of job satisfaction at a CI of 95%. Authentic leadership and 3 of its 4 dimensions were found statistically significant as a predictor of job satisfaction at a CI of 95%. This study may have implications for positive social change through its indirect effect on the management and execution of patient care.

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Dedication

This study is dedicated to those seeking to improve their leadership skills and those who support these efforts.

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I would like to give thanks to God for my desire to learn and many other blessings; my mother for her inspiration; my wife, my family, and friends for their encouragement along the way; and Dr. Nancy Bostain for her steady guidance.

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Chapter 1: Introduction to the Study

The transformation of the U.S. health sector has created an environment for increased competition among healthcare entities, including hospitals. Changes in healthcare in the United States due to economic, political, and policy forces have shown how vital hospitals and other healthcare providing entities are in decreasing mortality (Jiang, Friedman, & Jiang, 2013). As an example, Dhar, Kim, Wima, Hoehn, and Shah (2018) noted in their study that safety-net hospitals, hospitals that typically provide care to underprivileged patient populations, provide healthcare services to these vulnerable populations in the United States without decreasing favorable health outcomes for patients served. As market forces continue to drive hospitals toward pay-for-performance, having staff with the knowledge, skills, abilities, and training to perform is increasingly essential. Additionally, having the proper nursing staff and administration of this staff is vital to the ability of a healthcare entity to provide the quality of care necessary to prevent deaths, injuries, and infections in healthcare facilities and thereby continue to reduce mortality rates.

Aiken, Havens, and Sloane (2009) noted that nurses employed in hospitals recognized with the American Academy of Nursing's Magnet Nursing Services Recognition program experienced high levels of job satisfaction and delivered a better quality of care, as reported by patients. Nurse managers are essential to the successful administration of nursing staff and positive outcomes for patients.

Djukic, Jun, Kovner, Brewer, and Fletcher (2017) suggested that nurse managers were the largest segment of health care management in the United States. Critical to the

administrative infrastructure of health care execution and control are nurse managers. Djukic et al. noted that there is a high cost to nurse manager turnover and added to this challenge the difficult tasks that hospitals have of recruiting and retaining nurse managers. These difficulties create a context that makes it challenging for healthcare providing institutions to achieve positive patient and staff outcomes consistently.

Han, Trinkoff, and Gurses (2015) noted that job satisfaction was associated with several factors that included psychological demands. Han et al. found that nurses who experienced greater mental demands were less satisfied with their jobs. The researchers suggested future researchers should consider interventions that address factors leading to decreased job satisfaction, burnout, and intent to leave, among other work-related outcomes. Among these considerations is self-leadership and authentic leadership of nurse managers. This study will help increase the insights gained from determining the relationship of both variables on work attitudes and other work-related outcomes. This information could provide insight related to mitigating the psychological demands that Han et al. suggested are involved in adverse work outcomes.

Background

Cable and Graham (2018) described nurse managers as vital to the administration and proper treatment and care of patients. They also noted that job satisfaction and the nurse manager's style of leadership were essential factors in nurses' decisions to remain with their current employers and in their current positions. The researchers acknowledged that additional investigation is needed to understand further what makes nurse managers

satisfied in their jobs. These authors encouraged more research investigating the determinants of nurse manager job satisfaction.

Self-Leadership

Both classic and contemporary studies have elucidated the concept of self-leadership. However, Flores, Jiang, and Manz (2018) suggested that self-leadership had been under investigated in some areas. These authors suggested that self-leadership had a relationship with transformational leadership. They also noted that leadership preference was among the criterion variables predicted by self-leadership. Researchers have sought to expand on this subject by exploring self-leadership in novel contexts and settings.

Furtner, Baldegger, and Rauthmann (2013) studied leaders who influenced themselves through self-leadership and concluded that these leaders were effective in leading others. The authors found leaders' self-leadership was positively related to active leadership styles, such as authentic leadership. Furtner et al. (2013) suggested self-leadership could result in positive organizational outcomes.

Additional evidence presented by researchers in similar studies has indicated that self-leaders have a relationship with positive work outcomes of employees. From their examination of leaders and self-leadership, Furtner, Rauthmann, and Sachse (2015) concluded that leaders engaging in self-leadership strategies were influential as leaders and perceived as such by their employees. Researchers have examined individual components of self-leadership, leading to a clarification of this construct. Furtner, Tutzer, and Sachse (2018) examined the role that mindful thought strategies, an element of self-leadership, had on leaders. The researchers observed that a relationship existed between

the mindfulness and positive outcomes of followers. They contended that the use of such strategies could increase subjective well-being and increase job satisfaction. The literature also contains descriptions of the role of self-leadership in the context of an organization and in relationship to group dynamics.

Authentic Leadership

Avolio (2010) and Northouse (2019) described authentic leadership as being comprised of self-awareness, balanced processing, moral perspective and transparency, and self-discipline with the ability to self-regulate. Authentic leaders influence followers as they apply self-leadership strategies and master their domains, which permit a constructive relationship for well-being (Karam, Gardner, Gullifor, Tribble, & Li, 2017; Khan, Muhammed, Afridi, & Sarward, 2017). Authentic leadership has a positive relationship to work attitudes and behaviors, including job satisfaction and well-being (Khan et al., 2017).

Job Satisfaction

Agarwal and Sajid (2017) studied job satisfaction and determined job satisfaction predicted affective and normative commitment. Lack of employee organizational commitment, above-average or higher than average employee turnover, and corporate loss of funds due to recruiting and training new employees due to low job satisfaction are threats to an organization's survival (Agarwal & Sajid, 2017). Karim (2017) defined job satisfaction as an employee's attitude toward the work they would perform and toward the organization. Karim described job attitude as a feeling that employees have about their jobs, and the different aspects of these jobs have constituted an attitudinal variable.

Karim noted a manager's organizational commitment had a relationship to job satisfaction among Malaysian academic librarians, reporting that management leadership and commitment served as precursors to organizational performance quality. Olaniyan and Hystad (2016) indicated authentic leadership affected and predicted intentions to quit and job satisfaction. Ling, Liu, and Wu (2017) provided information on the relationship between servant leadership, authentic leadership, trust, positive psychological capital, and performance at a group level among Chinese hospitality employees. The authors concluded that belief in management would mediate the relationship between positive psychological capital and performance.

Problem Statement

Nursing shortages in the United States are at an epidemic level, and this increasing trend is projected to continue (Cox, Willis, & Coustasse, 2014). Brown, Fraser, Wong, Muise, and Cummings (2013) noted job satisfaction was among the prominent factors related to a nurse manager's intention to stay in a job. A review of the literature showed that examining factors influencing job satisfaction of nurse managers was vital for the future of health care organizations seeking to remain competitive by keeping top talent and providing high-quality care (Lee & Cummings, 2008). In another review of self-leadership and nursing, Won and Cho (2013) found that a relationship between self-leadership and job satisfaction seemed present. Won and Cho conducted a meta-analysis examining literature related to nurses and self-leadership using 124 papers from a total of 150 papers published in Korea between 2003 and 2012. The authors determined that a trend was emerging, noting that increasing interest in this area was

evident among researchers. They wanted to learn more about the relationship between self-leadership and other variables, including job satisfaction (Won & Cho, 2013). The researchers determined this finding by using descriptive statistics to show frequency and percentage of subjects, reports, and conclusions identified in the literature reviewed.

The problem of this research investigation was the need to understand better the relationships associated with nurse managers' job satisfaction. Cable and Graham (2018) reported that although nurse managers identified being satisfied with their jobs, these same managers expressed plans to leave their positions. The findings of the study indicated that burnout, career change, retirement, and promotion were common reasons for the intent to leave, and turnover was linked to lower job satisfaction. Cable and Graham highlighted the need for a better understanding of determinants of job satisfaction and the relationships of job satisfaction to other factors. Positive work outcomes, intrinsic motivation, and increased effort have a relationship with job satisfaction. The focus of this research was examining the relationship between self and authentic leadership as predictors of nurse manager job satisfaction.

Purpose of the Study

The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and their job satisfaction. The goal was to understand better how self and authentic leadership relate to job satisfaction and to contribute this understanding to the body of knowledge related to leadership and work attitudes.

Theoretical Framework

Three elements constituted the theoretical framework of this research: self-leadership, authentic leadership, and job satisfaction. Manz (1986) constructed and developed self-leadership as a comprehensive self-influencing perspective and process that included self-management of behaviors and thought. Manz proposed that the goal of self-leadership practice would enable individuals to manage their thought patterns, directing their mental energy to redesign a job mentally for managing performance, regardless of desirable or undesirable elements of the job. Manz emphasized the importance of intrinsic motivation and thought management in self-regulation, an element used in self-leadership. Houghton and Jinkerson (2007) suggested that their findings aligned with the concepts of Manz's framework of self-leadership.

Self-leadership is a theory derived in part from the concept of self-management (Manz, 1986). Markham and Markham (1995) asserted that self-management encompassed individual processes and self-reward administration. They noted Manz (1986) expanded self-management to include self-leadership by incorporating constructs of self-regulation, self-control process, and intrinsic motivation in its makeup.

Researchers exploring concepts of self-leadership have expanded the constructs, recognizing that self-leadership includes several related theories (Houghton & Yoho, 2005). Houghton and Yoho (2005) noted that self-leadership, as a process, uses a specific set of strategies oriented toward behaviors and cognitive thought processes that positively affect individual outcomes. In further refinements of self-leadership, researchers have conceptualized it as a process that engages behavioral strategies, reward strategies, and

constructive thought strategies imposed by the individual on the self to move toward a positive and meaningful outcome (Neck & Houghton, 2006).

Neck and Houghton (2006) noted that self-observation arose from self-awareness, which influenced individuals' engagement of specific strategic behaviors. They described natural reward strategies as those strategies that build individually defined enjoyment into a task by shaping perceptions from the negative and toward positive aspects. Constructive thought pattern strategies are the third conceptual strategy described by Neck and Houghton. They noted that constructive thought pattern strategies included identifying and replacing unproductive thoughts or beliefs. These might consist of images, self-talk, or assumptions.

I created a job-satisfaction-oriented model of self-leadership by combining the emotional self-leadership model of Manz, Houghton, Neck, Fugate, and Pearce (2016) and Houghton and Jinkerson's (2007) conclusions of thought strategies related to employee job satisfaction. The job-satisfaction-oriented construct of self-leadership included job satisfaction oriented self-awareness, job satisfaction oriented self-observation, job satisfaction oriented self-leadership behavioral strategies, job satisfaction oriented natural reward strategies, and job satisfaction oriented cognitive thought strategies.

The constructs of self-leadership are social cognitive theory and intrinsic motivation theory. Neck and Houghton (2006) noted that self-leadership was related to self-regulation. Self-regulation has positive outcomes. Although self-leadership is related to self-regulation, it is distinct from self-regulation (Bailey, Barber, & Justice, 2016).

Authentic leadership requires self-regulation to be developed and consistently demonstrated (Kinsler, 2014).

Baumeister and Heatherton (1996) described self-regulation as a process. The researchers noted that self-regulation was composed of standards, monitoring, and operational process that aligned thoughts and behaviors with standards. Avolio and Gardner (2005) defined self-regulation as a process whereby authentic leaders align their behavior with self-awareness. The commonality of self-regulation among self and authentic leadership as processes offers an opportunity to examine their relationship as predictor variables and their relationship to job satisfaction. I examined the relationships of leaders who engaged in self-leadership strategies to job satisfaction and the authentic leadership approach to leadership.

Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008) presented authentic leadership as a pattern of leader behavior that draws upon psychological capacities to foster greater self-awareness and foster positive self-development among other dimensions that make up authentic leadership. Muceldili, Turan, and Erdil (2013) examined the relationship of authentic leadership to creativity. They suggested that the authentic leaders could empower others to explain their ideas and decisions, which could ignite employees' creativity. The current theoretical constructions for both self-leadership and authentic leadership was self-regulation, although both self and authentic leadership were broader concepts than self-regulation alone (see Avolio & Gardner, 2005; Godwin, Neck, & Houghton, 1999).

Spector (1997) initially suggested that job satisfaction could be considered a global feeling that individuals hold about their jobs or various facets of their jobs. He proposed that a faceted approach would provide a more refined representation of an individual's satisfaction. Job satisfaction can be considered a process of representing the facets or characteristics of one's job (Khan et al., 2017; Spector, 1997). Loher, Noe, Moeller, and Fitzgerald (1985) asserted that a relationship between job characteristics and job satisfaction existed. McFarlin and Rice (1992) found that job facets affected the relationship between job facets and job satisfaction. Batura, Skordis-Worrall, Thapa, Basnyat, and Morrison (2016) suggested the flexibility of Spector's (1985) job satisfaction facet model by applying the job satisfaction instrument to their study of health workers in Nepal. They determined that the theoretical construct supporting the job satisfaction measurement instrument was valid and reliable for use beyond the original population of the study. In the described context, the theoretical constructs of self and authentic leadership, when considered as a process, indicated these might relate to job satisfaction (Avolio & Gardner, 2005; Godwin et al., 1999; Khan et al., 2017).

Avolio and Gardner (2005) noted that authentic leadership is a more generic construct that forms the basis for other forms of positive leadership. The authors argued that generically defining authentic leadership permits the flexibility needed to encompass other types of positive leadership. Avolio and Gardner noted that one focus of authentic leadership is leader self-awareness. The researchers pointed out that the constructs involved in developing and maintaining authentic leadership include self-awareness and self-regulation.

Tonkin (2013) argued that authentic leadership is reliant on personality traits, which include self-awareness. Tonkin asserted that the self-awareness of leaders is self-regulated, which permits them to compare and adjust to standards perceived as valuable. Walumbwa et al. (2008) provided a refined definition of authentic leadership that includes authentic leadership as a process that involves positive psychological capacities, a process of self-awareness and self-regulation. Relational transparency, self-consciousness, internal moral perspective, and balanced processing of information are the concepts that form authentic leadership (Avolio & Gardner, 2005; Walumbwa et al., 2008).

Azanza, Moriano, and Molero (2013) and Walumbwa et al. (2008) conceptualized dimensions of authentic leadership as self-awareness, balanced processing, relational transparency, and internalized moral perspective. *Self-awareness* is an understanding of oneself and the influence of one's actions on others. *Balanced processing* involves intentional decision making achieved by removing bias as much as possible to process all relevant information before making a choice. *Relational transparency* can be described as leading open and honestly through sharing one's true self. Lastly, the *internalized moral perspective* is the idea that one is being guided through a self-regulation process by one's own internalized morals and values.

Research Questions

RQ1: Does nurse managers' self-leadership predict their job satisfaction?

H₀₁: Nurse managers' self-leadership does not predict their job satisfaction.

H₁₁: Nurse managers' self-leadership does predict their job satisfaction.

RQ2: Does nurse managers' authentic leadership predict their job satisfaction?

H₀₂: Nurse managers' authentic leadership does not predict their job satisfaction.

H₁₂: Nurse managers' authentic leadership does predict their job satisfaction.

RQ3: Does nurse managers' self and authentic leadership interact to predict their job satisfaction?

H₀₃: Nurse managers' self and authentic leadership does not interact to predict their job satisfaction.

H₁₃: Nurse managers' self and authentic leadership does interact to predict their job satisfaction.

Nature of the Study

A correlational linear regression analysis was used to examine the relationship between self and authentic leadership and job satisfaction. The quantitative methodology was consistent with the examination of self-leadership (see Houghton, Dawley, & DiLiello, 2012; Nel & van Zyl, 2015; Prussia, Anderson, & Manz, 1998; Vijayabanu, Therasa, AkshaySundaram, & MariaBonaparte, 2017). This methodology was applicable to measuring authentic leadership and job satisfaction (see Spector, 1985; Stander, de Beer, & Stander, 2015; Walumbwa et al., 2008). The predictor and criterion variables were measured using surveys. The predictor variables were self-leadership and authentic leadership; the criterion variable was job satisfaction. A sample of nurse managers and

their responses was analyzed. This inquiry conformed to a quantitative method and correlational linear regression design because the survey results were used to indicate each of the three constructs in this study, through correlational linear regression analysis.

The Study Significance

The results of this study will be significant to practitioners by adding to the body of knowledge while providing useful information leading to a better understanding of intrinsic motivating factors related to the examination of relationships between self-leadership, the authentic leadership approach, and nurse manager job satisfaction (Avolio, 2010; Brown et al., 2013; Jin & Hyun, 2013; Neck & Houghton, 2006; Vijayabanu et al., 2017). The results from this study may add to the understanding of both scholars and practitioners regarding the relationship that authentic leadership approaches to management have with job outcomes in the context of nursing management (Fallatah & Laschinger, 2016). The social change implications of this study involve its indirect effect on the management and execution of patient care. Administrators who review this study can gain insight into how self-leadership and authentic leadership affect nurse manager job satisfaction and patient outcomes, which may affect the training of healthcare providers (see A. S. Choi & Oh, 2013). The practical benefits that professional practitioners may gain from this study include an improved understanding of the application of self-leadership and the authentic leadership approach in managing, empowering, and motivating knowledge-based employees (Amundsen & Martinsen, 2015; Bligh, Pearce, & Kohles, 2006; Sesen, Tabak, & Arli, 2017).

Definitions of Terms

Self-leadership: I adapted the definition of self-leadership from Houghton et al.'s (2012) abbreviated self-leadership questionnaire and Amundsen and Martinsen's (2015) study of self-leadership, empowerment, and job satisfaction. *Self-leadership* refers to an individual's ability to actively engage in using behavior-focused strategies, natural reward strategies, and constructive thought pattern strategies for positive self-influence. The behavior-focused strategies for this study included measures of self-observation, goal setting, and self-reward. Natural reward strategies for this study included the measure of perceived ability to focus on enjoyable aspects of the task, being intrinsically motivated, and positively engaging in task redesign for enjoyment. Constructive thought patterns are cognitively oriented patterns that an individual engages in to evaluate beliefs, use positive self-talk, and maintain a level of awareness about feelings and thoughts related to tasks and self in the context of work through visualizing performance.

Authentic leadership: Authentic leadership is an approach to leadership wherein the leader demonstrates four components of the style. In this study, authentic leadership was acknowledged by measurement when a leader identified him- or herself as being self-aware, being relationally transparent (being genuine), engaging in balanced processing (being fair-minded), and exhibiting moral behavior (doing the right thing). A manager who engaged in authentic leadership would have self-reported various levels of these four components of the leadership approach.

Job satisfaction: In this study, job satisfaction was considered to derive from managers' feelings about their job and the degree to which they self-reported satisfaction

with their job. Managers who are satisfied with their job would self-report high ratings on the nine facets of job satisfaction measured by the job satisfaction instrument. Managers self-reporting job satisfaction would demonstrate satisfaction in the majority of their responses.

Nurse manager: In this study, a nurse manager was a professional nurse who was or had been responsible for evaluating and managing the performance of staff nurses. This person had broad administrative responsibility in managing staff nurses and was involved in the hiring and separation of nurses under their management. The nurse managers in this study were members of the American Organization of Nurse Executives (AONE, n.d.) or affiliated with similar nursing groups and worked in various healthcare organizations.

Assumptions, Limitations, Scope, and Delimitations

Assumptions

This study involved the assumption that participants were honest in their responses to the survey questions. Another assumption was that each participant had practiced as a nurse and served as a nurse manager for more than 6 months. The private collection of data was expected to permit open and honest answering of survey questions and reduce response bias. An additional assumption was that participants would remain comfortable using technology to respond to surveys and could adequately interpret questions provided in the survey without researcher intervention.

Limitations

The results of this study might not be transferable due to the specificity of the sample to be studied. Also considered were the limitations associated with the instruments used in this study. Groves et al. (2009) explained that surveys can constrain respondents due to the structured nature of survey questions, the design of the responses, the questions, and the respondents' interpretations of the questions.

Scope and Delimitations

The scope of this study included nurse managers active in the management of nursing personnel. Participants were members of the AONE (n.d.). These participants had been nurse managers for more than 6 months and served in a variety of health care organizations.

There were multiple research delimitations. A primary focus was on active nurse managers. All nurse managers were (or had been) members of the AONE (n.d.). Additionally, the focus was on nurse managers with access to computer technology and electronic mail. The selection of the nurse managers was a selection of convenience due to the established relationship of the AONE with its members who were serving or had served in the capacity of nurse manager.

The research depth was limited to the questionnaires used to assess the factors and elements measured. The design of the assessments used in this study called for self-reporting because of the survey respondents' perceptions at the time of survey response. I surveyed a population that was not vulnerable, and the topic of interest was not sensitive.

Summary

Chapter 1 established the framework for examining the relationship of self-leadership and authentic leadership style to nurse managers' job satisfaction. Nurse managers are critical to the administration of quality healthcare. As the healthcare industry continues to confront the challenge of low job satisfaction, turnover, and burnout among—but not limited to—nurse managers, a better understanding of the factors attributed to job satisfaction and other work-related attitudes, behaviors, and outcomes remains an important area for investigation (Warshawsky & Havens, 2014).

The concept of self-leadership and its relationship to work attitudes such as job satisfaction have been briefly examined and require further examination (Neck & Houghton, 2006). Presented in this chapter were the concepts of self-leadership, authentic leadership, and job satisfaction. Discussed were the theoretical constructs that established the idea that self-leadership and authentic leadership could affect job satisfaction of the individuals engaging in the respective activities (Houghton & Jinkerson, 2007; Walumbwa et al., 2008). The population of interest, nurse managers, has been established as a critical workforce vital to the quality of care provided to patients and the successful management of the healthcare organization (Aiken et al., 2009; Asencio, 2016; A. S. Choi & Oh, 2013; Cox et al., 2014). An explanation of the theoretical framework provided an understanding of the concepts of self-leadership, authentic leadership, and job satisfaction as related to the population of interest, nurse managers.

Chapter 2 addresses recent research on self-leadership, authentic leadership, and job satisfaction. In Chapter 2, I present literature on the variables of interest while

directing attention to a narrower scope leading to the focus of this study. After completing Chapter 2, the reader should understand self-leadership and authentic leadership and their potential relationship to job satisfaction for the population of interest. Additionally, readers will have gained a general overview of the variables, which may further assist them in understanding the importance of this study to the respective bodies of knowledge. In Chapter 3, I describe the population, research design, survey instruments, data collection procedures, measures to ensure respondents' protection and privacy, and data analysis. Chapter 4 provides the results of the study. This chapter includes data captured from participants and analyses. In Chapter 5, a discussion of the results is presented, along with conclusions and future study recommendations.

Chapter 2: Literature Review

Nursing shortages in the United States are at an epidemic level and are projected to continue (Cox et al., 2014). Brown et al. (2013) noted that job satisfaction was among prominent factors related to nurse managers' intention to stay in their jobs. A review of the literature showed that examining factors influencing job satisfaction for nurse managers is essential for the future of healthcare organizations seeking to remain competitive by keeping top talent and providing high-quality care (Lee & Cummings, 2008). In another review of self-leadership and nursing, Won and Cho (2013) found a relationship between self-leadership and job satisfaction. The problem addressed was the need to better understand the determinants and relationship of nurse managers' job satisfaction. Cable and Graham (2018) reported that although nurse managers identified being satisfied with their jobs, these same managers expressed plans to leave their positions. The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and job satisfaction. The goal was to understand better the relationship of self and authentic leadership to work attitudes such as job satisfaction, thereby contributing to the body of knowledge related to leadership and work attitudes.

This literature review contains an overview of the research leading up to this correlational linear regression study of self and authentic leadership as predictors of nurse manager job satisfaction. The review includes the rationale for ongoing research into the determinants of job satisfaction. The literature cited in this document describes research that progressively demonstrates the need to examine the relationship between self and

authentic leadership to determine if they predict job satisfaction. The first section contains a discussion of research focused on predicting and explaining job satisfaction. The next section presents a review of studies on self-leadership in general, and self-leadership and job satisfaction. The third section contains a review of studies about authentic leadership in general, and authentic leadership and job satisfaction. The chapter ends with a summary. Warshawsky and Havens (2014) and Han et al. (2015) noted the importance of better understanding the determinants of job satisfaction among nurse managers. The research findings may be used to understand nurse manager job satisfaction by examining the relationship of self and authentic leadership to job satisfaction. The literature review provides a review of previous research with the study variables.

Search Strategy

The use of keywords and phrases permitted the search, identification, and review of literature that provided the informational background and understanding of the need for the research. Keywords used to conduct the literature search and review included *self-leadership, self-leadership, authentic leadership, job satisfaction, predictors of job satisfaction, leadership worker attitudes, leadership, leadership job satisfaction, transformational leadership, and nurse managers*. These keywords were combined to create key phrases that aided in the search for literature related to the subject.

Walden University provided the main databases accessed; other similar database access was made available through the Internet. The primary databases providing the literature of interest were Elsevier, Emerald, Sage Publications, ScienceDirect, Springer,

Taylor and Francis, and Wiley Online Library. The scope of the literature review encompassed recent research (i.e., published within the past 5 years) and seminal literature (i.e., published more than 5 years ago) related to key variables and constructs of interest. This literature review primarily contains empirical, peer-reviewed research about leadership published in scholarly journals in health and organizational sciences.

Theoretical Foundation

Researchers have relied on self-leadership, authentic leadership, and job satisfaction in their efforts to understand leadership in the field of nursing. Initially constructed by Manz (1986), self-leadership theory was developed to conceptualize self-leadership as a comprehensive self-influence perspective and process that included self-management of behaviors and thought. The goal of self-leadership practice is to enable individuals to manage their thought patterns, directing their mental energy to redesign a job for managing performance, regardless of desirable or undesirable elements of the job. Manz emphasized the importance of intrinsic motivation and thought management in self-regulation as a supportive construct of self-leadership. Houghton and Jinkerson (2007) suggested that their findings concerning the effects of constructive thought strategies on job satisfaction aligned with the concepts of Manz's framework of self-leadership.

Self-leadership is a theory derived from the concept of self-management (Manz, 1986). Markham and Markham (1995) asserted that self-management encompasses individual processes and self-reward administration. They noted that Manz (1986)

expanded self-management to self-leadership by including constructs of self-regulation, self-control process, and intrinsic motivation in its makeup.

Recent concepts of self-leadership have expanded the constructs based on a recognition that self-leadership includes several related theories (Houghton & Yoho, 2005). Houghton and Yoho (2005) defined self-leadership as a process that uses a specific set of strategies oriented toward behaviors and cognitive thought processes that positively affect individual outcomes. Further refinement of self-leadership has conceptualized it as a process that engages behavioral strategies, rewards strategies, and provides constructive thought strategies imposed by the individual on the individual to move toward a positive and meaningful outcome (Neck & Houghton, 2006).

Neck and Houghton (2006) noted that self-observation arises from self-awareness, which then affects the individual to engage in specific strategic behaviors. The researchers described natural reward strategies as those strategies that build individually defined enjoyment into a task by shaping perceptions in a manner that moves attention away from the negative and more directly toward positive aspects. The third conceptual strategy described by Neck and Houghton was constructive thought pattern strategies, which include identifying and replacing unproductive thoughts or beliefs. These might include images, self-talk, or assumptions.

This current study used a model of emotional self-leadership created by Manz et al. (2016) as a guide and the conclusions of Houghton and Jinkerson's (2007) study on the relationship of constructive thought strategies to job satisfaction of employees. This conceptualized model was as follows: job satisfaction oriented self-awareness, job

satisfaction oriented self-observation, job satisfaction oriented self-leadership behavioral strategies, job satisfaction oriented natural reward strategies, and job satisfaction oriented cognitive thought strategies.

The constructs of self-leadership derive from social cognitive theory and intrinsic motivation theory. Neck and Houghton (2006) noted that self-leadership is related to self-regulation, which is associated with positive outcomes. Although self-leadership is related to self-regulation, it is distinct from self-regulation (Bailey et al., 2016). Authentic leadership requires self-regulation to be developed and consistently demonstrated (Kinsler, 2014).

Baumeister and Heatherton (1996) described self-regulation as a process. They noted that self-regulation is composed of standards, monitoring, and operational process that align thoughts and behaviors with standards. Avolio and Gardner (2005) defined self-regulation as a process whereby authentic leaders align their behavior with self-awareness. The commonality of self-regulation among self and authentic leadership as processes offers an opportunity to examine their relationship as predictor variables and their relationship to job satisfaction. In the current study, I examined this relationship as it pertained to the job satisfaction of leaders who engaged in the described process.

Walumbwa et al. (2008) originally presented authentic leadership as a pattern of leader behavior that drew on psychological capacities to foster greater self-awareness and positive self-development among other dimensions that make up authentic leadership. Muceldili et al. (2013) suggested that a relationship exists between authentic leadership and creativity. They suggested that the dimensions of authentic leadership expressed by

leaders could empower leaders to explain their ideas and decisions, which could ignite employees' creativity. The common theoretical construct supports both self and authentic leadership, which provides a framing that unites the two concepts and can explain the possible relationships identified. The common theoretical construction for both self-leadership and authentic leadership is self-regulation, although both self and authentic leadership are broader concepts when compared to self-regulation (Avolio & Gardner, 2005; Godwin et al., 1999).

Spector (1997) originally suggested that job satisfaction could be considered a global feeling that individuals have about their jobs or various facets of their jobs. He proposed that a faceted approach would provide a more refined representation of an individual's satisfaction. Job satisfaction can be considered facets or characteristics of one's job leading to a process of reactions toward the job (Khan et al., 2017; Spector, 1997). Loher et al. (1985) asserted that a relationship between job characteristics and job satisfaction existed. McFarlin and Rice (1992) found that job facets affected the relationship between job facets and job satisfaction. Batura et al. (2016) showed the flexibility of Spector's (1997) job satisfaction facet model by applying the job satisfaction instrument to their study of health workers in Nepal. They determined that the theoretical construct supporting the job satisfaction measurement instrument was valid and reliable for use beyond its original population of study. In the described context, the theoretical constructs of self and authentic leadership suggest that a relationship may extend to influencing job satisfaction when they are a process (Avolio & Gardner, 2005; Godwin et al., 1999; Khan et al., 2017).

Avolio and Gardner (2005) noted that authentic leadership is a more generic construct that forms the basis for other forms of positive leadership. The authors argued that generically defining authentic leadership permits the flexibility needed to encompass other forms of positive leadership. Avolio and Gardner noted that one focus of authentic leadership is leader self-awareness. The researchers noted that the constructs involved in developing and maintaining authentic leadership include self-awareness and self-regulation.

Tonkin (2013) argued that authentic leadership is reliant on personality traits including self-awareness. Tonkin asserted that the self-awareness of leaders is self-regulated, which permits them to compare and adjust to standards perceived as important. Walumbwa et al. (2008) provided a refined definition of authentic leadership that included authentic leadership as a process that involves positive psychological capacities, a process of self-awareness and self-regulation. Relational transparency, self-consciousness, internal moral perspective, and balanced processing of information are the conceptual basis of authentic leadership (Avolio & Gardner, 2005; Walumbwa et al., 2008).

Azanza et al. (2013) and Walumbwa et al. (2008) conceptualized dimensions of authentic leadership as follows: self-awareness, balanced processing, relational transparency, and internalized moral perspective. Self-awareness refers to understanding oneself and the effect of one's actions on others. Balanced processing refers to intentional decision making by considering all available information and removing bias as much as possible to process all relevant information before making a choice. Relational

transparency can be described as leading openly and honestly through sharing one's true self. Lastly, the internalized moral perspective refers to a person being guided through a self-regulation process and internalized morals and values.

Literature Review Related to Key Variables and Concepts

Job satisfaction research on nurse managers is limited; nurse managers are critical to quality patient care and positive patient outcomes, but they have been reported to experience higher levels of psychological distress than the general population (Lee & Cummings, 2008). The transformation of the healthcare environment, the psychological demands placed on nurses, and the need for more research on the determinants of job satisfaction among nurse managers provided an important opening for the study of self and authentic leadership as predictors of job satisfaction (see Bligh et al., 2006; Cable & Graham, 2018; Han et al., 2015; Jiang et al., 2013; Warshawsky & Havens, 2014).

Determining whether self and authentic leadership are predictors of job satisfaction indicated other determinants of job satisfaction beyond the current scope of the subject's examination. Understanding the determinants of nurse manager job satisfaction could help organization leaders identify ways to improve work outcomes, delivery of quality care, and job satisfaction while reducing intent to leave and turnover of this important group of professionals (Bligh et al., 2006; Jooste & Cairns, 2014; Warshawsky & Havens, 2014). Self-leadership, an area of leadership deserving more attention, and authentic leadership, a style of leadership shown to improve job attitudes, can add insights regarding any roles these may have in nurse manager's job satisfaction (A. S. Choi & Oh, 2013; Djukic et al., 2017; Fallatah & Laschinger, 2016; Pearce, 2007).

Studies of Predicting Job Satisfaction

Job satisfaction can drive performance, organizational commitment, and intention to quit. Job satisfaction is the alignment of expectations and needs with the individual's perspective (Agarwal & Sajid, 2017). This section describes recent researchers who have examined predictors of job satisfaction. The section highlights the role of leadership in predicting job satisfaction and other variables that researchers have examined in predicting the same subject. This section demonstrates the progression of the need for considering other variables in determining and predicting job satisfaction, such as the relationships of self and authentic leadership in the context of job satisfaction as predictors.

Batura et al. (2016) demonstrated that job satisfaction is an important factor for determining an individual's intent to leave. Job satisfaction has been and continues to be an important variable for predicting intent to leave among health workers. Thus, a better positioned study to identify and predict the determinants of job satisfaction would predict intent to leave and other work-related outcomes. An examination of the literature related to nonleadership predictors of job satisfaction demonstrated that work environment, commitment, climate, exhaustion, and self-efficacy were associated with job satisfaction determination (Caricati et al., 2014; Chamberlain, Hoben, Squires, & Estabrooks, 2016).

Work-related predictors of job satisfaction. As job satisfaction has increased, researchers have identified many predictors of this construct. Caricati et al. (2014) showed that professional commitment and work climate were related to an individual's job attitude. In using a cross-sectional survey of nurses, the authors found that both

contextual and personal variables were associated with job attitude. The personal variables included professional commitment. Lu, While, and Barriball (2005) noted that professional commitment is a person's involvement, pledge, promise, or resolution toward their profession. The researchers characterized commitment by belief, acceptance of goals and values, willingness to exert effort, and desire to maintain a relationship or membership in the organization. Lu et al. found that increased professional commitment correlated with an increased job satisfaction score. In the context of the cognitive thought process of self-leadership as well as the importance of psychological capacity in authentic leadership, Lu et al. described commitment as having strong psychological elements. These elements provide reasons to consider self and authentic leadership as predictors of job satisfaction.

Subsequent research has expanded on the investigation of job satisfaction in specific organizations and settings. Chevalier, Fouquereau, Bénichoux, and Colombat (2018) examined self-employed dentists and dental assistants, finding that psychosocial variables could explain the greatest variance of job satisfaction measured. Their findings showed the importance of psychosocial factors related to job satisfaction. Loher et al. (1985) concluded that critical psychological states and job satisfaction were linked; Chevalier et al. supported this view, as they noted that psychosocial factors had a relationship to the job satisfaction of nurses. Yanchus, Periard, Moore, Carle, and Osatuke (2015) noted that autonomy was among the variables that predicted job satisfaction. Yanchus et al. recognized in association with autonomy and the other variables investigated, psychological safety not only was connected to job satisfaction,

but also determined turnover intention. Recognizing the psychological elements associated with job satisfaction has important implications for Houghton and Jinkerson's (2007) constructive thought pattern concept of self-leadership.

In the context of work, psychological elements are among some investigative variables used in considering job satisfaction. Knapp, Smith, and Sprinkle (2017) examined variables for predicting job satisfaction and determined that the structure of jobs and perceived support, reflecting the individual's relationship with the organization, were predictors of job satisfaction. Knapp et al. suggested the perception of the job and task performance can affect job satisfaction and organizational commitment. This finding indicated that an understanding of the relationship between self-leadership and job satisfaction would be beneficial to understanding better the determinants of job satisfaction. Karim (2017) concluded that affective commitment had a predictive relationship with job satisfaction. Karim suggested that a relationship between an individual's psychology and job satisfaction existed. Therefore, through considering the role of self-leadership and authentic leadership of the individual, a better understanding of the determinants of job satisfaction might be possible. Studies examining predictors of job satisfaction have extended beyond work-related variables to nonwork related variables, such as life satisfaction and achievement orientation.

Nonwork-related predictors of job satisfaction. Additionally, researchers have identified numerous nonwork related predictors of job satisfaction. Lambert, Hogan, and Paoline (2016) examined the differences in the predictors of job stress and job satisfaction. Their investigation found life satisfaction was associated with job

satisfaction. Lambert et al. concluded that efforts to increase job satisfaction would be beneficial to the population studied. This current study advanced the understanding of how to increase job satisfaction by investigating self-leadership and authentic leadership as predictors of job satisfaction.

Similarly, job satisfaction is not just related to organizational factors, but also individual ones outside of the work environment. For example, Y. Park, Seo, Park, Bettini, and Smith (2016) identified life satisfaction as related to job satisfaction as well. The researchers noted that life satisfaction mediated job satisfaction. Researchers have demonstrated that self-regulatory mechanisms affect life satisfaction (Praskova, Creed, & Hood, 2015). As self-leadership and authentic leadership were self-regulating, this current study examined the relationship to and role in predicting job satisfaction of nurse managers.

Life satisfaction has not been the only more recently examined variable for predicting job satisfaction. Avery, Smillie, and Fife-Schaw (2015) examined achievement orientations in predicting job satisfaction. They determined that job satisfaction as being satisfied with one's job performance and has a positive relationship with a mastery approach to performance. Individually, drive refers to a mastery approach to performance that may have a relationship with job satisfaction. Avery et al.'s results indicated self-leadership and authentic leadership could provide an important relationship to job satisfaction among nurse managers.

Researchers exerted efforts to predict job satisfaction using work-related (e.g., organizational commitment, job structures, perceived support, and work-related

psychological factors, etc.) and nonwork related (e.g., life satisfaction and achievement orientation, etc.) variables. This effort expanded the body of knowledge related to work-related attitudes and determinants of job satisfaction; however, these studies did not provide a complete portrait. Considering the relationship of leadership to job satisfaction could add robustness to the understanding of this work-related attitude.

Leadership as a Predictor of Job Satisfaction

Researchers have questioned the degree to which leadership can predict job satisfaction. Some literature has shown that leadership has a relationship with followers' attitudes and performance (Alonderiene & Majauskaite, 2016). Alonderiene and Majauskaite (2016) examined leadership style on followers and concluded a supervisor's leadership style did affect job satisfaction. The researchers found that a servant leadership style has a relationship to job satisfaction when compared to an autocratic leadership style. Alonderiene and Majauskaite affirmed the importance of leadership and its relationship to job satisfaction; however, they did not consider the relationship of leadership on the "self" as the leader. Focusing on the self's relationship to self-job satisfaction by examining the relationship between self and authentic leadership to job satisfaction was the interest of this current research. Recent researchers of leadership style have examined transformational leadership, work attitudes, and outcomes.

Transformational leadership and the relationship to job satisfaction.

Transformational leadership may be an appropriate contributor to job satisfaction. Bass (1999) described transformational leadership as engaging in activities and behaviors that moved followers to focus beyond their immediate self-interests. Previous researchers

have used the transformational leadership style as a predictor of job satisfaction. As described by Bass, this style of leadership takes an active role in purposeful activities and behaviors that work to affect followers. Ali, Jan, Ali, and Tariq (2014) concluded that transformational leadership style was a strong predictor of job satisfaction of employees. Another investigation of the transformational leadership style as a predictor of job satisfaction demonstrated that it affects job satisfaction. Atmojo (2015) investigated the relationship of transformational leadership to job satisfaction, organizational commitment, and employee performance. The researcher concluded that transformational leadership significantly affected job satisfaction and organizational commitment correlated with employee performance. Atmojo demonstrated that job satisfaction had a relationship to the leadership approach; however, Atmojo failed to examine the leadership approach as related to the leader's job satisfaction. Boamah, Laschinger, Wong, and Clarke's (2018) demonstrated a similar finding in their investigation of transformational leadership on job satisfaction and patient safety outcomes.

Researchers have continued to examine how transformational leadership corresponds to job satisfaction. Boamah et al. (2018) examined the relationship of transformational leadership behaviors to the job satisfaction of nurses and patient safety. The researchers concluded that the transformational leadership style had a positive relationship with workplace empowerment, which was shown to increase nurses' job satisfaction. The researchers also recorded and determined a decrease in the frequency of adverse patient. Boamah et al. noted that leadership style could predict the job satisfaction of others, but the researchers were silent on the relationship of leadership

style to the leader's job satisfaction. Engaging in a study that examines leadership style on the self's job satisfaction will meaningfully contribute to the literature. Examining the relationships between self-leadership, authentic leadership, and job satisfaction will help broaden the knowledge of leadership and determinants of work attitudes such as job satisfaction. Transformational leadership has been demonstrated to have a positive relationship to job satisfaction and is a predictor of job satisfaction, even when considering public servants versus private sector employees. Top, Akdere, and Tarcan (2015) examined transformational leadership and job satisfaction among other work-related attitudes, in public and private healthcare organizations, and concluded that the transformational leadership style fostered individualized support, acceptance, and job satisfaction. Top et al. reported differences between the private sector and public servants but noted that transformational leadership style remained significant as a predictor. Again, Top et al. demonstrated the relationship of leadership style with followers and their attitude, but they did not consider the relationship the leadership style has to the leader as a predictor.

A positive leadership style such as transformational leadership has been shown to have favorable outcomes in predicting job satisfaction; however, not all leaders are positive. Skogstad et al. (2015) demonstrated destructive forms of leadership were also predictors of job satisfaction. They also demonstrated through their research that destructive leadership styles have a relationship to job satisfaction as well.

Destructive leadership styles and the relationship to job satisfaction. Skogstad et al. (2015) examined the relationship of tyrannical leadership to subordinate's job

satisfaction and concluded that tyrannical leadership predicted a decrease in subordinate job satisfaction over six months. Skogstad et al. considered the behavior of the leader but did not consider the internal processes of the leaders themselves or identify the leaders' job satisfaction. Not examining the internal process of the leaders or their job satisfaction limited the understanding of the relationship that the leaders' internal processes had on their behaviors, job satisfaction, and relationships to the job satisfaction of subordinates. Examining self-leadership, authentic leadership, and job satisfaction from the perspective of the supervisor would better clarify the possible interactions and determinants of supervisor job satisfaction as related to the self and self-regulatory leadership styles. Mathieu, Neumann, Hare, and Babiak (2014) described the relationship of psychopathy to employee well-being and job satisfaction. The researchers showed the relationship of leadership style to job satisfaction of others but not from the supervisor's perceptions of job satisfaction. The authors suggested the importance of understanding the cognitive thought process of supervisors to understand better their self-observation and self-awareness, as well as their job satisfaction when engaging in destructive leadership styles. Examining self and authentic leadership provided insight into the relationships that might have existed regarding self-perceived job satisfaction.

Other leadership factors and the relationship to job satisfaction. In addition to transformational leadership and destructive leadership styles, researchers have examined other miscellaneous factors which suggest a relationship to job satisfaction. In a study of nurse leaders, Bawafaa, Wong, and Laschinger (2015) determined that resonant leadership was influential in contributing to higher job satisfaction by creating

empowering environments. The researchers concluded that developing resonant leadership skills can foster higher job satisfaction among nurses. However, Bawafaa et al. did not consider the self-perception or regulatory role of the supervisors studied, nor did they examine the self-job satisfaction of the supervisors. Bawafaa et al. demonstrated one example of other leadership predictors of job satisfaction. Another example was provided by Masal and Vogel's (2016) study of leaders' use of performance information.

Researchers have continued to examine how leadership affects job satisfaction. Masal and Vogel (2016) examined the relationship between leadership use of performance information and job satisfaction. The researchers examined this relationship among a population of police officers and their supervisors. Masal and Vogel determined that a relationship existed between how leaders used information and job satisfaction. The researchers observed that as leaders used information positively, the job satisfaction of the officers correlated with that use; leaders who used the information negatively (e.g., as a means to disciplinary action) demonstrated a relationship with job satisfaction. Masal and Vogel did not attempt to consider the internal context of the supervisors regarding their levels of self-leadership creating a baseline for information use when referencing the use of information toward their subordinates. Studying self and authentic leadership of supervisors and their job satisfaction could provide information as to self-perception and self-influence, which could be used to help further develop leadership training guidelines for information use that would be of benefit to stakeholders. Thus, studying nurse manager self and authentic leadership as determinants of their job satisfaction helps increase the understanding of the determinants of job satisfaction. Another recent study

examining predictors of job satisfaction was that of leadership performance and job satisfaction. Meng and Berger (2018) examined the role of leader performance on work engagement and job satisfaction. The researchers determined that a combination of organizational culture and leader performance had a relationship to the job satisfaction of the population examined. Meng and Berger underscored the importance of perceived leadership performance as a predictor of job satisfaction. Their findings indicated identifying silent predictors of job satisfaction could maintain performance. However, Meng and Berger did not examine the leader's perspective of self as a driver to perform, nor did they examine the elements of how the leader would lead his/herself toward the desired performance level. The study of self and authentic leadership as a predictor of leader's self-job satisfaction could help to understand better the relationship between leadership approach and predicting leader job satisfaction.

The studies above indicated the importance of determining job satisfaction while showing the lack of current research to examine or explore the leader's self or elements of themselves or strategies engaged as determinants of job satisfaction. The current research examined this issue by measuring the self-leadership, authentic leadership, and job satisfaction of the leaders themselves. Understanding these relationships provided a clearer understanding of the internal elements that could be predictive of job satisfaction of leaders. Considering the more recent literature on self-leadership and job satisfaction would advance an understanding of the leader's internal processes and self-perceptions about their job satisfaction.

Although the literature in this section has shown correlations between various aspects of leadership and job satisfaction, some gaps in the research remain. Specifically, little research has examined the relationship between self-leadership, authentic leadership, and job satisfaction among nurse managers. Additional research examining the relationship among the population of nurse managers is further warranted to address nurse manager job satisfaction (A. S. Choi & Oh, 2013; Laschinger & Fida, 2013; Olaniyan & Hystan, 2016; Pratiwi & Welly, 2014; Warshawsky & Havens, 2014; Won & Cho, 2013). This study differed from previous ones by exploring the relationship between these concepts as these related to nursing managers.

Studies of Self-Leadership

Researchers have proposed self-leadership as an important characteristic of effective organizations. Manz (1986) described the emerging recognition of the importance of self-control, self-management, and self-influencing systems in organizational settings. The researcher noted that prior research tilted toward external controls for self-management; however, he believed that true self-management governed by an individual's ownership of the standards that govern their behavior. Manz conceptualized self-leadership as a process that focused on behaviors, intrinsic motivation, and thought patterns that were regulated by the individual from within versus externally. The concept of self-leadership has evolved to a uniqueness that makes it different from other motivational constructs (Furtner et al., 2015). This difference means that researchers may find it useful to research it systematically. The systematic study of self-leadership has involved examining or exploring self-leadership in the context of

culture, emotion, mindfulness, teams, work outcomes, and work attitudes. Reviewing the more recent investigations of self-leadership and a few older articles demonstrates the importance of self-leadership has become and continues as a variable of interest and as a meaningful concept to engage.

Self-leadership appears to have a range of benefits for nurse managers. For example, Jooste and Cairns (2014) concluded that focusing on self-leadership nurses could develop their confidence and skills when managing and building capacity. Managing and building capacity for the delivery of quality care and positive patient outcomes as well as increasing job satisfaction is a role that self-leadership can support, as noted by Jooste and Cairns. Cable and Graham (2018) suggested self-leadership was important for assuring the delivery of quality care and developing nurse leaders in their Scotland population of nurses. The literature has shown studying self-leadership and job satisfaction is important for better understanding leadership and work outcomes, such as performance, organizational commitment, and building leadership capacity for the future (Furtner et al., 2013). These findings indicated self-leadership could improve work-related outcomes and performance for nurse managers.

Leaders engage in behaviors that are key drivers of organizational performance and can contribute to achieving organizational mission success (Asencio, 2016). Leaders who create positive organizational cultures strengthen motivation and engage more positively with employees, contribute to greater organizational productivity and better overall performance outcomes (Ingraham & Getha-Taylor, 2004). Albashiti, Hajiaj, and Thabet (2017) noted the role of authentic leadership attributes to organizational

commitment, which had a relationship to job satisfaction. Fallatah and Laschinger (2016) noted that their findings supported previous research suggesting that authentic leadership affected job outcomes. The findings indicated authentic leadership was an important consideration when investigating job satisfaction. Hoch, Bommer, Dulebohn, and Wu (2016) suggested authentic leadership might be useful when examining some types of employee outcomes, such as job satisfaction. Authentic leadership affected workplace outcomes, and further study of its use could further benefit the leadership body of knowledge (Laschinger & Fida, 2013). Further, research on job satisfaction of nurse managers could benefit organizations by helping leaders understand the determinants of their job satisfaction (Warshawsky & Havens, 2014).

Although the research as mentioned earlier regarding self-leadership, authentic leadership, and job satisfaction as topics of interest has yielded some important findings, little research has examined the relationship between self-leadership, authentic leadership, and job satisfaction among nurse managers. Additional research examining the relationship among the population of nurse managers is warranted to address nurse manager job satisfaction (A. S. Choi & Oh, 2013; Laschinger & Fida, 2013; Olaniyan & Hystan, 2016; Pratiwi & Welly, 2014; Warshawsky & Havens, 2014; Won & Cho, 2013).

Researchers have noted that self-leadership has been related favorably to organizational culture and reduced rates of burnout at the individual level. Although previous research has noted that self-leadership could have an important role in forming self-managed work teams, Im, Sung, and Jung (2017) noted that the self-leadership performance relationship was notable when examining the relationship in team members.

The researchers noted that self-leadership among members was one aspect important to functional teams. In the context of this study, nurse manager self-leadership is relevant in that the manager establishes the example of self-leadership for direct reports to work as a self-managed team. Manganelli, Thibault-Landry, Forest, and Carpentier (2018) noted that managers had important roles in motivating employees. Managers' abilities to motivate employees could affect self-leadership behavior among their direct reports. Researchers should consider managerial leadership style as it plays a role in work outcomes, including job satisfaction.

Findings related to self-leadership add to earlier research where authors sought to define the construct of self-leadership simply. Georgianna, Müller, Schermelleh-Engel, and Petersen (2016) described the relationship of entrepreneur job satisfaction with leadership characteristics. These authors suggested that self-leadership, although related to the effectiveness of an individual's ability to manage self, could lead to greater job satisfaction. They noted that understanding self-leadership among managers could be helpful in better understanding those in the management role, including in the formation of a cohesive self-managed work team. Im et al. (2017) examined the relationship of self-leadership to organizational culture and team members

Culture and self-leadership. Self-leadership may have an important relationship to organizational culture. Bracht, Junker, and van Dick (2018) examined the relationship between self-leadership and culture. The researchers determined self-leaders directing their attention and behaviors toward a greater purpose, beyond their own lives, and those whose behaviors aligned with their values had a relationship to work-related behaviors.

Bracht et al. (2018) presented the concept of self-leadership-culture to describe the self-regulating behavior that directed from within toward others or a greater entity, such as the organization. The researchers concluded that self-leadership in consideration of culture having a relationship to job satisfaction.

Researchers have considered culture and self-leadership in the context of healthcare. Im et al. (2017) examined the degree self-leadership, nursing organizational culture, and nurses' perceived burnout. The authors concluded after examining the relationship between self-leadership and burnout that burnout negatively correlated with self-leadership. The results of Im et al.'s study showed nurses' awareness of the culture affected nurses' burnout. In another investigation of self-leadership and culture, Seubert, Hornung, and Glaser (2017) determined that self-leadership predicted the direction of work characteristics, such as learning requirements, work overload, and health-related outcomes. The results indicated the interplay of self-leadership within an organizational context, among other individual factors, have a relationship to self-leadership. Seubert et al. highlighted the need for further research in determining the role of self-leadership's relationship to other variables, such as job satisfaction.

The researchers of the three studies cited here provide examples of how self-leadership has been studied to understand its role in a cultural context. The conclusions from these researchers indicated self-leadership could have a relationship with a variety of work outcomes within an organizational setting. The researchers showed that within the organizational setting, self-leadership was related to work outcomes, such as job satisfaction, and the organization's culture in general. However, the researchers of these

studies examined the role of self-leadership on the individual and work outcomes or job satisfaction. This current study examined the relationship between self-leadership of the individual and their job satisfaction, deepening the understanding of the ability to predict the relationship self-leadership had on work attitudes, such as job satisfaction.

Emotion and self-leadership. Researchers have determined how emotional factors contribute to self-leadership. Manz et al. (2016) researched the relationship of emotional self-leadership strategies to shaping emotional experience among other work-related outcomes. The researchers concluded that individual self-leadership strategies could be applied to exercise self-influence of emotions. They noted emotional self-leadership could serve as a critical tool for workers to use to shape emotional responses to workplace pressures. Another study examined emotions self-leadership in the context of intra-team conflict; Flores et al. (2018) examined emotional self-leadership of teams as a boundary condition in work team decision relationships. The authors concluded that through emotional self-leadership, operating as a moderator, team members could guide and focus their emotions to improve team decision-making ability. The researchers of the two articles demonstrated the adaptability of self-leadership in consideration of other variables and its relationship to process outcome. However, neither attempted to examine the relationship of the individual's self-leadership on themselves in the contribution of the team's decision-making outcome. Studies that examine self-leadership's relationship to outcomes would add to the understanding of self-leadership's role as a determinant of outcomes. An objective of this research was to examine the relationship of self-leadership on the individual's outcome, in the case of this study, job attitude.

Self-leadership and mindfulness. Mindfulness may link emotional factors with leadership outcomes. Furtner et al. (2018) recognized self-leadership and mindfulness both as self-regulating activities. The researchers examined self-leadership and mindfulness concerning the Big Five personality traits and determined some personality traits had a stronger positive association with self-leadership and mindfulness than did others. The authors concluded that one might learn and develop both mindfulness and self-leadership to promote self-regulatory focus. The researchers encouraged the development of programs that taught both self-leadership and mindfulness. The implication of Furtner et al.'s (2018) research was that some personality traits were more inclined to engage in self-leadership and confirmed what others have demonstrated: The development of self-leadership is possible.

Furthermore, Sampl, Maran, and Furtner (2017) demonstrated that implementing a mindfulness self-leadership program reduced anxiety and stress of study participants. The implementation of self-leadership and mindfulness showed improved performance of study participants as well. The authors concluded that mindfulness might affect the strategies individual's select when engaging in their self-leadership strategies. Sampl et al. demonstrated that through training, self-leadership and mindfulness was teachable. This training in self-leadership and mindfulness has a relationship to positive outcomes for the individual. The implication of their study results indicated that when individuals engaged in self-leadership strategies, they might experience more positive job satisfaction when it was measured.

Self-leadership and behavior. In addition to emotional factors, behaviors can contribute to positive self-leadership. Kör (2016) studied innovative work behavior in the banking industry. Kör determined that self-leadership played a mediating role in the measure of innovative work behavior. The author suggested that by teaching self-leadership, innovative work-behavior was fostered. Kör's study was an example of the relationship that self-leadership had on behavior and indicated self-leadership might have other relationships that could generate specific outcomes. Recently, researchers have investigated how self-leadership relates to specific organizational outcomes for nurse managers. Müller and Niessen (2018) investigated self-leadership and self-control; the researchers concluded self-leadership engagement had a relationship to self-control depletion in some workload cases. The authors examined work overload and self-control levels in relationship to self-leadership. Müller and Niessen observed that when workloads were high, self-leadership was a strategy often engaged to perform tasks for individuals that used self-leadership. Müller and Niessen examined self-leadership and workload; they demonstrated in a high demand environment, those engaging in self-leadership would use self-leadership strategies to perform. However, the researchers did not examine the relationship of engaging this strategy to job satisfaction of the individual. The examination of the relationship between self and authentic leadership with job satisfaction was the interest of this current study. Pina e Cunha, Pacheco, Castanheira, and Rego (2017) observed managers who engaged in self-leadership were predictably better able to manage and work through potentially conflicting demands.

Researchers have expanded on the behavioral components most directly related to self-leadership. Pina e Cunha et al. (2017) studied the factors relevant for managers to remain sustainably productive. They concluded that being able to work through conflicting demands was influential in adapting to changing work conditions. The researchers found that self-leadership was a process that made it possible to work through conflicting conditions and demands while managing the performance of self in different situations or conditions. Pina e Cunha et al. examined self-leadership and suggested that self-leadership might predict the individual's ability to manage the self in various working conditions and among various demands. However, the study did not address the relationship between self-leadership and the manager's management of the attitudes or perception of behavior. This current examination of self and authentic leadership attempted to understand better the manager's perception of work attitude in consideration of the engagement of both types of leadership. Self-leadership is considered to have a constructive thought component (Neck, Manz, & Houghton, 2017). To understand the importance of thought in self-leadership and the general management of behavior, Singh, Kumar, and Puri (2017) examined the relationship of thought self-leadership to the development and self-efficacy of individual sales representatives. Sing et al. demonstrated a relationship between thought self-leadership and skill development and performance. The authors concluded that thought self-leadership was a predictor of performance. The authors noted that training sales representatives to engage in thought self-leadership could increase selling proficiency and effectiveness. Singh et al.'s investigation indicated that self-leadership engagement at the individual level could be

predictive of work attitude and not just a predictor of behavior that would lead to performance.

Some recent researchers of self-leadership have examined the subject in its relationship to job satisfaction; however, most have emphasized an individual's self-leadership as it relates to others and not of the individuals themselves. Below are a few studies that have examined this relationship.

Self-leadership and job satisfaction. Self-leadership appears related to increased job satisfaction. Houghton and Jinkerson (2007) examined constructive thought strategies as applied in self-leadership to determine the relationship such strategies as applied in self-leadership and job satisfaction. The researchers argued that dysfunctional thought processes affected subjective well-being and job satisfaction. Thus, increasing constructive thought processes would increase well-being and job satisfaction. The researchers' findings indicated constructive thought process had a measurable relationship to job satisfaction. Houghton and Jinkerson suggested self-leadership had a relationship to job satisfaction; however, they did not consider the relationship of self-leadership of those engaged in a supervisory role such as nurse managers. The difference between Houghton and Jinkerson's study and this current study was this study examined the relationship between self and authentic leadership, and job satisfaction of managers. Amundsen and Martinsen (2015) examined empowering leadership to job satisfaction among other work-related outcomes. The researchers linked empowering leadership with psychological empowerment through self-leadership. Amundsen and Martinsen found that self-leadership did not affect job satisfaction of employees. However, the instrument

used was a modified, researched version of a self-leadership assessment containing added scales. It is also important to consider that self-leadership of leaders was not measured, rather, that of employees who the leaders could influence, as these employees were followers.

Amundsen and Martinsen's (2015) findings indicated psychological empowerment was important for job satisfaction. Although they did not find that self-leadership, according to their devised measure and to who it was applied, did not affect job satisfaction, psychological empowerment did, which suggest that the self-leadership of the individual is related to psychological empowerment and therefore could predict the individual's job satisfaction. An analysis of nurse manager's self and authentic leadership and the relationship to their job satisfaction will occur in this study. In this proposed study, the researcher would capture through a survey the individual's tendency to engage in self-leadership demonstrating psychological empowerment which would result in a relationship with job satisfaction. Additionally, job satisfaction and self-leadership may lead to improved organizational culture. S. Choi, Jang, Park, and Lee (2014) examined the relationship of organizational culture, self-esteem, and empowerment to job satisfaction. Their research showed a positive relationship between self-leadership and job satisfaction among other variables of interest. The researchers examined these relationships among a population of nurses. The implication of their study regarding self-leadership was that along with other variables, there was a relationship to job satisfaction. S. Choi et al. suggested that hospital administrators could increase job satisfaction by implementing innovative programs that were culturally oriented and included self-

leadership among other work-related concepts. However, S. Choi et al. did not examine or discuss the relationship of self-leadership on job satisfaction of nurse managers, nor do they examine the relationship of the manager's self-leadership on their job satisfaction. An examination of self-leadership and job satisfaction of the managers occurred during this research investigation, and the results of this study provided hospital administrators with additional empirical evidence that might support the development of innovative development programs. The examination of self-leadership in the context of organizational crisis added dimension to the analysis of it and its role as a possible predictor of job satisfaction.

Researchers have shown that improved organizational cultures can increase performance outcomes and job satisfaction. Marques-Quinteiro, Vargas, Eifler, and Curral (2018) examined employee performance, self-leadership, and job satisfaction during an organizational crisis. The researchers found that job satisfaction increased after participants were trained to use self-leadership strategies. The researchers concluded that improving job satisfaction is possible with the application of self-leadership strategies. Marques-Quinteiro et al. suggested self-leadership could be a predictor of job satisfaction. An examination of the relationship between self-leadership as a predictor of job satisfaction will occur in this proposed research study. H. S. Park and Han (2015) examined self-leadership and satisfaction of clinical practice among nursing students. The researchers concluded that self-leadership was a predictor of the nursing students' satisfaction with their clinical practice experience. The research concluded that universities should consider adopting a curriculum that includes the development of skill

and self-leadership to increase task performance and build confidence that they argued has an observable relationship to clinical practice satisfaction. Suggested by H. S. Park and Han, the study of nurse managers' self-leadership and job satisfaction could guide the development of curricula and training that teach self-leadership strategies for possible job satisfaction. Self-leadership correlated with numerous positive organizational outcomes in the field of health care; for example, Sung and Lee (2017) examined self-leadership, job satisfaction, and job involvement. They identified a correlation between self-leadership and job satisfaction among others of the nurse population studied. The researchers did not predict job satisfaction from self-leadership among other variables but observed a strong relationship. The analysis from Sung and Lee's study indicated self-leadership (in concert with other variables) might predict job satisfaction of nurses. An examination as to whether a correlation existed between self and authentic leadership and job satisfaction of nurse managers who engaged in self and authentic leadership occurred in this current investigation.

The studies provided in this section on self-leadership and job satisfaction demonstrate a broad range of interests in the relationship between self-leadership and job satisfaction. The articles have considered self-leadership and job satisfaction in the context of organizational culture, work behavior, work attitude, emotions, teams, and mindfulness. Each of the studies provided support for the potential of self-leadership to predict job satisfaction. However, the studies often considered the relationship of self-leadership of one actor to an outcome variable produced by another actor. For example, Amundsen and Martinsen (2015) did not find that self-leadership had a predictive

relationship to job satisfaction of employees. However, this was from the context of supervisors empowering employees. The study did not examine the self-leadership of supervisors on their job satisfaction. Examining the self-leadership of the individual and the individual's job satisfaction differentiated this current study from other studies. The recent literature cited provided support for such an examination and suggested that any effort to study the relationship would add to the body of knowledge on the subject. This study did not only examine the relationship of self-leadership and job satisfaction of nurse managers but also examined the relationship between authentic leadership, self-leadership, and job satisfaction. The next section of this literature review provides an overview of recent studies of authentic leadership in the context of work outcomes and where job satisfaction has been a variable.

Studies of Authentic Leadership

Authentic leadership is effective in combination with self-leadership and positive organizational outcomes. Gardner, Cogliser, Davis, and Dickens (2011) concluded from their review of the literature on authentic leadership that researchers have agreed that effective leadership empowers leaders to express their leadership through their own unique identity and style. The researchers suggested that future research should continue to examine the attributes of authentic leaders and the interacting variables that work in concert with authentic leadership. The more recent examinations of authentic leadership as a predictor or showing a correlation have included its relationship to employee performance, well-being, effect in the work environment, on teams, self-perceptions, and job satisfaction (Adil & Kamal, 2016; Amunkete & Rothmann, 2015; Chaudhary &

Panda, 2018; Guenter, Schreurs, van Emmerik, & Sun, 2017; Wang, Sui, Luthans, Wang, & Wu, 2014).

In addition to the positive relationship authentic leadership has demonstrated on work attitudes and behaviors, recent research has suggested that authentic leaders are reflective. Fallahtah and Lachinger (2016) suggested that this reflectiveness suggests that authentic leaders are in tune with their values and those of their subordinates which affects these followers to work toward common goals and objectives. Guenter et al. (2017) noted that authentic leadership was influential in follower attitudes, behaviors, and performance outcomes; but the conceptual and empirical links need further development. In the context of this study, the role of authentic leadership in understanding the work attitude job satisfaction of nurse managers will help the scientific study of authentic leadership by adding to the understanding of these constructs.

Research has affirmed that authentic leaders have positive performance outcomes that include but are not limited to followers, follower attitudes, and behaviors (Guenter et al., 2017). However, the research on the relationship of engaging in the authentic leadership style to job satisfaction has received little attention.

Authentic leadership and performance. Wang et al. (2014) examined the role of authentic leadership on the performance of followers. The researchers suggested that a better understanding of this relationship was necessary to understand authentic leadership better. The researchers determined that authentic leadership was positively related to follower performance, which was a secondary outcome from the positive relationship associated with the leader-member exchange. The researchers concluded that as a

follower's performance improved, there was a positive correlation of improved psychological capital. Authentic leadership could lead to improved organizational performance. Wang et al. demonstrated both the direct and indirect relationship that authentic leadership had on followers but did not examine the relationship on the manager's performance. This current research identified the relationship between the manager's self, authentic leadership, and job satisfaction to understand better the interactions of authentic leadership with other variables and outcome. Authentic leadership has recently been examined in the context of its relationship to work engagement. These studies have indicated authentic leadership does affect followers' work engagement and can predict a certain level of work engagement.

Authentic leadership and work engagement. Authentic leadership appears to lead to improved engagement in the work environment. Chaudhary and Panda (2018) identified both a direct and indirect relationship of authentic leadership on work outcome. The researchers determined that authentic leadership directly affected psychological meaningfulness among followers, which indirectly predicted work engagement. They also found that authentic leadership's relationship to work engagement was indirect. Drawing from the research of Chaudhary and Panda, authentic leadership may have a direct relationship to an individual's job satisfaction, given the relationship identified by the researchers. Karam et al. (2017) examined the relationship of authentic leadership to enhance work engagement and the development of high-performance employees. Karam et al. concluded that authentic leadership had various processes; thus, the researchers argued through these various relationship threads, authentic leadership directly promoted

high-performance human resources practices and indirectly related and might predict work outcomes, such as work performance and engagement. Karam et al. supported the suggestion that an indirect or direct relationship to work attitude might be predicted when authentic leadership was present. Studying the relationship between self and authentic leadership and job satisfaction would provide clarity on the ability to predict such outcomes in the presence of authentic leadership.

The work engagement articles cited suggest authentic leadership has a relationship to work outcomes and could, when present, predict a certain level of work engagement. Although the articles do not directly point to the relationship that authentic leadership may have to the individual engaging in the leadership style, these do suggest that the authentic leader's style may have a relationship to the leader's job satisfaction. Another consideration of researchers has been to examine the relationship of authentic leadership to team outcomes.

Authentic leadership and teams. Authentic leadership may be conducive to improvements in team cohesion. Guenter et al. (2017) investigated the relationship that authentic leadership had when examining team interactions in terms of voicing ideas and thoughts. They found that leaders engaged in authentic leadership that motivated followers to become more engaged, proactive, and voice their thoughts. The researchers concluded when leaders behaved in the truest sense of who they were, they motivated followers, who might not be proactive, to become more proactive on tasks. Guenter et al. suggested authentic leadership had a motivating aspect in terms of team engagement. However, they did not address the motivating factor of the leader themselves or how

authentic leadership affected their perspectives of the action. A research effort that investigates the predictive nature of authentic leadership on the individual engaging in this approach to leadership would help practitioners and scholars better understand authentic leadership's role in work outcomes that include but are not limited to motivation and job satisfaction. Hirst, Walumbwa, Aryee, Butarbutar, and Chen (2016) investigated authentic leadership's relationship to team member helping behavior. The researchers concluded that leaders engaged in an authentic leadership style at the higher levels of an organization predicted lower-level employees to engage in helping behavior. Hirst et al. attributed the increase in helping behavior to the role that authentic leadership had in improving leader-member exchange. The researchers also attributed increased intra-team trust was predictable due to team authentic leadership as a byproduct of the leader's authentic behavior. Authentic leadership was investigated in the context of groups to determine the leadership style that best generates group trust and employee work outcomes.

This relationship to team contexts appears to be moderated by improvements in trust. Ling et al. (2017) examined servant and authentic leadership style's relationship to group trust. The researchers found that a relationship to group trust climate and employee work outcomes; however, authentic leadership lacked the significance in the examination of servant leadership. Although the study showed that authentic leadership did not have the same observed relationship as servant leadership, it does have an observable relationship to building trust and positive work outcomes of followers. Ling et al. did not consider the relationship to either leadership style; the leader; or the leader's work

attitude, perspective, or trust, which showed the importance of investigating authentic leadership's correlation with the leader's job satisfaction.

Based on these findings, researchers have examined how authentic leadership leads to improvements in team outcomes specifically within nursing contexts. Regan, Laschinger, and Wong (2016) investigated the authentic leadership among other variables on nurses' perceived interprofessional collaboration. The researchers, using a professional nursing practice environment, surveyed nurses to determine these professional's perspective of interprofessional collaboration. Regan et al. found that authentic leadership was among the variables that had a relationship to nurses' perspective of interprofessional collaboration. They found that authentic managers built trust and support, which affected the perception of inter-professional collaboration. Regan et al. suggested the role authentic leadership might be used as a variable when studying the perception of professional collaboration. Although the researchers suggested a possible predictive characteristic, the current research examined a population other than supervisors. The research left a gap indicated authentic leadership predicted perception, which could mean that authentic leadership might predict the job satisfaction of managers who engaged in the authentic leadership style.

Authentic leadership and well-being. Researchers interested in authentic leadership have also been interested in examining its role in promoting well-being. Rahimnia and Sharifirad (2015) investigated the relationship between authentic leadership and employee well-being. The researchers found that attachment insecurity of followers decreased as authentic leadership was present among their leaders. This

decrease also had a relationship with employee job satisfaction and well-being. Rahimnia and Sharifirad concluded that the presence of authentic leadership could have a relationship to job satisfaction and well-being among employees. However, the researchers did not consider the relationship of leader engaging in authentic leadership and their well-being or job satisfaction. Although Rahimnia and Sharifirad did not consider the relationship that authentic leadership had to the leader, they did suggest a possible predictive nature of authentic leadership when considering well-being and job satisfaction. The relationship between authentic leadership and job satisfaction of the leader was of interest in this current study. Another study of authentic leadership and well-being examined the authentic leadership approach on the leader. Authentic leadership might improve practitioners' psychological and affective states. Weiss, Razinskas, Backmann, and Hoegl (2018) examined authentic leadership on leaders' mental well-being. The researchers acknowledged a lack of investigation of authentic leadership on leaders themselves; therefore, the researchers considered the role authentic leadership plays in predicting leaders' well-being. The researchers found that authentic leadership reduced leaders' stress and increased their work engagement. The researchers concluded that authentic leadership could be a predictor of leaders' mental well-being in the context of stress and mental depletion. Weiss et al. suggested authentic leadership could be a predictor and their consideration of the leader provides insight as to the relationship that authentic leadership style had on the leader. This current study identified the relationship of authentic leadership on leaders' job satisfaction and, as suggested by Weiss et al., if authentic leadership could be a predictor of job satisfaction.

Authentic leadership and job satisfaction. In continuation of the study of authentic leadership, it has become apparent that this type of leadership increases job satisfaction. Černe, Dimovski, Marič, Penger, and Škerlavaj (2014) sought to determine the congruence of the leader's self-perceptions and the perceptions of their authentic leadership among followers. The researchers concluded that an interaction between the leader's perception of their authentic leadership and that which was perceived by followers could predict job satisfaction of followers. The researchers concluded authentic leadership was most beneficial when considering the relationship that it had with the job satisfaction of employees.

Černe et al. (2014) provided a reason to consider a leader's self-perception of authentic leadership as possibly relevant to the leader's job satisfaction. Another investigation of authentic leadership considered the relationship of authentic leadership to job satisfaction among other variables, which strengthened the suggestion of authentic leadership's relationship to leaders' job satisfaction; Olaniyan and Hystad (2016) conducted such a study. They determined that a relationship of authentic leadership to psychological capital and the perception that leaders operated authentically by followers also reported more job satisfaction. The researchers found a relationship between the authentic leadership style to employee outcome was not limited to the immediate leader. Olaniyan and Hystad concluded that authentic leadership could have a relationship with job satisfaction. However, Olaniyan and Hystad did not examine the relationship of authentic leadership to the leader's job satisfaction.

Another study examining the relationship of authentic leadership to nurses' empowerment provides additional support to the interest of authentic leadership and job satisfaction. Authentic leadership appears to improve job satisfaction by empowering employees. Read and Laschinger (2015) found that structural empowerment mediated authentic leadership's relationship to job satisfaction. The researchers concluded that authentic leaders improved the job satisfaction of the nurses they studied. Read and Laschinger demonstrated the relationship of authentic leadership to job satisfaction; however, the researchers did not consider the relationship of authentic leadership to the leader's job satisfaction. The investigation conducted by these researchers directed attention to the relationship between a leaders' job satisfaction and the active engagement of an authentic leadership approach to leading.

Another study examined the relationship between authentic leadership and psychological capital on increasing job satisfaction and lessening job stress; authentic leadership may lead to improved well-being amongst employees. For example, Sultana, Darun, and Yao (2018) wanted to lower stress and enhance job satisfaction among employees. The researchers determined that authentic leadership was positively related to job satisfaction. Although Sultana et al. did not demonstrate a prediction of job satisfaction when authentic leadership was present, the findings indicated if authentic leadership was present, a relationship to job satisfaction was likely to be measured. Moreover, Sultana et al. did not investigate the relationship of the supervisor's authentic leadership on their job satisfaction. This current research examined this relationship.

Authentic leadership can also promote long-term positive relationship to organizational citizenship behavior. Wei, Li, Zhang, and Liu (2016) investigated the integration of authentic leadership and leader competency on employee job performance and organizational citizenship behavior. The researchers found that authentic leadership positively affected followers' task performance and that competency moderated the relationship between authentic leadership and organizational citizenship behavior. Wei et al. also reported that leader competency moderated the relationship between authentic leadership and organizational citizenship behavior among other findings. Wei et al.'s results indicated a connection existed for authentic leadership to be moderated by another variable, possibly self-leadership, when considering a work outcome, such as job satisfaction. The research on self and authentic leadership and job satisfaction of nurse managers showed either authentic leadership or self-leadership moderated nurse managers own job satisfaction. The current research added to the existing body of knowledge by examining how authentic leadership related to the job satisfaction of a sample of nurse managers.

Summary

Chapter 2 provided a review of recent literature showing the previous research efforts that have attempted to better understanding job satisfaction, self-leadership, and authentic leadership. The studies provided a broad overview of the varied findings related to the study of each subject matter. The commonality that persisted in the articles included the lack of attention on supervisors' perceptions of their self-leadership, authentic leadership, and job satisfaction. Another commonality was most researchers

included surveys to measure the distinct variables of interest. The use of surveys and statistical analysis guided this study on measuring the relationship and relationship of self and authentic leadership of nurse managers to their job satisfaction.

An important observation of the findings from the research related to self-leadership, authentic leadership, and job satisfaction was the relationship between self-leadership and authentic leadership to job satisfaction. In some studies, findings indicated job satisfaction was directly related to those mentioned above and in other studies, one of the variables mentioned above moderated job satisfaction. No researchers in recent literature examined self and authentic as predictors of job satisfaction. Furthermore, no researchers examined the previously mentioned variables in the context of nurse managers and their job satisfaction. This research examined the relationships self and authentic leadership and determined if these correlated or interacted significantly with nurse managers' job satisfaction. Chapter 3 provides the methodology employed to carry out this study.

Chapter 3: Research Method

The objective of this research was to examine the relationship of self and authentic leadership to the job satisfaction of nurse managers engaged in either or both leaderships. Chapters 1 and 2 established the relationship of self-leadership and authentic leadership, respectively, to work outcomes in the populations studied. Further investigation was required to determine the relationship of both self-leadership and the authentic leadership approach in the context of the individual's job attitude, specifically job satisfaction. Therefore, applying a method derived from previous studies of related aims would enable the examination of relationships among the variables self-leadership, authentic leadership, and job attitude.

Chapter 3 includes a detailed description of the study design, the reasoning behind the design, and the survey approach used to capture the data. Chapter 3 describes the population, the privacy mechanism applied to keep information confidential, measures to protect respondents from harm and other ethical safeguards, recruitment procedures, data collection, and the analysis methodology. A summary connects the method and data to the identified gap in research on the subject and population.

Research Design and Rationale

The nonexperimental design of this quantitative study was correlational where a linear regression analysis was applied to examine the relationships, if any, between the variables of self-leadership, authentic leadership, and job satisfaction of nurse managers. The quantitative method was consistent with the examination of the stated variables through the analysis of data collected by survey (see Houghton et al., 2012; Nel & van

Zyl, 2015; Prussia et al., 1998; Spector, 1985; Stander et al., 2015; Vijayabanu et al., 2017; Walumbwa et al., 2008). A qualitative methodology was not selected because such research would aim to describe phenomena, while I sought to quantify the relationship between variables. An alternative quantitative design (e.g., randomized controlled trial) was not selected because I sought to correlate variables rather than manipulate one variable to detect a change in another. The two predictor variables were self-leadership and authentic leadership. The criterion variable was job satisfaction. The research questions and the associated hypotheses were as follows:

RQ1: Does nurse managers' self-leadership predict their job satisfaction?

H₀₁: Nurse managers' self-leadership does not predict their job satisfaction.

H₁₁: Nurse managers' self-leadership does predict their job satisfaction.

RQ2: Does nurse managers' authentic leadership predict their job satisfaction?

H₀₂: Nurse managers' authentic leadership does not predict their job satisfaction.

H₁₂: Nurse managers' authentic leadership does predict their job satisfaction.

RQ3: Does nurse managers' self and authentic leadership interact to predict their job satisfaction?

H₀₃: Nurse managers' self and authentic leadership does not interact to predict their job satisfaction.

H₁₃: Nurse managers' self and authentic leadership does interact to predict their job satisfaction.

In this study, a correlational linear regression, nonexperimental design was used to examine the relationship between the predictor variables and the criterion variable. The use of this research design led to understanding the relationship of the predictor variables (self-leadership and authentic leadership) and the associated sublevel variables (i.e., self-observation, self-goal setting, self-reward, positive self-talk, self-awareness, relational transparency, balanced processing, and internalized moral perspective). The findings provide insights that may be helpful in further exploring the nuances that may contribute to the antecedents of job attitudes, such as job satisfaction. Examining predictive relationships may help administrators create programs and training that may facilitate positive and favorable work outcomes in healthcare entities.

A composite electronic survey measured the self-awareness, self-leadership, authentic leadership, and job satisfaction of nurse managers. The survey included the Abbreviated Self-Leadership Questionnaire (ASLQ), Authentic Leadership Questionnaire (ALQ), and Job Satisfaction Survey (JSS).

Methodology

The precise methodology employed in this study was the use of a correlational linear regression, nonexperimental design to investigate the relationship between each of the variables identified above. A linear regression test was performed to determine the significance of the relationship between each of the variables of interest and the strength

of the correlations. Additionally, the linear regression test demonstrated how the variables interacted in combination with one another.

Population

The target population in this study was nurse managers in the United States. The estimated sample size was 160, although a calculated sample size of 107 resulted from using an *F* test computation with two predictors and the same alpha level, power, and effect size. An estimated sample size of 160 was used because of the interest in further examining the relationship further of sublevel variables if the two main predictors (i.e., self-leadership and authentic leadership) showed a relationship with job satisfaction. The estimated sample size involved using an *F* test computational feature of the G*Power computation software. The *F* test is a statistical computation test used in factorial analysis of variance permitting researchers to make overall comparisons of variable relationships (Steiger, 2004). G*Power is power analysis software used in the social, behavioral, and biological sciences (Faul, Erdfelder, Buchner, & Lang, 2009). Faul et al. (2009) noted that an *F* test calculation supported a conditional (fixed – predictor) regression study design. In this study, the two fixed predictors were self-leadership and authentic leadership. However, Faul et al. (2009) noted that the fixed-predictors model was best in experimental research with defined predictors, whereas random predictors were suited for observational studies in cases where an underlying population supported the sampled participants. I used the fixed model to calculate the sample size because the predictors were defined.

When calculating for sample size using an F test, an estimated sample size of 160 was determined. This computation resulted from using an alpha level of 0.05, a power of 0.95, eight predictors, and an effect size of 0.15. Cohen (1992) noted that sample size, alpha level, population effect size, and statistical power were related and a function of one another. The effect size was acceptable because of the interest in determining if a relationship existed between the variables, and it represented a medium effect in the population when employing a linear regression analysis, which evaluated variables collectively and independently. The power of 0.95 selected for this study was acceptable because at this level, I had a high probability of rejecting a false null hypothesis. The chosen power level also permitted calculation of a large enough sample size for inferring results to the population of interest, as well as for offsetting problems that may arise from high collinearity (see Cohen, 1992; Mason & Perreault, 1991). The F test computation made a suitable choice for determining samples considering the interest in a determination as to a relationship between the predictor variables and the criterion variable (see Cohen, 1992; Fritz, Morris, & Richler, 2012). The determination of the correlation coefficients was proposed to occur during data analysis; therefore, an exact sample size calculation was not a suitable choice.

Sampling and Sampling Procedures

The American Organization for Nursing Leadership, the Arizona Organization for Nursing Leadership, the Florida Organization for Nursing Leadership, Walden University's Phi Nu Chapter, and email notifications to nurse managers associated with a number of organizations and companies provided access to the sample. Participants

indicated their consent to participate in the study through electronic acceptance of the informed consent form. According to the AONE (n.d.) website, AONE is a subsidiary of the American Hospital Association that was established in 1967 to provide leadership, professional development, and advocacy, among other activities, to advance nursing practice and patient care. The organization has over 9,700 members and serves as the voice of nursing leadership in health care along with its affiliate members such as the Arizona Organization for Nursing Leadership and the Florida Organization for Nursing Leadership (Foundation Center, n.d.).

The sampling strategy in this study was nonprobabilistic and convenient. This strategy was justified based on the need to identify participants who met specific inclusion criteria. I recruited participants through AONE's recruitment description page on its website. I also recruited participants through invitations distributed by organization contacts of the Arizona Organization for Nursing Leadership, the Florida Organization for Nursing Leadership, and Walden University's Phi Nu Chapter, as well as through email disbursement, LinkedIn, Facebook, Twitter, and Google Ads. I provided an overview and instructions as well as a link to access the surveys through a website that provided confidentiality, privacy, and disclosure terms and a survey portal. The data provided apply to the fields of psychology, nursing, healthcare administration and management, and business, and they add to the body of knowledge related to psychological factors and leadership styles affecting job attitudes. The participants self-selected by opting to take part in the study via an invitation in a posted or emailed study description that directed them to the research website

(leadershipjobsatisfactionstudy.weebly.com/). The statistical power with a sample size of 160, an alpha level of 0.05, and an effect size of 0.15 was 0.95. I computed sample size when the alpha level was 0.05, the effect size was 0.15, and the power was 0.95. A medium effect size with a higher power would have been acceptable in this study because the goal was to determine whether a relationship between the predictor variables (i.e., self-leadership and authentic leadership) and the criterion variable (i.e., job satisfaction) existed. The data collection period was 13 weeks and ended before the total a priori sample of 160 was reached. I address my reasons for ending data collection with the final number of participants in Chapter 4.

Instrumentation

The three survey instruments respectively measuring each of the variables in this study were the ASLQ, ALQ, and JSS. Self-leadership was measured using the ASLQ, which had nine questions. ASLQ scoring occurred on a 5-point Likert-type scale (Houghton et al., 2012). The measurement of authentic leadership occurred through the ALQ (see Avolio, Gardner, & Walumbwa, 2007). The ALQ used 16 questions measured on a 5-point Likert scale (see Northouse, 2019). Job satisfaction was measured by the JSS, which used 36 questions and was measured on a 6-point Likert scale (see Spector, 1985). In this study, I did not use sensitive information, such as personally identifiable data.

The ASLQ identifies self-leadership level by using a three-dimensional or three-factor model. The three dimensions are behavioral awareness and volition, task motivation, and constructive cognition (see Houghton et al., 2012). Houghton et al.

(2012) created the ASLQ to measure self-observation, self-reward, visualization of performance, self-talk, belief and assumption valuation, and self-goal setting. Houghton et al. measured Cronbach's alpha for the questionnaire's use in their study as 0.73.

The ALQ is a theoretically based instrument that measures the four dimensions of authentic leadership (i.e., self-awareness, internalized moral perspective, balance processing, and relational transparency), which can help individuals better understand who they are as leaders. The self-regulatory process leveraged the self-awareness of the individual self-regulating. Panczyk, Jaworski, Iwanow, Cieslak, and Gotlib (2018) measured the ALQ Cronbach's alpha for the questionnaire's use in their investigation as 0.84.

The JSS is an instrument that measures nine facets of job satisfaction, including general job satisfaction (see Spector, 1985). Batura et al. (2016) defined job satisfaction in the health care community as an important predictor of intent to leave. The nine facets of Spector's (1985) job satisfaction are pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication (p. 8). Top et al. (2015) measured Cronbach's alpha for the JSS questionnaire used in their investigation as 0.87.

The literature supported the use of the instruments mentioned above in this study. The instruments have been reported to have respectable reliabilities. The ASLQ Cronbach's alpha of 0.73, the ALQ Cronbach's alpha of 0.84, and the JSS Cronbach's alpha of 0.87 supported the selection of the instruments for this study.

Data Analysis Plan

The electronic administration of the survey permitted participants to respond at a convenient time and in a readily accessible manner. The study provided the data necessary to assess the relationships between self-leadership, authentic leadership, and job satisfaction. Data were collected using a web-based form provided by SurveyMonkey™. I transcribed the survey questions into an online questionnaire. All participants were volunteers. Before taking the survey, participants were directed to read a summary of the research background and informed consent information. Participants could communicate directly to me regarding confidentiality and the study using email. In providing the research background, I noted the voluntary nature of the study and the nature of participation. I provided participants with the necessary instruction for completing surveys. Data collection was expected to occur over 23 days.

I provided a specific Uniform Resource Locator (URL) in the invitation paragraph posted on AONE's (n.d.) website to participants and transmitted it via email to members of affiliate organizations, Facebook, LinkedIn, Twitter, and Google Ads for ease of access to information about the study and how to participate. The URL was specific to this study, and the associated webpage provided background, disclosures notice, privacy notice, and links to the survey questionnaires were electronically available via SurveyMonkey™. The benefit of using a designated URL and SurveyMonkey™ was that they provided a plain and simple format allowing participants to interact easily with the survey. Providing a designated URL and using SurveyMonkey™ to communicate and collect data was a means to improve the response rate to web-based surveys. The

platforms also reduced the time demand on participants for completing the survey, which may have improved the response rate (see Mertler, 2003; Solomon, 2001). A selection of “yes” and an electronic signature on the informed consent form permitted participants to continue to the surveys. Participants were expected to be nurse managers with at least 6 months of experience in nurse management service. The participants needed to manage (or have managed) a minimum of three employees. Responses were collected using SurveyMonkey™ and were downloaded in a comma-separated value (CSV) file format, which I imported into the Statistical Package for Social Sciences (SPSS) software package for data analysis. Gender, age, years of service as a nurse manager, and current status as a nurse manager were the demographic factors collected. SPSS was used to conduct descriptive statistical analysis on all data collected. I computed categorical data, such as gender, frequency, and percentage. I computed minimum, maximum, mean, median, and standard deviation for continuous data, such as the measurement for job satisfaction.

Correlational linear regression analysis was used to test the research questions. Before analysis, several assumptions were tested to support the validity of findings. These included multicollinearity, homoscedasticity, outliers, and normality. Mahalanobis distance was used to determine the presence of multivariate outliers, and a variance inflation factor was conducted to identify multicollinearity. A Shapiro-Wilk test for skewness and kurtosis assessed normality. Multiple linear regression was conducted to test each of the research hypotheses. The predictor variables for the regression included

nurse-manager self-leadership and authentic leadership. The single outcome variable for the regression was job satisfaction. The key confidence interval of interest was 95%.

Threats to Validity

The examination of self-leadership and authentic leadership as predictors of job satisfaction of nurse managers provided insightful information related to the relationship of the predictor variables as predictors of job satisfaction among this defined population. The demographics of the sample population and the use of AONE's (n.d.) website as a recruitment page provided a good representation of the relationship of these variables among this targeted sample. This section discusses the internal and external threats to the validity of this study.

Validity is the correlation between responses and the intended value of interest (Groves et al., 2009). Several threats to the internal validity include but are not limited to experimental procedures and experiences of participants. Among the procedural threats of this study was the selection of participants with common characteristics. In this study, the threat to internal validity included the commonality of the participants selected from a single source. An error in the listing provided might result in a coverage error where the errors in the list might result in responses from individuals not qualifying based on the predetermined sample frame (see Dillman, Smyth, & Christian, 2014).

External threats might negatively affect the validity of the study. External threats to validity resulted from interpreting the data collected, making incorrect inferences beyond that of which would be supported by the sample studied. The defined sample of this study and its results would not be claimed to apply to populations not defined by the

sample used in this study. The language used in this study was used to emphasize the limited scope of this study and its conclusions.

Additional threats to validity might also include nonresponse error and total survey error. According to Grove et al. (2009), nonresponse errors result when there is a failure of all sample members to be successfully measured. Dillman et al. (2014) noted that nonresponse errors might create sampling results that could differ from results received from those in the sample population that did not respond. Total survey error was a threat to validity that could have been caused by the survey design where the research and concern for preventing or eliminating a source of error could have resulted in another error. Additional threats to external validity included testing reactivity, interaction effects of selection and experimental variables, the specificity of variables, reactive effects of experimental arrangements, and multiple-treatment interference. The most significant way to minimize potential issues included obtaining a sufficient sample size that was representative of the population. Additionally, the use of previously validated instruments was assumed to control for these sources of bias, as the focus of this dissertation was not on scale development, but on identifying the correlation between validated constructs that apply to leadership and job satisfaction.

Ethical Procedures

The guidelines as set forth by the Institutional Review Board (IRB), Association of Nursing Executives, SurveyMonkey™, Mind Garden, and the guidance as prescribed by the authors of the survey instruments used in this study were followed. Privacy was an important part of ensuring that the research participants could remain confident that the

responses and other information provided is confidential and remains confidential within the scope of research standards, SurveyMonkey™'s privacy guidelines, and Google (because Google's servers hosted the downloaded response). Data security was an ongoing concern for surveyors and participants, and total nonbreach of confidentiality could not be kept in some instances due to breaches beyond a researcher or host's control (see Dillman et al., 2014, p. 461). Participants were made aware, in plain language, of the efforts to maintain and protect the information provided. These efforts were presented in the informed consent that participants were required to read and attest that terms and information provided in the consent form were understood. Informed consent acknowledged participants' rights during and after the study, described the protection of collected data, and explained confidentiality. The informed consent also included information that identified me and described the study, the benefits of participation, the risks to the participant, and the contact information of those if questions arose.

Participants were made aware of the study IRB approval number: 05-31-19-0126928.

Retained in a secure format data collected from the survey will be held for 5 years. Any hard copy of data that is available for review was stored in a secured filing cabinet. A shredding device to destroy any hard copy of the data when no longer needed for review was used when necessary, as data retention will be electronic, password protected, encrypted, and secured. Data access was anticipated to be only available to this researcher and Dr. Paul E. Spector, per his requirement for survey use; additionally, AONE (n.d.) has limited access to the information provided for their benefit. Documentation and collected data will be eligible for destruction after the 5 years of

retention have expired. This destruction will include both physical and electronic documentation to include data and responses. The research data collected is owned by this research, whereas the survey copyright holders retain all rights associated with the respective surveys used in the study.

This research investigation did not require participants to provide their names; however, due to the nature of the access provided by AONE (n.d.), names of participants might have been made known to me. Email addresses were another identifying piece of information that might have been provided for the recruitment of participants. Walden University's IRB guidelines, AONE's guidelines, AONE affiliate guidelines, social media guidelines, and professional and expected ethical research standards guided the recruitment of participants. There was no expected danger or risk to the participants from an employer or employee exposure; the survey was electronically online and was accessed by the participant anywhere there was an internet connection and on any compatible internet connected device. The population surveyed through this medium was not vulnerable nor was the topic of interest sensitive, such that an adverse influence could result.

Summary

The quantitative, correlational linear regression, nonexperimental design of this study examined the relationship and predictive ability of self and authentic leadership of nurse managers on their job satisfaction. Chapter 3 described the sample; rationale for the design of the study, setting, and population; the collection of the data; instrumentation; and operationalization of constructs, validity threats, and protection of participants. The

sample was expected to come from those referred by the Association of Nurse Executives. However, other nurse managers might have participated due to a referral from nonAONE (n.d.) participants. The use of a survey was believed the most appropriate for logistical reasons, as evidenced by similar studies on the subject and demonstrated by extending the finding of previous authors regarding nurse management and leadership (Spector, 1985; Stander et al., 2015; Walumbwa et al., 2008).

This chapter included information regarding the instruments used to collect data and the respective reliability and validity values, as well as what these instruments respectively measured. Chapter 3 described the process of collection of data collection, the information collected, and the period for which respondents could respond to the surveys, which was over 23 days. Data collected included demographic information, as well as the responses to the survey. Chapter 3 described the use of the survey tool, SurveyMonkey™, to collect data. The section discussed ethical concerns related to participant privacy and confidentiality, as well as the protection of data and the timeframe for data destruction. Chapter 4 analyzes and summarizes the research study results based on a statistical analysis resulting in the acceptance or rejection of the hypothesis for this study.

Chapter 4: Results

Introduction

This chapter provides the procedures for data collection and the statistical analyses used to examine the three research questions and their respective hypotheses. The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and job satisfaction. The demographic makeup of the participants was not examined because it was determined that the relationship between the predictor variables and the criterion variables of the sample were the main focus of the study. The null hypotheses were that neither predictor variables (i.e., neither self-leadership nor authentic leadership) predicted or interacted to predict the criterion variable of job satisfaction. The alternative hypotheses were that the predictor variables predicted or interacted to predict the criterion variable.

This chapter includes a description of the data collection timeframe, participant recruitment methods, data collection method, and general response rates. Additionally, I present a summary of the results of the study by reporting descriptive statistics, correlation results, and the results of the linear regression analysis. The research questions and hypotheses were as follows:

RQ1: Does nurse managers' self-leadership predict their job satisfaction?

H₀₁: Nurse managers' self-leadership does not predict their job satisfaction.

H₁₁: Nurse managers' self-leadership does predict their job satisfaction.

RQ2: Does nurse managers' authentic leadership predict their job satisfaction?

H₀₂: Nurse managers' authentic leadership does not predict their job satisfaction.

H₁₂: Nurse managers' authentic leadership does predict their job satisfaction.

RQ3: Does nurse managers' self and authentic leadership interact to predict their job satisfaction?

H₀₃: Nurse managers' self and authentic leadership does not interact to predict their job satisfaction.

H₁₃: Nurse managers' self and authentic leadership does interact to predict their job satisfaction.

Data Collection

Participants were recruited through multiple mediums that included postings on the social media platforms Twitter, Facebook, LinkedIn, and Google Ads. Participants were recruited through emails; over 20,000 combined emails and digital messages were sent to members of nursing organizations (Arizona Organization for Nursing Leadership, Florida Organization for Nursing Leadership, American Organization for Nursing Leadership, and Walden University's Phi Nu Chapter), the respective Listservs, and the nurse manager community. Digital notices of the study included an announcement with a link to the study on cooperating nursing organizations' social media and research request website when available. Word of mouth and distribution of participation information cards to nursing groups were also methods of recruitment.

After receiving an approval letter from IRB (IRB approval number: 05-31-19-0126928) and approval from the respective participating organizations, I initiated recruitment for participation. Recruitment for participants lasted 13 weeks; during that time, the survey link was available via the website. The link was deactivated at the end of the 13-week period. In consideration of the intent of the study and to reduce the total number of questions as well as increase the survey completion rate, gender, age, and other common demographic questions were not included and were replaced with the screen-out questions. Participants had to confirm that they met the qualifications to participate by responding to screen-out questions that preceded the main survey questions. These questions asked if they were at least 18 years of age, were current or previous nurse managers, and had managed or currently managed three or more nurses. The online survey was a combination of three survey instruments: the ASLQ, ALQ, and JSS. These surveys made up the single online survey available through the SurveyMonkey™™ platform (Appendix A). The Likert-type online survey was made available through a dedicated research website that described the study, the participation requirements, the survey instruments, and informed consent. The website had a button that directed participants to the SurveyMonkey™™ survey portal where the survey could be completed confidentially and at their leisure.

The a priori sample size for an F test with an effect size of 0.15, confidence level of 95%, and .05 alpha level and eight predictors was 160 participants. Eight predictors were used in the a priori calculation in case it was found that if statistical significance was observed with both predictors, an examination of the respective sublevel variables

would take place; however, the analysis showed that authentic leadership was the only statistically significant variable in correlating and predicting job satisfaction of the sample at a CI of 95%. Due to authentic leadership being the only statistically significant predictor, it was not necessary to evaluate the eight predictors as identified during the research planning and a priori calculation. Given the results of the statistical significance of authentic leadership, the four dimensions of authentic leadership were evaluated.

After the 13-week data collection effort, 87 participants used SurveyMonkey™'s reporting tool and provided responses. Of these, 76 mostly completed the survey, whereas four of the 76 survey responses were missing either one or two responses. In Likert-type scale survey research, missing data are common and can be addressed with mean imputation, which was applied in the cases of missing data described in this study (see Raaijmakers, 1999). Survey collection was stopped due to the low response rates, increasing costs to recruit, and a preliminary regression and a G*Power 3.1 analysis of 66 survey responses. The G*Power 3.1 analysis indicated that more than 900 sample participants would be needed for examining self-leadership at an effect size of .014, alpha level of 0.05, and power of .90 generated using the 66 survey responses. The resulting sample size was a sample size of convenience that was limited in scope, thereby limiting statistical inference beyond the sample.

Descriptive and Demographic Statistics

I did not gather demographic information from participants, beyond verifying that each participant qualified for the study as a current or previous nurse manager of an age equal to or greater than 18 years who had managed or was currently managing three or

more nurses for a period of 6 months or more. The interest in examining the relationship between self-leadership, authentic leadership, and job satisfaction superseded capturing common demographic information. Additionally, by not including common demographic questions, I reduced the total number of questions, which improved the SurveyMonkey™™ predicted completion rate percentage.

Descriptive information of responses to the ASLQ, ALQ, and JSS provided insight into the overall self-leadership level, authentic leadership level, and job satisfaction level of the sample. The survey responses were recorded using a Likert-type scale for each of the surveys. The ASLQ consisted of nine questions and was scored such that participants were to read the response and decide how true the statement was in describing their self-leadership. The responses provided were *Not at all accurate* = 1, *Somewhat accurate* = 2, *A little accurate* = 3, *Mostly accurate* = 4, and *Completely accurate* = 5. The ALQ consisted of 16 questions and was scored such that the participants were to judge how frequently each of the provided statements fit their leadership styles, selecting from the following response choices: *Not at all* = 0, *Once in a while* = 1, *Sometimes* = 2, *Fairly often* = 3, and *Frequently, if not always* = 4. The JSS consisted of 36 questions and was scored such that participants were to select the description for each question that came closest to reflecting their opinion about it. The response choices included *Disagree very much* = 1, *Disagree moderately* = 2, *Disagree slightly* = 3, *Agree slightly* = 4, *Agree moderately* = 5, and *Agree very much* = 6. The JSS contained negatively worded items with scoring that needed to be reversed. The negatively worded items that were reversed were 2, 4, 6, 8, 10, 12, 14, 16, 18, 19, 21, 23,

24, 26, 29, 31, 32, 34, and 36. Therefore, any negatively worded selection scored with a 1 became a 6, and any item that was a 2 became a 5, any item that was a 3 became a 4, a 5 became a 2, and a 6 became a 1.

Table 1 represents the sample minimum, maximum, mean statistical scores, standard deviation of reported responses to the surveys, and Cronbach's alpha score of the surveys. The minimum score reported for the ASLQ was 2, and the maximum score reported was 5. The sample's mean score for the ASLQ was 3.94. There was a reported standard deviation for the ASLQ of 0.576. The minimum score reported for the ALQ was 2, and the maximum score reported was 4. The sample's mean score for the ALQ was 3.11. There was a reported standard deviation for the ALQ of 0.477. The minimum score recorded for the JSS was 1, and the maximum score recorded was 6. The sample's mean score for the JSS was 3.85. There was a reported standard deviation of 0.937.

Table 1

Minimum, Maximum, Mean, Standard Deviation, and Cronbach's Alpha

Survey	Minimum	Maximum	Mean	Std. deviation	Cronbach's alpha
ASLQ	2	5	3.94	0.576	.777
ALQ	2	4	3.11	0.477	.889
JSS	1	6	3.85	0.937	.957

Note. $N = 76$.

Appendices B, C, and D provide tables of the frequencies and percentages of the sample's responses to specific questions presented in each of the survey questionnaires. The data reported were a sample size of 76 respondents that did not include any missing values. A few highlights of the responses per respective survey are presented.

Abbreviated Self-Leadership Questionnaire

The ASLQ consisted of nine questions. Each question measured a specific element of self-leadership. Appendix B provides the list of questions. Questions 1 and 3 measured goal setting. The sample mean response for Question 1 was 4.30, and the sample mean response for Question 3 was 4.46. The most frequently selected response rating for Question 1 was 5, with 44.7% of respondents selecting this rating. The most frequently selected response rating for Question 3 was 5, with 59.2% of respondents selecting this rating. Question 2 measured self-observation. The sample mean score for this response was 4.26. The most frequently selected response for this question was 4, with 52.6% of respondents selecting this rating.

Questions 4 and 5 measured self-reported performance visualization. The sample mean for Question 4 was 3.75, with 40.8% of respondents selecting this rating, and Question 5 was 3.66, with 39.5% of respondents selecting this rating. The most frequently selected response rating for Question 4 was 4, with 40.8% of respondents selecting this rating. The most frequently selected response rating for Question 5 was 4, with 39.5% of respondents selecting this rating.

Question 6 measured respondents' self-reward. The sample mean reported for this question was 2.99, with 23.7% of respondents selecting 3 as the rating. Question 7 measured self-talk. The sample mean reported for this question was 4.11, with 44.7% of respondents selecting 5 as the rating. Questions 8 and 9 measured evaluation of beliefs. The sample mean reported for Question 8 was 3.99, with 57.9% of respondents selecting

4 as the rating. The sample mean reported for Question 9 was 3.95, with 53.9% of the respondents selecting 4 as the rating.

Authentic Leadership Questionnaire

The Authentic Leadership Questionnaire consisted of 16 questions. Each question measured a specific element of authentic leadership. Appendix A provides the list of questions. Questions 1 through 5 measured transparency. The sample mean reported for Question 1 was 3.22, with 56.6% of respondents selecting 3 as the rating. The sample mean reported for Question 2 was 3.42, with 59.2% of respondents selecting 4 as the rating. The sample mean reported for Question 3 was 3.30, with 50% of respondents selecting 4 as the rating. The sample mean reported for Question 4 was 3.0, with 50% of respondents selecting 3 as the rating. The sample mean reported for Question 5 was 2.16, with 40.8% of respondents selecting 2 as the rating.

Questions 6 through 8 measured the moral and ethical orientation element of authentic leadership. The sample mean reported for Question 6 was 3.34, with 52.6% of respondents selecting 4 as the rating. The sample mean reported for Question 7 was 3.33, with 44.7% of respondents selecting both 3 and 4 as the rating. The sample mean reported for Question 8 was 3.17, with 59.2% of respondents selecting 3 as a rating.

Questions 9 through 12 measured the balanced processing element of authentic leadership. The sample mean reported for Question 9 was 3.45, with 55.3% of respondents selecting 4 as the rating. The sample mean reported for Question 10 was 2.74, with 46.1% of respondents selecting 3 as the rating. The sample mean reported for Question 11 was 3.41, with 51.3% of respondents selecting 4 as the rating. The sample

mean reported for Question 12 was 3.24, with 43.4% of the respondents selecting 3 as the rating.

Questions 13 through 16 measured the self-awareness element of authentic leadership. The sample mean reported for Question 13 was 3.08, with 44.7% of respondents selecting 3 as the rating. The sample mean reported for Question 14 was 2.78, with 50% of respondents selecting 3 as the rating. The sample mean reported for Question 15 was 2.99, with 53.9% of respondents selecting 3 as the rating. The sample mean reported for Question 16 was 3.21, with 48.7% of respondents selecting 3 as the rating.

Job Satisfaction Survey

The JSS consisted of 36 questions. Appendix A provides the list of questions. Each question measured a specific facet of job satisfaction, as conceptualized by Spector (1985). There were nine facets of job satisfaction measured by the JSS. The nine facets of job satisfaction comprised pay, promotion, supervision, fringe benefits, contingent rewards (Questions 5, 14, 23, and 32), operating conditions (Questions 6, 15, 24, and 31), coworkers (Questions 7, 16, 25, and 34), nature of work (Questions 8, 17, 27, and 35), and communication (Questions 9, 18, 26, and 36).

Questions 1, 10, 19, and 28 measured the pay facet of job satisfaction. The sample mean reported for Question 1 was 3.97, with 32.9% of the respondents selecting 5 as the rating. The sample mean reported for Question 10 was 2.74, with 28.9% of respondents selecting 2 as the rating. The sample mean reported for Question 19 was 3.61, with

22.4% of respondents selecting 6 as the rating. The sample mean reported for Question 28 was 3.32, with 22.4% of respondents selecting 4 as the rating.

Questions 2, 11, 20, and 33 measured the promotion facet of job satisfaction. The sample mean reported for Question 2 was 3.24, with 18.4% respondents selecting both 3 and 4 as the rating. The sample mean reported for Question 11 was 3.53, with 31.6% of respondents selecting 3 as the rating. The sample mean reported for Question 20 was 3.28, with 25% of respondents selecting 4 as the rating. The sample mean reported for Question 33 was 3.13, with 26.3% of respondents selecting 4 as the rating.

Questions 3, 12, 21, and 30 measured the supervision facet of job satisfaction. The sample mean reported for Question 3 was 4.32, with 30.3% of respondents selecting 5 as the rating. The sample mean reported for Question 12 was 4.57, with 48.7% of respondents selecting 6 as the rating. The sample mean reported for Question 21 was 3.89, with 22.4% of respondents selecting 6 as the rating. The sample mean reported for Question 30 was 4.78, with 40.8% of the respondents selecting 6 as the rating.

Questions 4, 13, 22, and 29 measured the fringe benefits facet of job satisfaction. The sample mean reported for Question 4 was 4.29, with 28.9% of respondents selecting 6 as the rating. The sample mean reported for Question 13 was 4.22, with 27.6% of the respondents selecting 5 as the rating. The sample mean reported for Question 22 was 4.28, with 26.3% of respondents selecting 5 as the rating. The sample mean reported for Question 29 was 3.22, with 27.6% of respondents selecting 3 as the rating.

Questions 5, 14, 23, and 32 measured the contingent rewards facet of job satisfaction. The sample mean reported for Question 5 was 3.59, with 25% of respondents

selecting 4 as the rating. The sample mean reported for Question 14 was 3.86, with 21.1% of respondents selecting 6 as the rating. The sample mean reported for Question 23 was 3.53, with 23.7% of respondents selecting 3 as the rating. The sample mean reported for Question 32 was 3.13, with 15.8% of respondents selecting both 4 and 5 as the rating.

Questions 6, 15, 24, and 31 measured operating conditions facet of job satisfaction. The sample mean reported for Question 6 was 3.14 with 27.6% of respondents selecting 3 as the rating. The sample mean reported for Question = 15 was 3.16 with 28.9% of respondents selecting 3 as the rating. The sample's mean reported for Question 24 was 2.32 with 32.9% of respondents selecting 2 as the rating. The sample's mean reported for Question 31 was 2.36 with 31.6% of respondents selecting 2 as the rating.

Questions 7, 16, 25, and 34 measured satisfaction with coworkers. The sample mean reported for Question 7 was 5.29 with 52.6% of respondents selecting 6 as the rating. The sample mean reported for Question 16 was 3.93 with 26.3% of respondents selecting 3 as the rating. The sample mean reported for Question 25 was 5.21 with 47.4% of respondents selecting 6 as the rating. The sample's mean reported for Question 34 was 4.00 with 23.7% of respondents selecting 4 as the rating.

Questions 8, 17, 27, and 35 measured nature of work satisfaction facet of job satisfaction. The sample mean reported for Question 8 was 4.55 with 42.1% of respondents selecting 6 as the rating. The sample mean reported for Question 17 was 4.84 with 38.2% of respondents selecting 5 as the rating. The sample mean reported for

Question 27 was 5.22 with 55.3% of respondents selecting 6 as the rating. The sample mean reported for Question 35 was 4.59 with 32.9% of respondents selecting 5 as the rating.

Questions 9, 18, 26, and 36 measured communication satisfaction facet of job satisfaction. The sample mean reported for Question 9 was 3.50 with 25% of respondents selecting 5 as the rating. The sample mean reported for Question 18 was 4.58 with 34.2% of respondents selecting 6 as the rating. The sample mean reported for Question 26 was 3.59 with 25% of respondents selecting 3 as the rating.

Results

Survey responses from participants were analyzed using SPSS Version 25 software program. A test for multivariate outliers, normality, and multicollinearity were conducted. The Mahalanobis distance was used to determine multivariate outliers. Table 2 shows that multivariate outliers are present in the data set. However, the outliers presented did not have an influence based on a Cook's analysis to determine influential outliers; if Cook distances were greater than 1, then an indication of influence would be noted (Stevens, 1984). Table 3 shows a descriptive analysis of Cook's analysis results. The outliers were retained because these were not found influential in affecting regression coefficients nor were the presence of outliers influential in the criterion variable; it was more normally distributed, a linear relationship between the predictors was measured, and the criterion variable was maintained (see Osborne & Waters, 2002). Figure 4 shows the distribution frequencies of the criterion variable as normally distributed.

Table 2

Mahalanobis Distance and Outliers

	Minimum	Maximum	Mean	Std. deviation
Mahalanobis distance	0.01458	9.68921	1.9736842	2.17127470
Outlier indicated	0	1	0.08	0.271

Note. $N = 76$.

Table 3

Cook Distance Description

	Minimum	Maximum	Mean	Std. deviation
Cook's distance	0.00000	0.23055	0.0167416	0.03386995

Note. $N = 76$. Cook's distance >1 influential outlier present.

A Shapiro-Wilk test was used to assess normality. The test indicated the predictors were statistically significantly different from a normal distribution at an alpha level of 0.05; therefore, the scores were not normally distributed. The Shapiro-Wilk test showed that the distribution of scores for the criterion variable were normally distributed at a significance level of 0.05. Table 4 shows the results of the Shapiro-Wilk test for normality.

Table 4

Shapiro-Wilk Test of Normality

Survey	Shapiro-Wilk		
	Statistic	<i>df</i>	Sig.
ASLQ - AVE	0.925	76	0.000
ALQ - AVE	0.945	76	0.002
JSS - AVE	0.984	76	0.467

Note. $N = 76$.

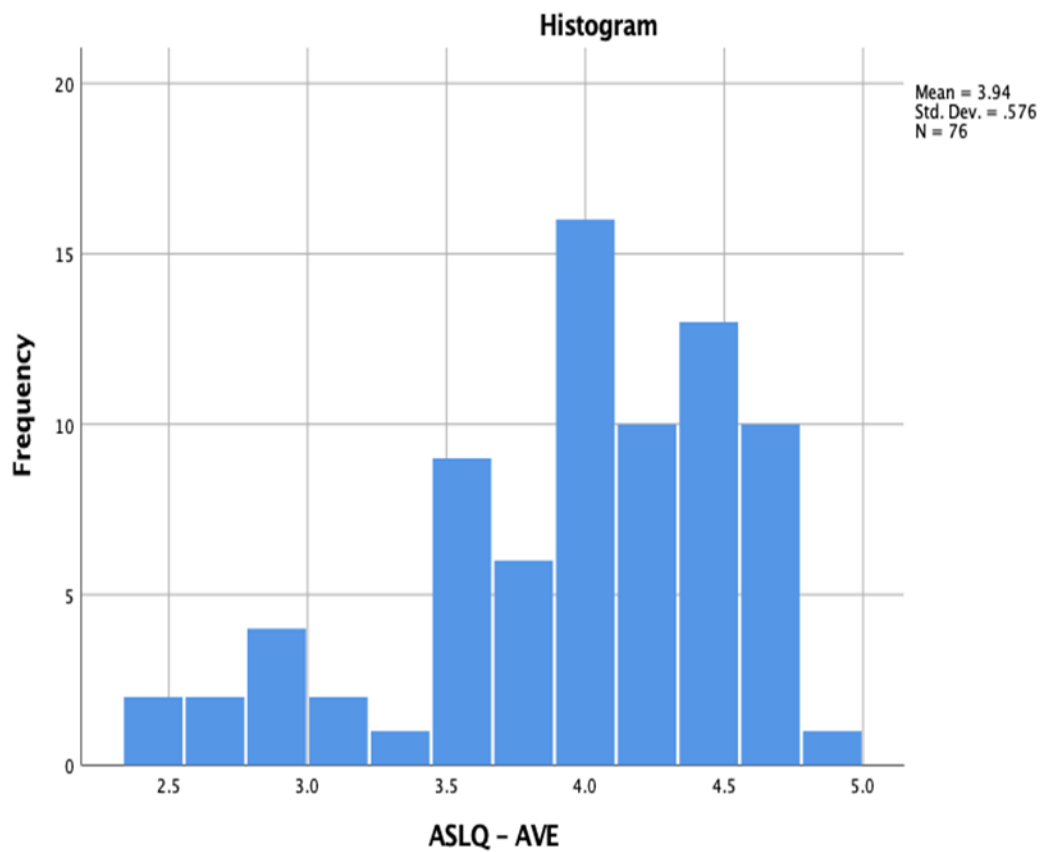


Figure 1. Histogram demonstrating the distribution of frequency of scores for the Abbreviated Self-Leadership Questionnaire.

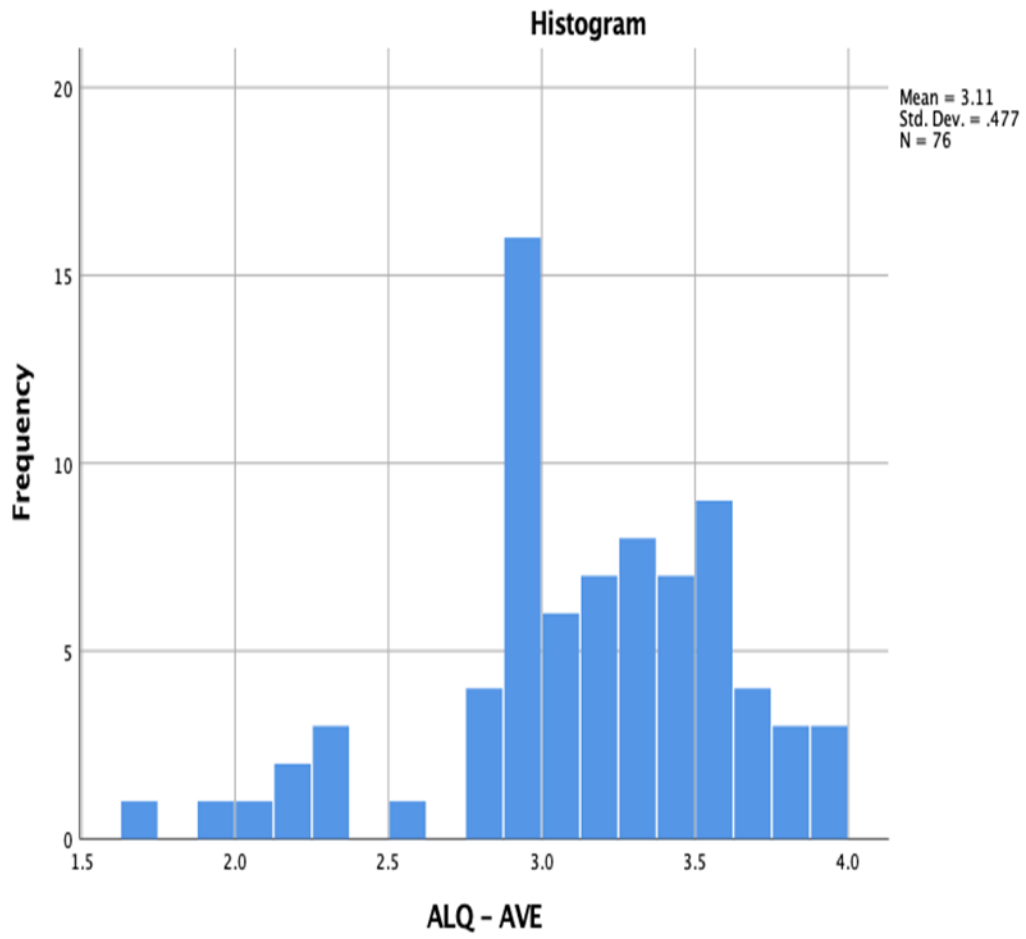


Figure 2. Histogram showing the distribution of frequency of scores for the Authentic Leadership Questionnaire.

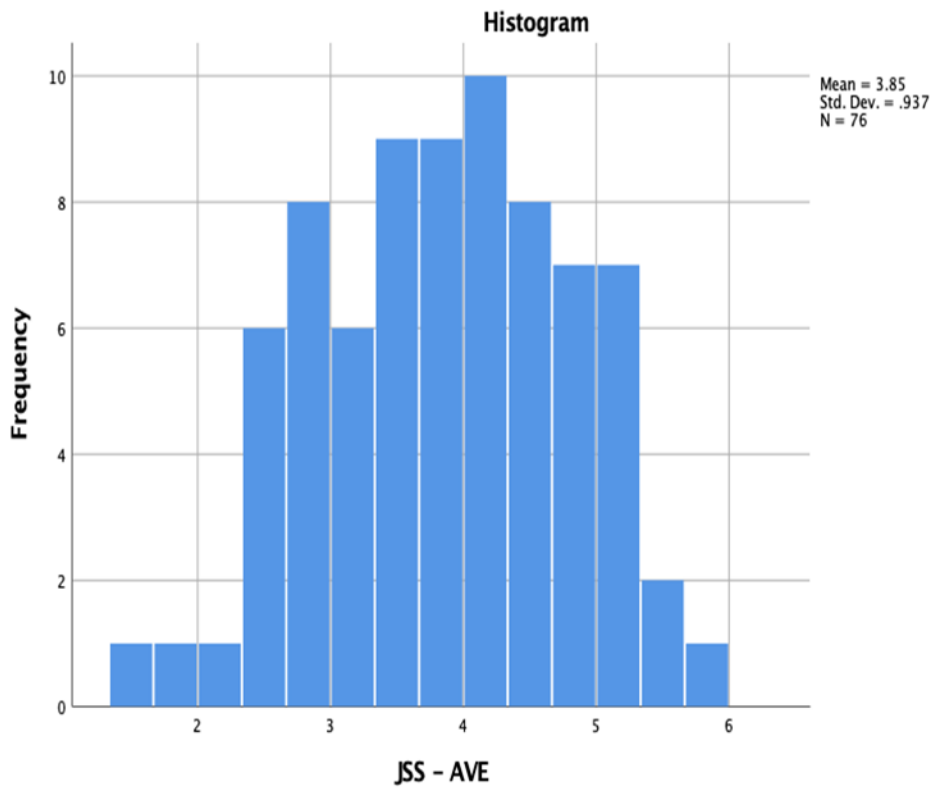


Figure 3. Histogram showing the distribution of frequency of scores for the Job Satisfaction Survey.

The variance inflation factor (VIF) computation was conducted to determine multicollinearity of the predictors. The collinearity statistics showed the VIF was 1.127 and less than the concerning value of 10 of which values equal to or greater indicated collinearity could be an issue in regression estimation (see Chatterjee & Hadi, 2012, p. 250). Table 5 shows the results of the VIF computation for multicollinearity of the predictors.

Table 5

Significance, Tolerance, and Variance Inflation Factor

Model	Sig.	Collinearity statistics	
		Tolerance	VIF
(Constant)	0.018		
ASLQ	0.786	0.887	1.127
ALQ	0.042	0.887	1.127

Note. Criterion variable: JSS – AVE.

Data related to RQ1 were analyzed to determine as to whether nurse manager self-leadership predicted their job satisfaction was analyzed using correlation and linear regression analysis. Data related to RQ2 were analyzed using correlation and linear regression analysis to determine if nurse manager authentic leadership predicted their job satisfaction. Data related to RQ3 were analyzed using correlation and linear regression analysis to determine if nurse manager self-leadership and authentic leadership interacted to predict job satisfaction.

The goal of this study was to determine the relationship between nurse manager self and authentic leadership and their job satisfaction. A linear regression analysis showed there was no statistically significant correlation or relationship between self-leadership, as measured by the ASLQ and job satisfaction, as measured by the JSS, at $p < 0.05$, $F(1, 74) = 1.012$, $p = .318$. Therefore, at a CI of 95% or 90%, the null hypothesis was not rejected, indicating that the samples' self-leadership did not predict their job satisfaction.

A linear regression analysis showed there was a statistically significant relationship between authentic leadership, as measured by the Authentic Leadership

Questionnaire, and job satisfaction, as measured by the JSS, of the sample at $p < 0.05$, $F(1, 74) = 5.349$, $p = .024$. Therefore, at a CI of 95%, the null hypothesis was rejected, indicating that the samples' measured authentic leadership did predict their job satisfaction. The reported effect size of this analysis was .067, meaning that authentic leadership accounted for 6.7% of the variance in the samples' measured job satisfaction.

Further analysis of authentic leadership dimensions and job satisfaction facets showed that of the nine job satisfaction facets measured by the JSS, authentic leadership was a statistically significant predictor of attitude about coworkers, nature of work, and communication in the workplace. The analysis showed that authentic leadership was a predictor of job satisfaction attitude about coworkers at $p < 0.05$, $F(1, 74) = 4.302$, $n = 76$, $p = .042$ with an effect size of .055. Therefore, 5.5% of the variance in the samples' measured job satisfaction attitude of coworkers could be attributed to authentic leadership.

The linear regression analysis of job satisfaction attitude of nature of work as measured by the instrument showed that authentic leadership was a predictor of this facet at $p < 0.05$, $F(1, 74) = 19.673$, $n = 76$, $p = .000$ with an effect size of .210. Therefore, 21% of the variance in the samples' measured job satisfaction attitude of the nature of work could be attributed to authentic leadership.

The linear regression analysis of job satisfaction attitude of communication in the workplace, as measured by the instrument, showed that authentic leadership was a predictor of this facet at $p < 0.05$, $F(1, 74) = 4.976$, $n = 76$, $p = .029$ with an effect size of

.063. Therefore, 6.3% of the variance in the samples' measured job satisfaction attitude of workplace communication could be attributed to authentic leadership.

The dimensions of authentic leadership predictive of job satisfaction were ethical and moral compass and balanced processing. The dimension transparency was statistically significant as a predictor at a CI of 90%, where ethical and moral compass and balanced processing were statistically significant at a CI of 95%.

Linear regression analysis showed that self-leadership and authentic leadership did not interact to predict job satisfaction as there was no statistically significant relationship between self and authentic leadership and job satisfaction at $p < 0.05$, $F(2, 73) = 2.678$, $p = .075$. However, there was significance at $p < 0.1$. Therefore, at a CI of 95%, there was no statistically significant finding, and the null hypothesis was not rejected. However, at a CI of 90%, there was a statistically significant finding, and the null hypothesis was rejected. The reported effect size reported was .068, meaning self-leadership and authentic leadership accounted for 6.8% of the variance in the samples' measured job satisfaction.

The analysis showed self-leadership, although not significantly correlated to job satisfaction, $r(2) = .116$, $n = 76$, $p = .159$, was positively correlated to authentic leadership, $r(2) = .335$, $n = 76$, $p = .002$. The analysis showed authentic leadership was positively correlated to job satisfaction, $r(2) = .260$, $n = 76$, $p = .012$. Table 6 shows the correlation matrix of the reported values. A linear regression analysis of self-leadership and authentic leadership showed self-leadership was statistically significant at a CI of 95% as a predictor of authentic leadership, $F(1, 74) = 9.381$, $n = 76$, $p = .003$ with an

effect size of .113. Therefore, as a predictor, self-leadership explained 11.3% of the variance in the samples' measured authentic leadership.

Linear regression analysis of each element of authentic leadership (e.g., self-awareness, ethical and moral direction, balanced processing, and transparency) showed that all, but self-awareness, were statistically significant predictors of job satisfaction.

Table 6

Self-Leadership, Authentic Leadership, and Job Satisfaction Correlation Matrix

		JSS	ASLQ	ALQ
Pearson Correlation	JSS	1.000	0.116	0.260
	ASLQ	0.116	1.000	0.335
	ALQ	0.260	0.335	1.000
Sig. (1-tailed)	JSS		0.159	0.012
	ASLQ	0.159		0.002
	ALQ	0.012	0.002	

Note. $N = 76$. Significant at $p < 0.05$.

The post hoc power analysis indicated the sample size was insufficient to produce an acceptable power of .80 or greater. Thus, there was an increased likelihood of failing to reject a false null hypothesis regarding any of the presented null hypotheses, meaning that authentic leadership or the interaction of self and authentic leadership as predictors of job satisfaction were not rejected when these were statistically, significantly determined as predictors at the respective CIs. Therefore, caution when inferring the results within the sample and beyond the sample should be taken.

Summary

The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and their job satisfaction. The data set used was evaluated for multivariate outliers,

normality, and multicollinearity of the predictors. The evaluation revealed outliers in the predictors influenced the distribution of scores and the normality of curvature. The criterion variable scores were normally distributed and did not suffer from the effects of outliers as the predictor variables. The predictors tested as significantly different from each other and distinctly had differing effects on regression estimates.

Research Question 1 showed no significant relationship between the sample's self-leadership and their job satisfaction. The linear regression analysis showed that self-leadership, as measured by the ASLQ, did not predict job satisfaction, as measured by the JSS. Research Question 2 showed a significant relationship between the samples' authentic leadership and their job satisfaction. The linear regression analysis indicated authentic leadership, as measured by the Authentic Leadership Questionnaire, was statistically significant as a predictor of job satisfaction, as measured by the JSS. Research Question 3 showed no significant relationship at the confidence interval 95% but did show a significant relationship at the confidence interval of 90%. The linear regression analysis showed that at a CI of 95%, self and authentic leadership did not interact to predict job satisfaction, as measured by the respective instruments; at a CI of 90%, these did interact to predict job satisfaction, as measured by the respective instruments.

The correlational analysis showed that self-leadership was correlated with authentic leadership, although not correlated with job satisfaction. Authentic leadership was correlated with job satisfaction. The reported effect size for authentic leadership as a predictor accounted for 6.7% of the variance in the samples' measured job satisfaction. In

consideration of the model self and authentic leadership when the CI was 90%, the effect size for this model accounted for 6.8% of the variance in the samples' measured job satisfaction.

Chapter 4 provided a description of the demographics, a description of the sample scoring distribution, results, and findings. The null hypothesis was rejected regarding authentic leadership as a predictor of job satisfaction at a CI of 95%; the null hypothesis of self-leadership as a predictor of job satisfaction was not rejected. The results showed that self and authentic leadership interacted to predict job satisfaction at a lower CI of 90% but failed at the CI of 95%. The results showed that self-leadership was correlated with authentic leadership but not with job satisfaction; authentic leadership was correlated with job satisfaction. The results showed that the effect size, although low, explained the variance in scores of job satisfaction when authentic leadership, at the 95% CI, or the interaction of self and authentic leaders, at the 90% CI, was present in the sample.

The results of the analysis showed authentic leadership was a predictor of three of the nine facets measured by the JSS. These facets included job satisfaction attitude of coworkers, nature of work, and workplace communication. Two dimensions of authentic leadership were predictive of job satisfaction at CI of 95%. These dimensions included ethical/moral direction and balanced processing, whereas transparency was significant at a CI of 90%. Given the correlation of self-leadership and authentic leadership and the indication as provided by the variance inflation factor analysis for multicollinearity, self-leadership and authentic leadership differed. The linear regression analysis of self-

leadership showed it as a predictor of authentic leadership at a CI of 95%. In Chapter 5, a discussion occurs on why the results occurred, what these findings mean, the social change implication, practical practice implications, and what future investigators should consider.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and job satisfaction. Researchers have examined self and authentic leadership in relation to follower job satisfaction but have produced little research examining followers' relationships with managers (Flores et al., 2018). In Chapter 1, a synopsis was provided of the concepts of self-leadership, authentic leadership, and job satisfaction. The context for which the study was important was discussed. Healthcare entities and providers in the United States were noted, such as Djukic et al. (2017) defining nurse managers as having vital roles in healthcare and noting a high cost when these professionals left their jobs as managers. In Chapter 2, research on self-leadership, authentic leadership, and job satisfaction in various contexts of interest was noted. Researchers examining employees' intent to stay have noted that job satisfaction is an important factor for predicting this work-related outcome. Researchers examining intent to stay among nurse managers have determined that job satisfaction is an important factor for identifying intent to stay in this population (Brown et al., 2013). Researchers have proposed that the determinants of job satisfaction represent a necessary area of investigation for improving nurse managers' job satisfaction and positively influencing their intent to stay on their jobs (Cable & Graham, 2018).

In Chapter 3, the type of study, the population of interest, and the sample were described. Present in the chapter was a description of the instruments of measurement and

their deployment. A description of the execution of data collection was presented. In Chapter 4, results of the data collected from the limited sample of nurse managers who voluntarily responded to the online survey made up of the ASLQ, ALQ, and JSS were presented. The difference between the a priori sample size (160) and the actual sample size used (76) was noted. Descriptions of the data collected and the findings of the correlational linear regression analysis were presented. In this chapter, an interpretation of the findings, some of the limitations of this study, implications, and recommendations for future investigations on the subject are presented.

Interpretation of the Findings in Relation to Theoretical Framework

This section provides a brief summary of the results, findings, and insights gained according to each of the research questions. The reader is cautioned to consider the finding interpretations in the context of a limited sample ($n = 76$).

Research Question 1

The first research question asked the following: Does nurse managers' self-leadership predict their job satisfaction? A correlational linear regression was used to test the relationship between self-leadership, as measured by the ASLQ, and job satisfaction, as measured by the JSS. Self-leadership contributed no statistically significant value in its relationship to job satisfaction, nor was it statistically significant as a predictor of job satisfaction. This finding indicated that within the context of the sample, the null hypothesis was not rejected, and self-leadership did not have a relationship such that it would predict job satisfaction. However, self-leadership did predict authentic leadership. These findings did not support self-leadership as a predictor of job satisfaction.

Furtner et al. (2015) described self-leadership as the influence of the leader on the perceptions of employees. This influence on employees is further supported by other research, including work by Furtner et al. (2018), who noted that the leader's self-leadership ability had positive outcomes on followers. Based on the findings of these studies and others, as well as the results of this limited investigation, self-leadership of nurse managers would seem to have a relationship to the influence of in perception and behaviors, but it was not directly related to the job satisfaction of the nurse manager, nor would it be a useful predictor of job satisfaction. Houghton and Jinkerson (2007) suggested that constructive thought strategies as an implementation of self-leadership had a relationship to the job satisfaction of employees.

In this study, I sought to capture self-leadership as a self-imposed strategy influencing the behavior of the individual, which could be divergent from the individual's own attitudes, thoughts, and beliefs while permitting conforming behavior and the appearance of satisfaction, but not the attitude of such. Houghton and Yoho (2005) indicated that self-leadership strategies were oriented toward behavior and cognitive thought processes. Therefore, the individual may be a self-leader, but his/her actual job attitude may diverge from the engagement of favorable self-leadership behavioral strategies employed.

The job-satisfaction-oriented construct of self-leadership was job satisfaction oriented self-awareness, job satisfaction oriented self-observation, job satisfaction oriented self-leadership behavioral strategies, job satisfaction oriented natural reward strategies, and job satisfaction oriented cognitive thought strategies. These subvariables

were not statistically significant predictors of job satisfaction; therefore, the proposed job satisfaction construct of self-leadership was not a viable construct for further consideration.

Research Question 2

Research Question 2 asked the following: Does nurse managers' authentic leadership predict their job satisfaction? A correlational linear regression model was used to test the relationship between authentic leadership and job satisfaction. The analysis showed that authentic leadership had a statistically significant relationship, as a predictor, with job satisfaction. This finding added support to previous research findings where researchers suggested that authentic leadership influenced work attitudes (see Khan et al., 2017).

Walumbwa et al. (2008) suggested that psychological capacities were among the dimensions that made up authentic leadership; Olaniyan and Hystad (2016) defined authentic leaders as having a highly developed organizational context, including mental constructs, that permitted self-development and positive relationship formation with the self and others. This internalized organizational context and the psychological aspect of authentic leadership may have an attributable influence on job satisfaction, just as turnover intent is a cognitive process job satisfaction is, in part, cognitive (Lambert & Hogan, 2009; Schleicher, Greguras, & Watt, 2004). In addition to finding authentic leadership as statistically significant in its relationship to job satisfaction, there were two dimensions of authentic leadership that were statistically significant as predictors of job satisfaction, ethical and moral direction, and balanced processing. The authentic

leadership dimension transparency showed no statistical significance at the same reported confidence interval.

Organizational fit and the leadership style within the context of the organization may contribute to the statistical significance of this sample's findings as these related to authentic leadership, and the dimensions ethical and moral direction and transparency directing the relationship. Eva, Sendjaya, Prajogo, Cavanagh, and Robin (2018) suggested that a leader's fit within the organization could yield positive work-related outcomes. This finding might not be limited to positive work outcomes of followers; it might encompass work attitudes such as job satisfaction of managers and leaders. As demonstrated with the sample of this study, a positive correlation, and shown as a statistically significant predictor of job satisfaction, authentic leadership may have a benefit of positively predicting nurse manager job satisfaction within the context of an organization that empowers this relationship. The context of organizational culture and fit might also contribute to the findings that authentic leadership was predictive of three facets of the nine job satisfaction facets. The facets predicted by authentic leadership were job satisfaction with coworkers, job satisfaction with nature of work, and job satisfaction with workplace communication. The organization context and culture, as previously cited, could be considered a variable contributing to the statistical significance of the aforementioned in relationship to job satisfaction of the sample examined.

Research Question 3

Research Question 3 asked the following: Does self-leadership and authentic leadership interact to predict job satisfaction? A correlational linear regression analysis

was completed to examine whether self and authentic leadership interacted to predict job satisfaction. The analysis showed that self and authentic leadership did not interact to predict job satisfaction at a high confidence interval. As noted earlier, self-leadership alone was not predictive, nor was it correlated with job satisfaction. Thus, it was an unfavorable predictor of job satisfaction for the sample examined. However, when combined with authentic leadership, a predictor of job satisfaction, the significance level met lower confidence interval thresholds than the confidence interval level at which authentic leadership alone was identified as significant, suggesting that there could be a role that self-leadership had when considered with authentic leadership to predict this sample's job satisfaction. An analysis of the relationship between self-leadership and authentic leadership provides some insight into the possible connection to job satisfaction.

The relationship between self-leadership and authentic leadership was not the focus of a question posed in this study; however, after analyzing the correlational matrix featuring self-leadership, authentic leadership, and job satisfaction, I observed that self-leadership was positively correlated with authentic leadership. To confirm that the variables were not collinear, an additional analysis was conducted. Further analysis using linear regression showed that self-leadership was a statistically significant predictor of authentic leadership. Both might be linked by a common concept of self-regulation, and the elements of self-leadership might empower the sample to be authentic leaders. Future research might be useful to examine this possibility.

Manz (1986) expanded the concept of self-management to self-leadership by including self-regulation as a construct. Avolio and Gardner (2005) described authentic leaders as being driven by a self-regulation process that empowered them to align their behaviors with their self-awareness. If this finding was the case, the sample of this study engaged in various levels of self-leadership to achieve authentic leadership that contributed varying levels of job satisfaction. Thus, self-leadership's relationship to authentic leadership might be that when the self-regulatory process was engaged strategically and in a meaningful way, there was some level of authenticity in leadership that was present.

The theoretical implications of this study expanded the reaches of self-leadership, authentic leadership, and the relationship to job satisfaction as a concept. The findings in this study indicated that researchers should consider leadership style and approach with respect to the leader engaging in that activity and their work outcomes. The findings presented in this study indicated that both scholars and practitioners should consider the role of self-leadership in the development of leadership style and approach regarding authentic leadership. Therefore, researchers could consider adapting or constructing theoretical constructs that consider the relationship of leaders' constructs (style) and their work outcomes.

Limitations of the Study

This survey was limited in its generalizability because the sample was a sample of convenience, limited in number of participants, and focused on a specific subset of managers—nurse managers. Given the low response rates, the findings might have higher

variances and greater error rates than would be normalized with a larger sample. The post hoc power calculated, given the sample size and the various effect sizes presented, was low, thus increasing the probability of errors in interpretation. Another limitation was related to the instruments used for measuring the respective variables. These instruments might have been limited, due to wording or questionnaire length, in capturing the truest thoughts and feelings of the respondent. As noted by Houghton et al. (2012) about the development of the ASLQ, confining the measurement to a 9-item scale and limited knowledge of scale stability across time could limit interpretation of findings in other studies for which the scale was used. An additional limitation was the use of mean imputation for the survey items not completed by some participants, which might have weakened the general findings of this study by either inflating or deflating the scores used for analysis. Sample bias from using a computer to provide a survey online could have contributed to self-selecting bias and under-coverage bias. Some participants might not have been able to access the survey in a private setting, thus possibly decreasing their attention to the questions as well as increasing their concerns for confidentiality. Some of these limitations are not unusual in low-response-rate surveys, but these were restrictive as to the extent that such findings could be applied to a general population (see Coughlan, Cronin, & Ryan, 2009).

Recommendations

Future Research

This study was limited in scope and number of participants. Future researchers should consider increasing the number of participants to meet a minimum threshold of a

power of .90. The low power of the current study makes it statistically limiting to consider generally applying the findings to any group beyond the sample participants. Researchers should consider repeating the study with a different self-leadership instrument. As noted, condensing the self-leadership questionnaire to a nine-question survey may have influenced the stability of the instrument and may have limited the sensitivity of the instrument (see Houghton et al., 2012). Therefore, repeating the study with another self-leadership rating instrument may provide improved insights about the relationship that self-leadership has with job satisfaction or in its interaction with the authentic leadership of nurse managers.

Future researchers should consider applying qualitative techniques to understand the meaning of authentic leadership in relation to job satisfaction facets of coworker satisfaction, nature of work satisfaction, and work-related communication satisfaction. The insights from such studies may enhance programs for developing leaders and workplace communication programs. These researchers may consider conducting longitudinal research on authentic leadership and its relationship to job satisfaction over time. Scholars and practitioners can use this information to identify better the sustainability of this relationship.

Scholars could consider examining authentic leadership in the context of satisfaction in a small context, such as within groups, given that this study showed that participants indicated authentic leadership as a statistically significant predictor of job satisfaction facet of coworkers. Banks, McCauley, Gardner, and Guler (2016) noted that authentic leadership outperformed transformational leadership in predicting group

performance. Authentic leadership might be predictive of job satisfaction when in the context of groups.

Given the findings of this study, future researchers should examine the relationship between self-leadership and authentic leadership. The findings of this study showed that self-leadership was correlated with authentic leadership and was a predictor of it as well. Future researchers should examine this relationship more closely and with other types of managers. The findings could provide insights about how leadership development programs can foster self-leadership and authentic leadership.

Practical Recommendations

Cable and Graham (2018) discussed the importance of better understanding the determinants of nurse manager job satisfaction. This study has presented evidence that authentic leadership is a statistically significant predictor of job satisfaction of the sample studied. This statistical significance may be considered an opportunity for practitioners, organizations, and other entities with job satisfaction concerns for managers to consider understanding the relationship that these managers have with their coworkers, the nature of their work, and workplace communication. Examining these relationships may help practitioners develop programs, policies, and practices that can improve the job satisfaction of managers.

Those interested in further improving job satisfaction among their managers may consider training programs that foster managers' abilities to be authentic as leaders. Ahmad et al. (2019) noted that training had a direct effect on job satisfaction. The implementation of a training program can help organization leaders interested in

improving the job satisfaction of nurse managers. The leaders can focus on helping those managers become more authentic in their leadership through mentoring and coaching. This training might include the development of self-leadership strategy skills, as self-leadership was shown to be a significant predictor of authentic leadership.

Organization leaders may consider managerial fit or the context in which the manager may engage a style or approach of leadership. Mitchell, Holtom, Lee, Sablinski, and Erez (2001) noted that employee perceived compatibility or comfort with an organization and environment might attribute to that employee's connection to the job. In this study, the fit consideration for nurse managers described may include considering the coworkers of the manager; the manager's compatibility between the job; the knowledge, skills, and abilities related to the nature of the work as a manager; and the manager's communication style and ability. Therefore, as organization leaders consider selecting nurse managers for management, they should consider the individual's fit with the current needs of the organization. Leaders can then train these managers through development programs for the future needs of the evolving organization.

Hartviksen, Aspfors, and Uhrenfeldt (2019) noted that leadership development affected healthcare middle managers capacity and capability for leadership. Fraiser (2019) noted that measurable increases of participants' authentic leadership were measured after completing the pilot leadership development program designed to prepare nurses for authentic leadership. Therefore, developing a program that includes some insights gained from this research study should be considered, as the program may strengthen participants' capacities and abilities for leadership. For example, Wulffers,

Bussin, and Hewitt (2016) described creating a program for leaders to develop their authentic leadership abilities through developing personal, interpersonal, and then professional leadership. The researchers found that participants appreciated the importance of their presence, and trueness to their selves empowered them to create a work environment that improved achieving results. Thus, a program that implements self-leadership development while focusing on the development of authenticity in leadership may empower managers to create productive work environments that improve objective achievement.

Implications for Positive Social Change

The positive social change implications for this study include offering direction for developing leadership programs that help nurse managers develop their authentic leadership abilities. As authentic leadership has been demonstrated as a statistically significant predictor of job satisfaction of the sample, nursing development programs that encourage the development of authentic leadership may benefit from increasing the job satisfaction of their nurse managers. As shown in this study, the relationship between authentic leadership and job attitude related to coworkers, nature of work, and communication can be used to provide guidance for developing nurse manager organizational relationships, their fit to the nature of their work, and communication within the work environment. Researchers have found due to improving authentic leadership, it may be possible to improve job satisfaction, thereby increasing the intent to stay given job satisfaction (Brown et al., 2013).

Improved authentic leadership and job satisfaction may increase improve the quality of care provided. As Aiken et al. (2009) noted, organizations that have nursing professionals with high levels of job satisfaction are rated as offering a high level of care. Thus, through improving manager authentic leadership and job satisfaction, an increase of positive health outcomes that affect the treatment of patients serviced may be possible.

Conclusion

The purpose of this quantitative correlational linear regression study was to examine any relationships between nurse managers' self-leadership, authentic leadership, and their job satisfaction. This study included the application of the theoretical constructs of self-leadership and authentic leadership, as presented by Manz (1986), Houghton and Jinkerson (2007), and Avolio et al. (2007). The findings could address what Cable and Graham (2018) encouraged researchers to consider, understanding better the determinants of nurse manager job satisfaction. The findings showed that self-leadership of the participants was related to and a predictor of authentic leadership. The findings showed authentic leadership was related to and a predictor of job satisfaction of the participants. The findings showed self-leadership and authentic leadership did interact to predict job satisfaction, but this finding was only statistically significant at a lower confidence interval, whereas authentic leadership alone as a predictor or self-leadership alone as a predictor of authentic leadership were statistically significant at a high confidence interval. Although the limitations of the study can be considered substantial, the findings still present an opportunity for researchers to consider the relationship that leadership has on the leader and their work-related outcomes.

This study provides more information on the role that self-leadership and authentic leadership have in job satisfaction and that their inclusion in leadership development programs may improve patient outcomes. A pilot study has shown the benefits of training nurses to develop their authentic leadership and provides suggestions on a few areas of focus (Fraiser, 2019; Wulffers et al., 2016). The findings of this study are encouraging for improving nurse manager job satisfaction through authentic leadership and for addressing issues of nurse manager intent to leave.

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Appendix A: Abbreviated Self-Leadership Frequency Tables

Table A1

I Establish Specific Goals for My Own Performance

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	2	2.6	2.6	2.6
	3	7	9.2	9.2	11.8
	4	33	43.4	43.4	55.3
	5	34	44.7	44.7	100.0
	Total	76	100.0	100.0	

Table A2

I Make a Point to Keep Track of How Well I Am Doing at Work

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	2	2.6	2.6	2.6
	3	5	6.6	6.6	9.2
	4	40	52.6	52.6	61.8
	5	29	38.2	38.2	100.0
	Total	76	100.0	100.0	

Table A3

I Work Toward Specific Goals I Have Set for Myself

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	2	2.6	2.6	2.6
	3	6	7.9	7.9	10.5
	4	23	30.3	30.3	40.8
	5	45	59.2	59.2	100.0
	Total	76	100.0	100.0	

Table A4

I Visualize Myself Successfully Performing a Task Before I Do It

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	5	6.6	6.6	10.5
	3	19	25.0	25.0	35.5
	4	31	40.8	40.8	76.3
	5	18	23.7	23.7	100.0

Table A5

Sometimes, I Picture in My Mind a Successful Performance Before I Actually Do a Task

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	6	7.9	7.9	11.8
	3	21	27.6	27.6	39.5
	4	30	39.5	39.5	78.9
	5	16	21.1	21.1	100.0
	Total	76	100.0	100.0	

Table A6

When I Have Successfully Completed a Task, I Often Reward Myself With Something I Like

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	16	21.1	21.1	21.1
	2	12	15.8	15.8	36.8
	3	18	23.7	23.7	60.5
	4	17	22.4	22.4	82.9
	5	13	17.1	17.1	100.0
	Total	76	100.0	100.0	

Table A7

Sometimes, I Talk to Myself (Out Loud or in My Head) to Work Through Difficult Situations

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	6	7.9	7.9	10.5
	3	8	10.5	10.5	21.1
	4	26	34.2	34.2	55.3
	5	34	44.7	44.7	100.0
	Total	76	100.0	100.0	

Table A8

I Try to Mentally Evaluate the Accuracy of My Own Beliefs About Situations I Am Having Problems With

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	3	3.9	3.9	6.6
	3	8	10.5	10.5	17.1
	4	44	57.9	57.9	75.0
	5	19	25.0	25.0	100.0
	Total	76	100.0	100.0	

Table A9

I Think About My Own Beliefs and Assumptions Whenever I Encounter a Difficult Situation

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	3	3.9	3.9	6.6
	3	11	14.5	14.5	21.1
	4	41	53.9	53.9	75.0
	5	19	25.0	25.0	100.0
	Total	76	100.0	100.0	

Appendix B: Authentic Leadership Questionnaire Frequency Tables

Table B1

As a Leader, I Say Exactly What I Mean

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	8	10.5	10.5	10.5
	3	43	56.6	56.6	67.1
	4	25	32.9	32.9	100.0
	Total	76	100.0	100.0	

Table B2

As a Leader, I Admit Mistakes When They Are Made

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	9	11.8	11.8	14.5
	3	20	26.3	26.3	40.8
	4	45	59.2	59.2	100.0
	Total	76	100.0	100.0	

Table B3

As a Leader, I Encourage Everyone to Speak Their Mind

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	9	11.8	11.8	15.8
	3	26	34.2	34.2	50.0
	4	38	50.0	50.0	100.0
	Total	76	100.0	100.0	

Table B4

As a Leader, I Tell You the Hard Truth

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	16	21.1	21.1	23.7
	3	38	50.0	50.0	73.7
	4	20	26.3	26.3	100.0
	Total	76	100.0	100.0	

Table B5

As a Leader, I Display Emotions in Line With Feelings

		Frequency	Percent	Valid percent	Cumulative percent
Valid	0	4	5.3	5.3	5.3
	1	14	18.4	18.4	23.7
	2	31	40.8	40.8	64.5
	3	20	26.3	26.3	90.8
	4	7	9.2	9.2	100.0
	Total	76	100.0	100.0	

Table B6

As a Leader, I Demonstrate Beliefs Consistent With Actions

		Frequency	Percent	Valid percent	Cumulative percent
Valid	0	1	1.3	1.3	1.3
	1	1	1.3	1.3	2.6
	2	9	11.8	11.8	14.5
	3	25	32.9	32.9	47.4
	4	40	52.6	52.6	100.0
	Total	76	100.0	100.0	

Table B7

As a Leader, I Make Decisions Based on My Core Values

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	1	1.3	1.3	1.3
	2	7	9.2	9.2	10.5
	3	34	44.7	44.7	55.3
	4	34	44.7	44.7	100.0
	Total	76	100.0	100.0	

Table B8

As a Leader, I Ask You to Take Positions That Support Your Core Values

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	9	11.8	11.8	11.8
	3	45	59.2	59.2	71.1
	4	22	28.9	28.9	100.0
	Total	76	100.0	100.0	

Table B9

As a Leader, I Make Difficult Decisions Based on High Standards of Ethical Conduct

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	8	10.5	10.5	10.5
	3	26	34.2	34.2	44.7
	4	42	55.3	55.3	100.0
	Total	76	100.0	100.0	

Table B10

As a Leader, I Solicit Views That Challenge My Deeply Held Positions

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	7	9.2	9.2	9.2
	2	20	26.3	26.3	35.5
	3	35	46.1	46.1	81.6
	4	14	18.4	18.4	100.0
	Total	76	100.0	100.0	

Table B11

As a Leader, I Analyze Relevant Data Before Coming to a Decision

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	1	1.3	1.3	1.3
	2	6	7.9	7.9	9.2
	3	30	39.5	39.5	48.7
	4	39	51.3	51.3	100.0
	Total	76	100.0	100.0	

Table B12

As a Leader, I Listen Carefully to Different Viewpoints Before Coming to Conclusions

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	1	1.3	1.3	1.3
	2	11	14.5	14.5	15.8
	3	33	43.4	43.4	59.2
	4	31	40.8	40.8	100.0
	Total	76	100.0	100.0	

Table B13

As a Leader, I Seek Feedback to Improve Interactions With Others

		Frequency	Percent	Valid percent	Cumulative percent
Valid	0	1	1.3	1.3	1.3
	1	4	5.3	5.3	6.6
	2	10	13.2	13.2	19.7
	3	34	44.7	44.7	64.5
	4	27	35.5	35.5	100.0
	Total	76	100.0	100.0	

Table B14

As a Leader, I Accurately Describe How Others View My Capabilities

		Frequency	Percent	Valid percent	Cumulative percent
Valid	0	1	1.3	1.3	1.3
	1	3	3.9	3.9	5.3
	2	21	27.6	27.6	32.9
	3	38	50.0	50.0	82.9
	4	13	17.1	17.1	100.0
	Total	76	100.0	100.0	

Table B15

As a Leader, I Know When It Is Time to Reevaluate My Position on Important Issues

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	2	2.6	2.6	2.6
	2	15	19.7	19.7	22.4
	3	41	53.9	53.9	76.3
	4	18	23.7	23.7	100.0
	Total	76	100.0	100.0	

Table B16

As a Leader, I Show I Understand How Specific Actions Impact Others

	Frequency	Percent	Valid percent	Cumulative percent
Valid	1	1	1.3	1.3
	2	10	13.2	14.5
	3	37	48.7	63.2
	4	28	36.8	100.0
	Total	76	100.0	100.0

Appendix C: Job Satisfaction Frequency Table

Table C1

I Feel I Am Being Paid a Fair Amount for the Work I Do

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	7	9.2	9.2	9.2
	2	11	14.5	14.5	23.7
	3	8	10.5	10.5	34.2
	4	13	17.1	17.1	51.3
	5	25	32.9	32.9	84.2
	6	12	15.8	15.8	100.0
	Total	76	100.0	100.0	

Table C2

There Is Really Too Little Chance for Promotion on My Job

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	7	9.2	9.2	9.2
	2	23	30.3	30.3	39.5
	3	14	18.4	18.4	57.9
	4	14	18.4	18.4	76.3
	5	13	17.1	17.1	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C3

My Supervisor Is Quite Competent in Doing His/Her Job

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	7	9.2	9.2	9.2
	2	7	9.2	9.2	18.4
	3	8	10.5	10.5	28.9
	4	9	11.8	11.8	40.8
	5	23	30.3	30.3	71.1
	6	22	28.9	28.9	100.0
	Total	76	100.0	100.0	

Table C4

I Am Not Satisfied With the Benefits I Receive

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	10	13.2	13.2	17.1
	3	10	13.2	13.2	30.3
	4	14	18.4	18.4	48.7
	5	17	22.4	22.4	71.1
	6	22	28.9	28.9	100.0
	Total	76	100.0	100.0	

Table C5

When I Do a Good Job, I Receive the Recognition for It That I Should Receive

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	6	7.9	7.9	7.9
	2	13	17.1	17.1	25.0
	3	15	19.7	19.7	44.7
	4	19	25.0	25.0	69.7
	5	18	23.7	23.7	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C6

Many of Our Rules and Procedures Make Doing a Good Job Difficult

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	11	14.5	14.5	14.5
	2	14	18.4	18.4	32.9
	3	21	27.6	27.6	60.5
	4	14	18.4	18.4	78.9
	5	15	19.7	19.7	98.7
	6	1	1.3	1.3	100.0
	Total	76	100.0	100.0	

Table C7

I Like the People I Work With

		Frequency	Percent	Valid percent	Cumulative percent
Valid	3	4	5.3	5.3	5.3
	4	10	13.2	13.2	18.4
	5	22	28.9	28.9	47.4
	6	40	52.6	52.6	100.0
	Total	76	100.0	100.0	

Table C8

I Sometimes Feel My Job Is Meaningless

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	9	11.8	11.8	15.8
	3	10	13.2	13.2	28.9
	4	7	9.2	9.2	38.2
	5	15	19.7	19.7	57.9
	6	32	42.1	42.1	100.0
	Total	76	100.0	100.0	

Table C9

Communications Seem Good Within This Organization

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	9	11.8	11.8	11.8
	2	13	17.1	17.1	28.9
	3	14	18.4	18.4	47.4
	4	16	21.1	21.1	68.4
	5	19	25.0	25.0	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C10

Raises Are Too Few and Far Between

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	19	25.0	25.0	25.0
	2	22	28.9	28.9	53.9
	3	13	17.1	17.1	71.1
	4	9	11.8	11.8	82.9
	5	8	10.5	10.5	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C11

Those Who Do Well on the Job Stand a Fair Chance of Being Promoted

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	9	11.8	11.8	11.8
	2	5	6.6	6.6	18.4
	3	24	31.6	31.6	50.0
	4	18	23.7	23.7	73.7
	5	15	19.7	19.7	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C12

My Supervisor Is Unfair to Me

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	5	6.6	6.6	6.6
	2	8	10.5	10.5	17.1
	3	10	13.2	13.2	30.3
	4	6	7.9	7.9	38.2
	5	10	13.2	13.2	51.3
	6	37	48.7	48.7	100.0
	Total	76	100.0	100.0	

Table C13

The Benefits We Receive Are as Good as Most Other Organizations

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	6	7.9	7.9	7.9
	2	7	9.2	9.2	17.1
	3	8	10.5	10.5	27.6
	4	16	21.1	21.1	48.7
	5	21	27.6	27.6	76.3
	6	18	23.7	23.7	100.0
	Total	76	100.0	100.0	

Table C14

I Do Not Feel the Work I Do Is Appreciated

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	7	9.2	9.2	9.2
	2	12	15.8	15.8	25.0
	3	12	15.8	15.8	40.8
	4	15	19.7	19.7	60.5
	5	14	18.4	18.4	78.9
	6	16	21.1	21.1	100.0
	Total	76	100.0	100.0	

Table C15

My Efforts to Do a Good Job Are Seldom Blocked by Red Tape

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	12	15.8	15.8	15.8
	2	12	15.8	15.8	31.6
	3	22	28.9	28.9	60.5
	4	16	21.1	21.1	81.6
	5	10	13.2	13.2	94.7
	6	4	5.3	5.3	100.0
	Total	76	100.0	100.0	

Table C16

I Find I Have to Work Harder at My Job Because of the Incompetence of Others

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	5	6.6	6.6	6.6
	2	9	11.8	11.8	18.4
	3	20	26.3	26.3	44.7
	4	12	15.8	15.8	60.5
	5	12	15.8	15.8	76.3
	6	18	23.7	23.7	100.0
	Total	76	100.0	100.0	

Table C17

I Like Doing the Things I Do at Work

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	4	5.3	5.3	9.2
	3	4	5.3	5.3	14.5
	4	8	10.5	10.5	25.0
	5	29	38.2	38.2	63.2
	6	28	36.8	36.8	100.0
	Total	76	100.0	100.0	

Table C18

The Goals of This Organization Are Not Clear to Me

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	8	10.5	10.5	14.5
	3	5	6.6	6.6	21.1
	4	12	15.8	15.8	36.8
	5	22	28.9	28.9	65.8
	6	26	34.2	34.2	100.0
	Total	76	100.0	100.0	

Table C19

I Feel Unappreciated by the Organization When I Think About What They Pay Me

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	11	14.5	14.5	14.5
	2	16	21.1	21.1	35.5
	3	13	17.1	17.1	52.6
	4	5	6.6	6.6	59.2
	5	14	18.4	18.4	77.6
	6	17	22.4	22.4	100.0
	Total	76	100.0	100.0	

Table C20

People Get Ahead as Fast Here as They Do in Other Places

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	10	13.2	13.2	13.2
	2	16	21.1	21.1	34.2
	3	15	19.7	19.7	53.9
	4	19	25.0	25.0	78.9
	5	10	13.2	13.2	92.1
	6	6	7.9	7.9	100.0
	Total	76	100.0	100.0	

Table C21

My Supervisor Shows Too Little Interest in the Feelings of Subordinates

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	6	7.9	7.9	7.9
	2	15	19.7	19.7	27.6
	3	10	13.2	13.2	40.8
	4	12	15.8	15.8	56.6
	5	16	21.1	21.1	77.6
	6	17	22.4	22.4	100.0
	Total	76	100.0	100.0	

Table C22

The Benefits Package We Have Is Equitable

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	8	10.5	10.5	14.5
	3	10	13.2	13.2	27.6
	4	17	22.4	22.4	50.0
	5	20	26.3	26.3	76.3
	6	18	23.7	23.7	100.0
	Total	76	100.0	100.0	

Table C23

Few Rewards Exist for Those Who Work Here

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	9	11.8	11.8	11.8
	2	14	18.4	18.4	30.3
	3	18	23.7	23.7	53.9
	4	11	14.5	14.5	68.4
	5	11	14.5	14.5	82.9
	6	13	17.1	17.1	100.0
	Total	76	100.0	100.0	

Table C24

I Have Too Much Work to Do at Work

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	21	27.6	27.6	27.6
	2	25	32.9	32.9	60.5
	3	19	25.0	25.0	85.5
	4	7	9.2	9.2	94.7
	5	4	5.3	5.3	100.0
		Total	76	100.0	100.0

Table C25

I Enjoy My Coworkers

		Frequency	Percent	Valid percent	Cumulative percent
Valid	2	1	1.3	1.3	1.3
	3	4	5.3	5.3	6.6
	4	9	11.8	11.8	18.4
	5	26	34.2	34.2	52.6
	6	36	47.4	47.4	100.0
	Total	76	100.0	100.0	

Table C26

I Often Feel That I Do Not Know What Is Going on With the Organization

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	6	7.9	7.9	7.9
	2	16	21.1	21.1	28.9
	3	19	25.0	25.0	53.9
	4	8	10.5	10.5	64.5
	5	16	21.1	21.1	85.5
	6	11	14.5	14.5	100.0
Total	76	100.0	100.0		

Table C27

I Feel a Sense of Pride in Doing My Job

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	3	1	1.3	1.3	5.3
	4	11	14.5	14.5	19.7
	5	19	25.0	25.0	44.7
	6	42	55.3	55.3	100.0
	Total	76	100.0	100.0	

Table C28

I Feel Satisfied With My Chances for Salary Increases

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	11	14.5	14.5	14.5
	2	14	18.4	18.4	32.9
	3	15	19.7	19.7	52.6
	4	17	22.4	22.4	75.0
	5	14	18.4	18.4	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C29

There are Benefits We Do Not Have That We Should Have

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	12	15.8	15.8	15.8
	2	13	17.1	17.1	32.9
	3	21	27.6	27.6	60.5
	4	11	14.5	14.5	75.0
	5	14	18.4	18.4	93.4
	6	5	6.6	6.6	100.0
	Total	76	100.0	100.0	

Table C30

I Like My Supervisor

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	7	9.2	9.2	13.2
	3	2	2.6	2.6	15.8
	4	11	14.5	14.5	30.3
	5	22	28.9	28.9	59.2
	6	31	40.8	40.8	100.0
	Total	76	100.0	100.0	

Table C31

I Have Too Much Paperwork

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	23	30.3	30.3	30.3
	2	24	31.6	31.6	61.8
	3	17	22.4	22.4	84.2
	4	4	5.3	5.3	89.5
	5	7	9.2	9.2	98.7
	6	1	1.3	1.3	100.0
	Total	76	100.0	100.0	

Table C32

I Do Not Feel My Efforts Are Rewarded the Ways They Should Be

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	14	18.4	18.4	18.4
	2	16	21.1	21.1	39.5
	3	16	21.1	21.1	60.5
	4	12	15.8	15.8	76.3
	5	12	15.8	15.8	92.1
	6	6	7.9	7.9	100.0
	Total	76	100.0	100.0	

Table C33

I Am Satisfied With My Chances for Promotion

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	11	14.5	14.5	14.5
	2	13	17.1	17.1	31.6
	3	12	15.8	15.8	47.4
	4	20	26.3	26.3	73.7
	5	12	15.8	15.8	89.5
	6	8	10.5	10.5	100.0
	Total	76	100.0	100.0	

Table C34

There Is Too Much Bickering and Fighting at Work

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	11	14.5	14.5	18.4
	3	15	19.7	19.7	38.2
	4	18	23.7	23.7	61.8
	5	12	15.8	15.8	77.6
	6	17	22.4	22.4	100.0
	Total	76	100.0	100.0	

Table C35

My Job Is Enjoyable

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	3	3.9	3.9	3.9
	2	7	9.2	9.2	13.2
	3	5	6.6	6.6	19.7
	4	12	15.8	15.8	35.5
	5	25	32.9	32.9	68.4
	6	24	31.6	31.6	100.0
	Total	76	100.0	100.0	

Table C36

Work Assignments Are Not Fully Explained

		Frequency	Percent	Valid percent	Cumulative percent
Valid	1	10	13.2	13.2	13.2
	2	17	22.4	22.4	35.5
	3	16	21.1	21.1	56.6
	4	10	13.2	13.2	69.7
	5	12	15.8	15.8	85.5
	6	11	14.5	14.5	100.0
	Total	76	100.0	100.0	

Appendix D: Permission for Instrument Use

Instrument use permission confirmation
Louverture Ellis [redacted] To Jeffery Houghton
[redacted]
03/06/19 9:58 AM

Thank you so much! I will keep you updated.

[redacted]

On Mar 6, 2019, at 9:12 AM, Jeffery Houghton [redacted] wrote:

Hello Octave,

Thanks for the update. It's good to hear that you are in the process of seeking IRB approval for your study.

Yes- you have my permission to use the RSLQ in your study and you may administer it electronically.

Please let me know if I can help in any other ways and good luck with your research!

Jeff

/ Jeffery D. Houghton, Ph.D.
Associate Professor of Management
and Coordinator, Organizational Leadership Program
West Virginia **University**
John Chambers College of Business and Economics

[redacted]

Check out my [Google Scholar Profile](#)

From: Louverture Ellis · [redacted] ·
Sent: Wednesday, March 6, 2019 7:52:14 AM
To: Jeffery Houghton
Subject: Instrument use permission confirmation

Hello Dr. Houghton,

I am in the process of putting my application together for submission to the IRB.

I wanted to confirm that I had your permission to use the Abbreviated Self-Leadership Questionnaire (ASLQ) for research purposes in my study. I would also like to confirm that I have your permission to administer it electronically for the

**Approval for Remote Online Use
of a Mind Garden Instrument**

Effective date is May 5, 2019 for:

Louverture Ellis

You submitted your Application for Remote Online Use at 8:59 pm EST on March 05, 2019.



[v2]

Sharing of Results for Researchers Who Use My Scales

All of my scales are copyrighted. I allow free use under two conditions.

1. The use is for noncommercial educational or research purposes. This means no one is charging anyone a fee. If you are using any of my scales for consulting purposes, there is a fee.
2. You agree to share results with me. This is how I continue to update the norms and bibliography.

What Results Do I Need?

1. Means per subscale and total score
2. Sample size
3. Brief description of sample, e.g., 220 hospital nurses. I don't need to know the organization name if it is sensitive.
4. Name of country where collected, and if outside of the U.S., the language used. I am especially interested in nonAmerican samples.
5. Standard deviations per subscale and total score (optional)
6. Coefficient alpha per subscale and total score (optional)

I would love to see copies of research reports (thesis, dissertation, conference paper, journal article, etc.) in which you used the JSS. Summaries are fine for long documents (e.g., dissertation), and e-mailed documents are preferred (saves copy and mail costs). Be sure to indicate how you want the work cited in the bibliography.

You can send the material to me via e-mail:
Spector, Department of Psychology,

or via regular mail: Paul