An Investigation of the Relationships Between and Among Power, Trust and Job Satisfaction of Nurse Managers in Acute Care Hospitals Using Rogers Science of Unitary Human Beings

Maureen A. Schneider
maureen.schneider@student.shu.edu

Follow this and additional works at: https://scholarship.shu.edu/dissertations

Part of the Business Administration, Management, and Operations Commons, Educational Leadership Commons, Leadership Studies Commons, Nursing Administration Commons, Organization Development Commons, and the Other Nursing Commons

Recommended Citation
https://scholarship.shu.edu/dissertations/2041
AN INVESTIGATION OF THE RELATIONSHIPS BETWEEN AND AMONG POWER, TRUST AND JOB SATISFACTION OF NURSE MANAGERS IN ACUTE CARE HOSPITALS USING ROGERS SCIENCE OF UNITARY HUMAN BEINGS

BY

MAUREEN A. SCHNEIDER

Dissertation Committee

Dr. Marie Foley
Dr. Barbara Wright
Dr. Phyllis Hansell
Dr. Pamela Foley

Approved by the Dissertation Committee

[Signatures]

Date: 12/18/14

Date: 12/18/14

Date: 12/18/14

Date: 3/19/15

Submitted in partial fulfillment of the Requirements for the degree of Doctor of Philosophy in Nursing
Seton Hall University
2015
Copyright © Maureen Schneider 2015
ACKNOWLEDGEMENT

I would like to take this opportunity to thank and acknowledge the Chief Nursing Officers, the research nurses and managers who assisted me in conducting my study. In addition, I want to also thank the nurse managers for participating in my research. I enjoyed meeting the nursing leadership of the participating hospitals during my research journey. If not for their willingness to participate in research, it would not have been possible to move my doctoral research forward.

Many thanks to so many who supported me through this educational journey. First, my thanks to Dr. Mary Anne McDermott, RN who served as my chair for my doctoral work but who unfortunately, passed away just prior to the completion of my doctoral defense. Her guidance, commitment and tenacity for the profession of nursing and nursing research was outstanding. I learned many things from her that provoked my educational interests. Also, Dr. Barbara Wright, RN is an astonishing mentor, researcher and content expert for Rogerian theory. She is a tremendous friend and supporter for my professional endeavors and research pursuits. She passed on to me her books of Rogerian work and those of trust and power. She always was there for me and encouraged me to stretch and reach for the stars. This encouragement included inviting me to participate with her in a panel discussion at the Society of Rogerian Scholars and encouraging me to apply and obtain a scholarship in support of my research work. I am in personal awe of her insights and political prowess. She truly epitomizes a NURSE LEADER! Many thanks Barbara for your friendship. My committee members were also very supportive Dr. Phyllis Hansell and Dr. Pamela Foley. They made the time for me with their busy schedules and provided me their expertise and scholarly knowledge and skills freely. Dr. Marie Foley, RN the
Dean of the School of Nursing, gracefully, accepted the role of my chair and assisted me to defend my dissertation successfully. I am very grateful to her for her wisdom, insights and support.

Additionally, I extend my gratitude to my nursing doctoral cohorts who began the educational journey as the first nursing PhD students at Seton Hall University. There were many challenges but we persevered and created a path of light for others to follow. The friendships made during this journey will always hold a special place for me. I particularly thank my fellow cohort partner Dr. Trish O’Keefe RN, who was with me every step of this eight year journey. We started together in the program and developed a very special bond and an exceptional appreciation for our professional work and doctoral studies. I am grateful for our friendship.

I thank Dr. Wendy Budin, RN and Dr. Judith Lothian, RN for their continued support throughout my educational journey. Any time I reached out to them they always provided their support and positive comments. Dr. Lothian provided the motivation, inspiration and remained a steadfast enthusiast for my work and saw me to the finish line by participating on my defense committee.

I also extend my sincerest thanks to Dr. Yvonne Wesley, RN for assisting me with my scholarly work. She provided the necessary guidance I required at the end of this journey. Her special gift of imparting her statistical skill, research knowledge and time was remarkable. I will always be grateful to her for her insights and ability to make research and statistics easier to learn and be meaningful.
DEDICATION

With a great deal of love and respect, I dedicate this dissertation to my husband Bill, who always supported my scholarly and professional pursuits. He has always been there for me with all of my personal, educational and professional endeavors. Although, many family events were forfeited due to my ongoing school work and deadlines, he and my family understood my goal. He is my great love and is always there for me. He is the greatest husband a girl could have!!

Yes, you survived my dissertation!!

I would also like to dedicate this work to my children, Brian, Steven, and Katie, who loved me unconditionally, throughout this journey. They were always there to provide help and encouragement. Since they all pursued the profession of nursing they assisted me with my references, editing, offered ongoing support, and participated in animated family discussions. My children make me proud and feel lucky every day for their achievements, accomplishments and the fact that they are outstanding individuals in every way. I am also thankful to Jenna, my daughter-in-law who is also a nurse for always smiling to show her support at family discussions.

Finally, I would also like to dedicate this dissertation to my deceased parents, my mother, Rose and father, Patrick who always encouraged me to pursue my education and to always reach for my dreams. As Irish immigrants they came to the United States with a dream, a love for their children, and a love of education. I thank them from the bottom of my heart for all their sacrifices to give me a good life, to support me and promote my dreams. They truly were my inspiration for all my professional pursuits. They always believed in me and communicated to me that I could do anything I wanted to do, I just needed to work hard and stay the course. I stayed the dissertation course and accomplished the dream!!

Thank you to all that made my dream a reality!!!
# TABLE OF CONTENTS

Table of Contents

ACKNOWLEDGEMENT ........................................................................................................... 3
DEDICATION ......................................................................................................................... 5
TABLE OF CONTENTS ........................................................................................................ 6
LIST OF TABLES ................................................................................................................ 9
ABSTRACT .......................................................................................................................... 10
CHAPTER I ......................................................................................................................... 12
INTRODUCTION ................................................................................................................ 12
  Purpose ......................................................................................................................... 17
  Definition of Variables ................................................................................................. 17
  Delimitations ............................................................................................................... 18
  Theoretical Rationale ................................................................................................. 19
    Figure 1 ....................................................................................................................... 20
  Research Question ...................................................................................................... 25
  Hypotheses .................................................................................................................. 25
  Significance of the Study ........................................................................................... 26
CHAPTER II ....................................................................................................................... 28
REVIEW OF LITERATURE ............................................................................................ 28
  Power as Knowing Participation in Change .............................................................. 28
  Trust ............................................................................................................................. 39
  Job Satisfaction .......................................................................................................... 50
  Summary ....................................................................................................................... 57
CHAPTER III ...................................................................................................................... 65
THE METHOD ................................................................................................................... 65
  Design of the Study .................................................................................................... 65
  Description of Population and Sample .................................................................. 65
  Setting ......................................................................................................................... 66
  Ethical Considerations .............................................................................................. 66
  Instruments and Measurement Methods ............................................................... 73
    Power as Knowing Participation in Change Test, Version II (PKPCT, V. II) ........ 73
    TORI Self-Diagnosis Scale .................................................................................... 76
REFERENCES .................................................................................................................. 124
APPENDICIES .................................................................................................................. 133
  Appendix A ..................................................................................................................... 133
  Appendix B ..................................................................................................................... 134
  Appendix C ..................................................................................................................... 135
  Appendix D ..................................................................................................................... 137
  Appendix E ..................................................................................................................... 139
  Appendix F ..................................................................................................................... 142
  Appendix G ..................................................................................................................... 146
  Appendix H ..................................................................................................................... 148
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Descriptive Statistics – Variables with Categorical Responses</td>
<td>88</td>
</tr>
<tr>
<td>Table 2</td>
<td>Descriptive Statistics – Variables with Non-Categorical Responses</td>
<td>90</td>
</tr>
<tr>
<td>Table 3</td>
<td>Overall Scores and Sub-Scores for Power, Trust and Job Satisfaction</td>
<td>93</td>
</tr>
<tr>
<td>Table 4</td>
<td>Regression Analysis Power, Trust of Self, Trust of Others and Job Satisfaction</td>
<td>94</td>
</tr>
<tr>
<td>Table 5</td>
<td>Bivariate Pearson Correlations of Select Variables</td>
<td>95</td>
</tr>
<tr>
<td>Table 6</td>
<td>Regression Analysis of Power, Trust of Self and Job Satisfaction</td>
<td>96</td>
</tr>
<tr>
<td>Table 7</td>
<td>Regression Analysis of Power, Trust of Others and Job Satisfaction</td>
<td>97</td>
</tr>
<tr>
<td>Table 8</td>
<td>Cronbach’s Alpha Reliability Coefficients</td>
<td>98</td>
</tr>
<tr>
<td>Table 9</td>
<td>Bivariate Pearson Correlations of Select Variables</td>
<td>99</td>
</tr>
<tr>
<td>Table 10</td>
<td>Regression Analysis Job Satisfaction and Compensated Fairly</td>
<td>99</td>
</tr>
</tbody>
</table>
ABSTRACT

Background: Defined as control and freedom, power is often characterized as hierarchical. Power-as-freedom exists as a unitary manifestation of the whole and is acausal. Thus a worldview that emphasizes mutual process rather than a causal (control) view supports a culture of trust in the healthcare environment that generates a committed and a thriving work force. When nurse leaders support a climate of trust, managers develop a sense of commitment to the organization which may lead to job satisfaction. However, there is a lack of empirical evidence supporting the relationship between power, trust and job satisfaction among nurse managers.

Purpose: The purpose of this study is to describe the relationships between and among power, trust and job satisfaction of nurse managers practicing in select acute care hospitals.

Methods: This descriptive correlational study of ninety-eight nurse managers investigated the relationships between power as knowing participation in change, trust, trust of self, trust of others and job satisfaction working in acute care hospitals in New Jersey. Participants completed four measurement instruments including the Power as Knowing Participation in Change Test, Version II, the TORI scale, the Work Quality Index scale and a Demographic Information Form.

Results: The one tailed Pearson coefficient indicated a positive and statistically significant \((r = .25, p = .001)\) relationship between power as knowing participation in change with trust of self. The one tailed Pearson correlation coefficient for the relationship between power as knowing participation in change and trust of others indicated a negligible, non-significant relationship \((r = .03, p = .38)\). The multiple regression analysis evaluated the relationship of power as knowing participation in change, and the combination of trust of self and job satisfaction with trust of self and job satisfaction together explaining 19% of the variance in power \(F (2, 95) = 11.00, p \leq .001\). Multiple regression analysis examined the relationship between power as knowing
participation in change and the combination of trust of others and job satisfaction with trust of others and job satisfaction together explaining 19% of the variance in power $F (2, 95) = 11.04, p \leq .000$. Ancillary findings used Pearson Correlation which revealed a positive correlation coefficient between perceived power and the participants’ belief that they were fairly compensated ($r = .20, p = .05$), and years with current hospital ($r = -.24, p = .02$). Job satisfaction was found to have a weak positive relationship with years as nurse manager on current unit ($r = .25, p = .01$), and a moderate inverse relationship with feeling fairly compensated ($r = .47, p \leq .001$). Finally, an inverse relationship was noted between participants annual salary with feeling fairly compensated ($r = -.21, p = .04$).

**Conclusions:** This study represented an opportunity for nurse administrators to promote Rogerian science with nurse managers in order to potentially manifest power with evolving mutual pattern manifestations in a mutually interactive process and experience job satisfaction in the acute care work environment. Nurse managers who experience job satisfaction will create and maintain work environments for nurses to practice that support quality patient outcomes. Viewed from an acausal worldview, trust of self is a pattern manifestation of the human and environmental process with job satisfaction explaining 19% of the variance in power.
CHAPTER I
INTRODUCTION

Healthcare organizations are undergoing constant and dramatic change in response to challenges to produce more service with fewer resources, and these changes must occur at a more rapid pace than ever-before experienced in the healthcare industry. Essential for organizations to prosper in this turbulent environment is a culture of trust that generates a committed and thriving work force comprised of individuals with creative talent and energy (Covey, 1998). Laschinger and Finegan (2005) relate that employees who experience trust from management in the work environment are more likely to contribute to organizational goals and work related activities than employees who perceive lack of trust and respect.

Although trust has long been identified as a foundational requirement for organizational success (Argyris, 1973; Covey, 1992), there is currently little literature, and even less research, that focuses on how trust evolves (Wicks, Berman & Jones, 1999). Trust in the work environment is a primary organizational imperative that supports management outcomes of credibility, respect, and fairness. These outcomes are established at the personal level, extended at the interpersonal level, exercised at the managerial level and ultimately integrated as system wide trust at the organizational level (Covey, 2006; Great Place to Work Institute, 2008). As organizations restructure and re-engineer themselves in the name of efficiency and effectiveness, trust emerges as the central underlying characteristic of the organizational climate, and overall employee commitment to the organization (Laschinger, Finegan, Shamian & Casier, 2000).

There has been increased interest in understanding the role of trust in organizations (Kramer & Tyler, 1996), but the current focus of inquiry has been from the perspective of measuring the quantity and quality of resources and support measures made available to
employees in order to increase employees’ trust in the organization. Kanter (1977, 1993) contended that situational elements in the work environment, such as access to information, support, resources, and an opportunity for professional development, influence employee attitudes and behaviors far more than the employee’s personal predisposition.

Laschinger et al. (2000) assert that the mandate of management is to create conditions to enhance work effectiveness by ensuring that employees have access to information and the support and resources necessary to do their jobs. Given such conditions, employees will have the opportunity to learn, grow and be supported within the organizational structure. When chief nurses, and other senior executives support a climate of trust, managers, workers, and especially professional nurses, develop a strong sense of commitment and loyalty to the organization which will be evidenced as job satisfaction and staff retention (Barnum-Stevens & Kerfoot, 1995).

Power is neither good, nor evil, in and of itself. Individuals or groups make judgments about the many forms in which power is manifested and label it as constructive or destructive (Barrett, 2010). The phenomenon of power can be conceptualized and defined from two perspectives: power-as-control which reflects a causal worldview and power-as-freedom which reflects an acausal worldview (Barrett, 1983). Barrett (1983, 1986, 1989, 1990a, 1990b, 2003) suggests that the predominant causal worldview of power-as-control is characterized as hierarchical, deterministic, reductionist, predictable, control dominated, and grounded in cause and effect. Acute care hospital organizations often embrace a causal worldview which drives ongoing system-wide efforts to provide resources and support measures designed to empower employees including nursing staff and managers who are subsequently expected to produce enhanced quality work behaviors and improved outcomes.
Different from this causally constructed organizational, power-as-control engagement of healthcare employees is the newly emerging acausal perspective of power that is an original, inventive, open systems worldview where the mutual process of human and environmental systems provides the basis for power-as-freedom and infinite changeability. Therefore, employees engaged and working in an acausal environment utilizing power-as-freedom may experience different work behaviors and outcomes than employees working in a causal environment. Rogers (1970), Barrett (1983, 2010) and Wright (2004) provide evidence that nursing supports an alternate view of power that is consistent with an acausal worldview. Power, from this acausal perspective is power-as-freedom which is described as having freedom and openness (Barrett, 1983, 1990) and reflective of the changing nature of the human-environment mutual process of individuals and groups.

Changes are innovative and creative, and outcomes are unpredictable; power-as-freedom is characterized by openness, mutual process, indivisibility and unpredictability. The causal worldview, and the premise that an inherently powerful organization can purposefully empower employees by providing work related resources, with expectations of enhanced job behaviors that will benefit the overall goals of the organization is clearly inconsistent with Barrett’s acausal unitary phenomenon of power-as-freedom. For example, from Barrett’s (2003, 2010) open system perspective, everyone has power; no one can give it, no one can take it away and power is infinite. Each individual is encouraged to use power-as-freedom, and the owner is free to mutually interact, or not, with organizational entities as appropriate in order to operationalize role behaviors.

In an acute care organizational environment that embraces the causal worldview in which power can be distributed and employee work behaviors controlled through the quality of
organizational resources, little attention is paid to the acausal worldview. Within an acausal worldview, attainment of organizational goals may instead be related to the use of power by the nurse manager who freely and knowingly participates in the desired organizational changes and goal achievement.

Using the acausal worldview of Roger’s (1970) Science of Unitary Human Beings (SUHB), and Barrett’s perspective on power-as-freedom (Barrett, 1983), Wright (2004) demonstrated that power and trust are positively related human-environment pattern manifestations. Trust includes trust of self, which is how people perceive their own human field, and trust of others, which is how they perceive others in their environmental field (Gibb, 1978; Wright).

Job satisfaction is of interest to employers and continues to be studied since it is considered a desirable outcome of employment and is measureable. Study findings indicate that job satisfaction is linked positively to productivity and negatively to absenteeism (Arnold & Feldman, 1982; de Jonge, van Breukelen, Landeweerd, & Nijhuis, 1999) and is inversely linked to poor job performance and staff turnover (Dahlke, 1996; Gifford, Zammuto & Goodman, 2002). Job satisfaction was examined in studies of nurse managers who are often fast-tracked from the staff nurse to nurse manager position with little, if any, preparation in required managerial role behaviors, such as budget management, interviewing, conflict resolution, and delegation (Heller, Drenkard, Espostio-Herr, Romano, Tom & Valentine, 2004). Job satisfaction is described by Locke (1969) as an interactive process between human beings and their environment, a description which is consistent with the acausal worldview. Nursing, in order to better understand the working world of nurse managers, would benefit from research studies that examine nurses’ perceptions of their job, which within the perspective of the Rogers’ (1970)
SUHB, best reflects the ever-changing acausal nature of the human-environmental field in the workplaces of nurse managers.

Nurse managers play a vital and paramount role in unit based staff retention, work productivity, quality of patient care, use of budget allocations, and overall unit operations, as well as supporting the attainment of organizational goals (Barnum-Stevens & Kerfoot, 1995). Therefore, it is imperative that hospital and nursing administrators focus on gaining a better understanding of the acausal “interplay of [nurse manager] power-as-freedom” (Barrett, 2010, p. 52), and the acute care hospital environment. This perspective represents the mutually interacting process of humans and the environment, as opposed to the power-as-external-control causal perspective of the environment that currently prevails in most healthcare organizations.

In the SUHB, Rogers (1990b) describes a framework which suggests that the energy field of the human being interacts with the energy field of the environment and the fields cannot be understood in isolation of each other. Theoretically, power, trust and job satisfaction may be viewed as pattern manifestations of the human (person)-environmental mutual process of change. While the literature supports the value of trust and power as core sustaining components in a successful organization, research has not examined the relationships among nurse manager’s perception of his or her own human field and others in the environmental field, and job satisfaction as a reflection of the mutual process of power and trust in the work place. There is a need to examine the relationships of power to knowingly participate in change, trust, trust of self and others, and job satisfaction in nurse managers practicing in an acute care hospital.
Purpose

The purpose of this study is to describe the relationships between and among power, overall trust, trust of self and trust of others, and job satisfaction of nurse managers practicing in acute care hospitals.

Definition of Variables

**Power as Knowing Participation in Change (PKPC)** is defined as the “capacity to participate knowingly in the nature of change characterizing the continuous patterning of the human and environmental fields” (Barrett, 1990, p. 108) and is manifested by awareness, choices, freedom to act intentionally, and involvement in creating change (Barrett, 1983, 1986, 1989, 1990, 2010).

Power as knowing participation in change was operationalized as a score on the Power as Knowing Participation in Change Test, Version II (PKPCT, V. II), (Barrett, 1983).

**Trust** is defined as “how people perceive themselves in their human field and others in their environmental field” (Wright, 2004, p. 139) and is characterized by a manifestation of the human patterns of being, opening, realizing, and interdepending. Being is the unique process of one’s becoming who one is; opening is understanding oneself and showing oneself to others; realizing is actualizing one’s wants; and interdepending is freely sharing and relating with others (Gibb, 1978; Wright, 2004). People manifest patterns of trust through their perceptions of their human and environmental fields.

Trust was operationalized as a total score on the Trust, Openness, Realization, and Interdependence (TORI) Self-Diagnosis Scale (Gibb, 1978).
**Trust of self** is defined as human attributes inherent in the pattern manifestations of being, opening, realizing, and interdepending used when people perceive their own human field. (Gibb, 1978; Wright, 2004).

Trust of self was operationalized as a summary score on the 48 of 96 items designated as “How I see Myself in life” (Gibb, 1978, p. 304) on the TORI Self-Diagnosis Scale.

**Trust of others** is defined as human attributes inherent in the pattern manifestations of being, opening, realizing, and interdepending used when people perceive their environmental field (Gibb, 1978; Wright, 2004).

Trust of others was operationalized as a summary score on the 48 of 96 items designated as “How I see the People World” (Gibb, 1978, p. 305) on the TORI Self-Diagnosis Scale.

**Job satisfaction** reflects the process of interactions between humans and their environment (Locke, 1969) and is defined as a pattern manifestation of the human-environment field; it is conceptualized as satisfaction resulting from the “work and work environment” (Whitley & Putzier, 1994, p. 44).

Job satisfaction will be operationalized as a total score on the Work Quality Index (WQI), (Whitley & Putzier, 1994).

**Delimitations**

Recognizing that entry level into professional nursing practice is at the baccalaureate in nursing (BSN) level, only a registered nurse (RN) manager with a BSN degree or higher will be included in the sample. In addition, a nurse manager in this study was delimited to an RN with full-time, first-line leadership responsibilities in an acute care hospital whose job description includes 24-hour, 7-days a week responsibility for supervising professional and nonprofessional staff members. They were working on a specific patient care unit(s) to ensure that the standards
of care and the efficiency of all unit based patient care activities are accomplished (American Organization of Nurse Executives, 1992).

Barnum-Stevens and Kerfoot (1995) purport that learning role behaviors and acclimating to a new work role takes place within the first year of practice: the opportunity to develop and use a personal leadership style in the work setting occurs during the second year and beyond. In addition, they state that “it is common that the nurse executive does not think that he ‘owns’ the job for at least 1 1/2 to 2 years” (p. 281). Therefore, only a registered nurse who had been employed full-time as a nurse manager, on the same patient-care unit(s) for two or more years were included in this study.

This is a study of nurse managers working in acute care hospitals in a specific state. Therefore, only acute care hospitals, in a mid-Atlantic state licensed by the State Department of Health to provide acute care health services to a community of clients, were included.

**Theoretical Rationale**

This study builds on a theoretical foundation of prior research of power and trust developed by Rogers (1990b), Barrett (1983, 2010), and Wright (2004); it focuses on the acausal unitary science worldview of the concepts which describe how individuals perceive and relate to the environment. Rogers’ (1990b) conceptual framework is based on an acausal, wholistic, open systems universe. The interacting mutual process of Barrett’s power as knowing participation in change, and Gibb’s (1978) explanation of human trust is discussed from the perspective of a unitary worldview, where one is free to make choices characterized by mutual patterning of power and trust of self and others. The mutual interaction pattern of power and trust is discussed as a reflection of the everyday world in which we live (Barrett, 2010). Barrett viewed power as a potential within people which may, or may not be manifested. An individual’s power is realized
through mutual process with the acausal environment (Barrett, 1983). It was proposed in this study that nurse manager role behaviors, when viewed through the lens of the acausal worldview, illustrate that as the mutual process of nurse manager trust and power evolve, pattern manifestations of change in the work environment will be observed.

**Figure 1.** Acausal Worldview of Power, Trust and Job Satisfaction

![Diagram of the Acausal Worldview](image)

Figure 1. Model of the Acausal Worldview utilizing the Roger’s Science of Unitary Human Beings framework, Barrett’s Power as Knowing Participation in Change, Gibb’s TORI and Job Satisfaction.
Rogers’ (1970, 1986, 1990b, 1992) SUHB provides the theoretical basis for describing the concepts of power and trust, and for postulating their relationship as mutually interacting pattern manifestations of the human-environmental fields. Proposed relationships among the concepts is illustrated in the Figure 1 above. Unitary human beings are irreducible wholes; that is, individuals cannot be understood when reduced to their particulars since the whole is greater than the sum of its parts (Rogers, 1990b). According to Rogers, an energy field is the fundamental unit of humans and their environment. The concept of a universe of open systems supports the premise that energy fields are infinite, without boundaries, and not bound in space and time. Pattern is the distinguishing characteristic of an energy field and manifestations of the patterns of the human-environmental field interactions are visible (Rogers, 1990b).

The human life process is a dynamic course that is “continuous, creative, evolutionary and uncertain” (Rogers, 1970, p. 46). The capacity for change in the life process is evidenced by constantly changing pattern manifestations that are unique to each human-environmental field (Rogers). Barrett (1983, 2010) purports that humans knowingly make choices and these choices influence the life process as it constantly changes, thus humans knowingly participate in change. Barrett suggests that knowing participation in change is power. In this study, power-as-freedom and trust of self in the human field, exists in mutual process with (nurse manager) trust in others in the environmental field.

Barrett (1983, 2010) created a theory of power based on Rogers’ SUHB (1970) and expanded the concept of power as knowing participation in change which is characterized by awareness, choices, freedom to act intentionally and involvement in creating change. Humans knowingly make choices and thus actualize some potentials and not others (Rogers, 1986, 1990). Barrett explains that awareness is focusing our attention on that which we are capable of
perceiving. Choices relate to the will to direct energies that are capable of changing reality. Freedom-to-act intentionally is an expression of a person’s potential to deliberately make decisions and lastly, when involved in creating such change, people knowingly participate in the evolving life processes.

Wright examined the relationship of power, defined as knowing participation in change and trust, defined as how people perceive themselves in their human field and others in their environmental field (Gibb, 1978; Wright, 2004). Barrett (1983), in the power as knowing participation in change theory, asserts that the field manifestations of power, “being aware of what one is choosing to do, feeling free to do it, and doing it intentionally” (p. 7), relate to the individual’s significant participation in life. Wright clarified that acausal power is not power over, dominance, control, or force. Rather, it is one’s “capacity to participate knowingly in the nature of change characterizing the continuous patterning of the human and environmental fields” (2004, p. 2). According to Wright, power interacts with trust of self and others in the human-environmental field. Based on prior literature about human trust by Gibb (1978), Wright proffers that trust is “how people perceive their human field and other people in their environmental field” (2004, p. 1). Gibb (1978) names the four pattern manifestations of trust as “being, opening, realizing, and interdepending” (p. 20). Trust involves one’s awareness in the following: “being aware of who I am, purposefully opening myself to others, realizing my emerging nature, and interdependence in the ways I live with others in freedom and intimacy” (p. 21). Gibb maintains that “to trust with fullness means I discover and create my own life” (p. 20). Gibb’s suggestion that trust evolves with the life process, creating change and the world of discovery was supported by the empirical findings of Wright (2010) who utilized Rogers (1990b)
descriptions of the life process and pattern manifestations of the dynamic nature of the energy field patterns of humans and their environment in mutually interacting processes.

Within the theoretical context of power and trust pattern manifestations, one can postulate that when people trust themselves and become more aware of who they are, they become more powerful, and thus, are more likely to make deliberate choices related to initiating positive change in the workplace. Attitudes of trust and openness support the concept of power as one freely experiences power and intentionally uses it. As nurse managers mutually engage with others in the work of the organization, through the use of interacting human field patterns of power and trust, they are more likely to enhance their human field pattern of trust in others and are also more likely to use power as knowing participation in change to facilitate desired changes in the organization.

An intricate, highly complex concept, job satisfaction has been widely reviewed in the nursing literature as an outcome measure of resources provided by the organization that were intended to cause positive worksite changes (Trangenstein, 1988; Laschinger, Finegan & Shamian, 2001a). From this causal worldview perspective, job satisfaction relates to the level of employee’s feelings, attitudes and beliefs about the work environment (Stamps, 1997) and resources provided to those employees by the organization.

In the current healthcare environment, some authors have proposed that nurse executives working in the acute care hospital setting who are focused on retaining both quality nurse managers and registered staff nurses need to reconceptualize their perception of organization variables known to be related to job satisfaction (Arnold & Feldman, 1982; de Jonge, van Breukelen, Landeweerd, & Nijhuis, 1999). When reconceptualized, nurse manager role behaviors and ultimately, job satisfaction reflect the evolving human-environmental field pattern
manifestations of the interactions of nurse manager power and trust in the workplace. Job satisfaction, when viewed within a Rogerian (Rogers’, 1970, 1994) acausal perspective, is based on the principle that humans and the environment are energy fields in continuous interaction.

Using Rogers’ (1992) SUHB, power, trust and job satisfaction are viewed as unitary phenomena that evolve with the individual (nurse manager) and the environment (hospital). The nurse manager is viewed as an energy field manifested by patterns in mutual process with the environment, that are distinctive, inseparable, each influencing and being influenced by each other (Rogers, 1994).

Mahoney (1999) used Barrett’s theory, power as knowing participation in change (1983) and job satisfaction in a study of home health care nurses in several New Jersey community health care agencies. Mahoney reported that power was related to job satisfaction and that home health care nurses in the study utilized their power to act freely and create work related change which supported the hypothesis that power and job satisfaction were positively related. Mahoney’s study supports Rogers’ (1970, 1990a) and Barrett’s (1983, 2010) prior conceptualization that humans and their environment are interrelated and that pattern manifestations mutually interact.

Hurley (2002) examined job satisfaction, stress, and power in a sample of 600 nurses, with 124 nurse manager participants using the SUHB (Rogers, 1990a) as the study framework. Findings supported the notion that job satisfaction and power reflect Barrett’s (1990) theoretical rationale that individuals who know their participation in change will manifest power and will therefore experience job satisfaction. No relationship between stress and job satisfaction was found. Hurley reported that the working individual, through deliberate choice, makes changes within the environment and experiences increased job satisfaction. Mahoney (1999) and Hurley
support the premise that power and job satisfaction in working individuals are linked to pattern manifestations in a mutually interacting process that increases individuals’ awareness of their power which is then reflected in increased job satisfaction. Whitley and Putzier (1994) defined job satisfaction as a pattern manifestation of the human-environment field which is conceptualized as the quantity of satisfaction resulting from the person’s experience of “work and [the] work environment” (p. 44).

In summary, nurse managers with increased capacity for power-as-freedom, (Barrett, 1990) who have trust of self and trust of others in the work environment will demonstrate the capacity to take actions and knowingly participate in positive change in the acute care organization. In the current healthcare climate of dynamic change, trust is an essential aspect of management. Thus, nurse managers who are highly motivated toward using power to knowingly participate in change, and recognize enhanced pattern manifestations of their ongoing interactions with professional staff nurses and others in a mutually supportive work environment, will experience enhanced job satisfaction.

**Research Question**

*RQ*: Does the combination of trust of self, trust of others and job satisfaction predict the variance in power as knowing participation in change in nurse managers in acute care hospitals?

**Hypotheses**

Based on Rogers’ Science of Unitary Human Beings (SUHB) and limited existing empirical research, the following hypotheses have been derived.

*H₁*: There is a positive relationship between power as knowing participation in change and trust of self in nurse managers working in acute care hospitals.
There is a positive relationship between power as knowing participation in change and trust of others in nurse managers working in acute care hospitals.

There is a positive relationship between power as knowing participation in change, trust of self and job satisfaction in nurse managers working in acute care hospitals.

There is a positive relationship between power as knowing participation in change and trust of others and job satisfaction in nurse managers working in acute care hospitals.

**Significance of the Study**

Literature related to the relationships of power, trust, and management behaviors is largely theoretical. This study will examined theoretical and research based insights about the relationship of power as knowing participation in change and trust, for possible evidence of how nurse managers in the hospital workplace “perceive their human field and others in their environmental field” (Wright, 2004, p. 139). In addition, questions were posed regarding the relationship of trust, trust of self and trust of others in relation to the human-environmental field, and job satisfaction of nurse managers in the hospital workplace.

Findings of this study may serve as an impetus for nurse leaders of acute care organizations to design innovative initiatives that promote the nurse manager’s ability to utilize power as knowing participation in change in the work environment. Research based initiatives will also support nurse managers to enhance, or learn to develop and use power-as-freedom when exercising their managerial skills. It is important for nursing to recognize that when nurse managers manifest human field patterns that demonstrate a mutual process of power and trust, this supports and advances professional role behaviors. This study seeks to examine the evolving
pattern manifestations of nurse manager power as knowing participation in change (Barrett, 1983, 2010) and trust of self and others (Gibb, 1978; Wright, 2004) in mutual process with the acute care hospital environment as reflected in nurse manager job satisfaction. To date, no research has examined the relationship of the concepts of power as knowing participation in change, and trust of self and others, from the perspective of an acausal worldview which involves nurse managers in the acute care setting and nurse manager job satisfaction.

The significance of this study is fourfold: to further test Rogers’ SUHB (1970, 1986, 1990a) and Barrett’s (1983, 2010) Power as Knowing Participation in Change theory in mutual process with trust; to examine whether the process of the mutual human field pattern of power and trust of self and others is related to nurse manager role behavior in the acute care hospital; to examine whether nurse manager job satisfaction is a mutually interactive process related to the evolving mutual patterning of power and trust and to reexamine through empirical research in a nurse manager population, the reliability of the Power as Knowing Participation in Change Test, Version II (Barrett, 1983).
CHAPTER II
REVIEW OF LITERATURE

Current dynamic changes in healthcare bring attention to the pivotal role of the nurse manager in the continued success of hospitals. Organizationally invested nurse managers are known to attract and positively influence retention of strong clinical nurses who deliver quality nursing care to diverse patient populations in the professional workplace. For this reason, it is imperative that nursing leaders explore opportunities to promote nurse manager job satisfaction. In the following review of the literature, power, trust, trust of self, and trust of others are examined as they relate to job satisfaction of nurse managers practicing in an acute care hospital.

Power as Knowing Participation in Change

Authors in early literature defined power as force (Desmond, 1950), whereas later authors carried this perspective further and described power as an ability to obtain compliance from others, while leaving open their judgment about the methods used to obtain that compliance (Bachrach & Baratz, 1969; Glen, 1990). Theoretically, power is neither positive nor negative; rather, it is how power is used that determines its effect (Flaherty, 1991; Geradini, 1961; Novello, 1976). Conceptualizing power as an exchange transaction is well supported by theorists who discuss power and relationships among people as having aspects of motive, potentiality, and reciprocity that point to a cause and effect quality in power (Blau, 1964; Geradini, 1961; Harsangi, 1962; Nagel, 1968; Puskar & Hess, 1986; M.F. Rogers, 1974).

Some authors postulate that a person’s personality will determine how power is perceived and used (Burns, 1983; Flaherty, 1991). This idea is similar to C. Rogers’ (1977) explanation of personal power, wherein power is an actualizing tendency that can be accomplished by the individual, either alone or with the assistance of others. From this perspective and regardless of
its definition, power is conceptualized within a context that is defined by the intent and relationship of the players (Beck, 1982; Hawks, 1991).

Nursing research and theory provide an alternate perspective on power that emerges from the science of unitary human beings (SUHB) proposed by Rogers’ (1970). Rogers’ SUHB provides the conceptual framework for integrated awareness, which is founded on four concepts and three principles. The four concepts of Rogers’ (1986) SUHB are energy fields, openness, pattern, and pandimensionality, which provide a base for three homeodynamic principles including resonancy, integrality, and helicy. Rogers (1990) defined an energy field as the fundamental unit of the living and nonliving; energy fields are infinite and exist without boundaries. Rogers viewed the universe as an open system that is continuous and innovative, and where causality is not an alternative. Phillips and Bramlett (2008) assert that “pattern is represented as an abstraction which gives identity to the field, which is unique and integral and has its own environmental field pattern that is continuously changing” (p. 41). Rogers (1992) defined pandimensionality as “a nonlinear domain without spatial or temporal attributes” (p. 7) which are the human and environmental fields. Rogers (1970) postulated that people and their world are in mutual process and change is viewed as the hallmark of the life process. Rogers suggested that one’s physical body and human energy field are integral with each other and thus, human beings are irreducible energy fields. Human beings are aware of their wholeness and their integrality with the environment, where change is mutual and dynamic. The human and environmental energy fields are reflected as a single wave and are differentiated by patterns, which can be observed from the human-environmental fields that are in mutual process. The “field patterns are also unpredictable, dynamic, creative and continually innovative” (Rogers, 1990, p. 9). Change is manifested as innovative, increasingly diverse field patterns in which
people knowingly participate. Since humans are *not* confined to a linear, three-dimensional worldview, they flow with the infinite nature of a nonlinear universe where pattern change is contrary to prediction and control (Rogers, 1970).

Barrett (1983) defined power as knowing participation in change, which is based on Rogers’ (1970, 1990) SUHB. In the Rogerian worldview, human energy field and environmental field patterns change continuously and creatively through human-environment mutual process. Power is “the capacity to participate knowingly in the nature of change characterizing the continuous patterning of the human and environmental fields” (Barrett, p. 108). Barrett’s power theory consists of four elements identified as awareness, choices, freedom to act intentionally, and involvement in creating change. Rogers (1990) suggested that humans knowingly make choices and therefore, actualize only selected potentials and not others. According to Barrett the nature of the four elements of power constitute the individual’s distinctive power view, which is not static, is nonlinear, and varies based on the changing nature of the pattern of the human and environmental fields.

Barrett’s (1983, 2010) theory of power differs from the traditional and prevailing cause-and-effect perspective of power. Barrett (1983) described two types of power: power-as-control (causal), which is focused on a reductionist worldview, and power-as-freedom (acausal), which is focused on a wholistic worldview.

Barrett (1990) explained that being aware enables individuals to focus attention on that which they are capable of perceiving. After becoming aware, one’s choice relates to the individual’s will to direct energies that are capable of changing reality. Freedom to act intentionally, (power-as-freedom) is an expression of one’s potential to deliberately make decisions. Additionally, Barrett (2010) viewed power as a potential within an individual that
may, or may not be manifested. Power-as-freedom exists as a unitary manifestation of the whole in accordance with an acausal worldview, whereas control represents an interpretation of power in accordance with a reductionist, causal worldview (Barrett, 2010).

While Barrett’s work provided the theoretical foundation for understanding and measuring power from a nursing science perspective, subsequent research studies (Trangenstein, 1988; Rizzo, 1990; Caroselli-Dervan, 1991; Mahoney, 1999; Hurley 2002; & Wright, 2004), provided support for Barrett’s (1983) measure of power, the Power as Knowing Participation in Change Test (PKPCT). In addition to examining power in selected populations these same studies were also designed to examine possible methodological issues associated with the PKPCT.

Trangenstein (1988) used the PKPCT to investigate relationships between and among power as knowing participation in change, job diversity, job satisfaction and job involvement in a population of female staff registered nurse members of the American Nurses Association. Trangenstein hypothesized that at least one significant \((p < .05)\) relationship existed among the predictor variables (power and job diversity) and the criterion variables (job satisfaction and job involvement). Using canonical correlation analysis, the hypothesis was supported at the .001 level \((R = .53)\) with one meaningful canonical correlation. All four variables contributed meaningfully to the structure of the canonical variates and all structure coefficients were positive, ranging from a low of \(R = 0.51\) for job involvement to \(R = 0.96\) for job satisfaction. Trangenstein reported that power and job diversity were integrally related to job satisfaction and job involvement and that the PKPCT alpha reliability in this study was 0.96. Trangenstein found four viable factors in a factor analysis of PKPCT items which contrasted to Barrett’s (1983) report of findings of two PKPCT tool development pilots which indicated there were only two
factors in the original PKPCT pilot study and only one factor in the second pilot study. Based on the different number of factors reported in the two pilot studies and in findings of this factor analysis which examined hypotheses based research data, Trangenstein suggested that the PKPCT is not invariant across populations and recommended further tool refinement.

Rizzo (1990) utilized Barrett’s theory of power as knowing participation in change to test whether a positive relationship existed between power and purpose in life and between power and life satisfaction in a sample of male and female adults ($N = 84$) ranging from 65-88 years of age. Rizzo found a positive correlation between power and purpose in life ($r = 0.51, p < .001$) and between power and life satisfaction ($r = 0.38, p < .001$), thus supporting the primary hypotheses of the study. Rizzo then compared PKPCT scores with response options to questions about whether subjects believed that what happened to them in life was (a) due to something outside of their control, (b) due to something within their control, or (c) a product of their interaction with others and the environment. Analysis of variance with the post-hoc Tukey test for significance demonstrated that PKPCT scores from the first response group (outside their control), were significantly lower ($p < .05$) than scores from both the second response group (within their control) and third response group (product of interaction with others and the environment).

Although the homogeneity of Rizzo’s (1990) study sample limits the ability to generalize, the findings, they contributed important methodological support for the use of the PKPCT and added new knowledge in support of Barrett’s conceptualization of power. Rizzo concluded that the concept of choice in decision making, which was inherent in the study’s second and third response options, played a key role in the positive relationship between life satisfaction and power. Decision making not only provides individuals with a sense of control over themselves
and their environment, but also is implicit in the concepts of choice and participation, which are central to Barrett’s conceptualization of power as knowing participation in change.

Caroselli-Dervan (1991) used Barrett’s theory of power as knowing participation in change to investigate the relationship between power and feminism among nurse executives. Caroselli-Dervan hypothesized that nurse executives who work in acute care hospitals perceive a positive relationship between power and feminism. The volunteer sample of 89 nurse executives completed the Index of Sex Role Orientation (Dreyer, Woods, & James, 1981) and the PKPCT, Version II (Barrett, 1983). Using the Pearson product-moment correlation, Caroselli-Dervan’s data analysis revealed a non-significant correlation between power and feminism scores \( r = .01, p = .166 \), indicating the hypothesis was not supported. However, a significant correlation was obtained between scores on the PKPCT, the subscale of freedom to act intentionally, and the Index of Sex Role Orientation \( r = 0.24, p < .01 \), which provided partial support for viewing power and feminism as related constructs. This small correlation suggests that greater identification with feminism is associated with greater freedom to act intentionally on choices made.

Caroselli-Dervan (1991) acknowledged that the study sample was derived from a homogeneous group, often described as being among the elite of the profession, and therefore, high power scores could be considered predictable for the sample. The mean PKPCT score for the nurse executive sample (289.05, \( SD = 25.98 \)) is high when compared to Trangenstein’s (1988) mean PKPCT score of 262 (\( SD = 34.70 \)) for a staff nurse sample. This difference in PKPCT scores between the two groups supports Barrett’s (1983) view that power may vary in potency and scope (Caroselli-Dervan). Theoretically, the range of situations in which one knowingly participates will vary, as will the individual’s ability to participate knowingly
(Barrett, 1983). From a Rogerian (Rogers, 1990b) perspective, Caroselli-Dervan (1991) reported an alpha reliability coefficient of 0.95 which supported the premise that as nurses become increasingly aware of their power they make career choices where they can continue to manifest and experience their power. This manifestation of power may also be reflected in staff nurse job satisfaction. Based on the expected direction of mean PKPCT scores, and between group differences that favor nurse executives over staff nurses, knowledge about nurse executives may best be gained by contrasting and comparing nurse executives as a known power group, with nurses at lower levels of the organizational hierarchy and in different practice settings (Caroselli-Dervan).

Hurley (2002) used Rogers’ (1970) SUHB conceptual framework to examine the human experience of change in nurse managers as a job-related, mutual-process pattern. In the study, the relationship among power, job satisfaction, and stress were examined. The study sample of 124 female nurse managers who met inclusion criteria was selected from the 45% rate of responses (N = 270) from 600 registered nurses who received anonymous, national, electronic invitations to participate in the study. Nurse managers from 34 of the 50 states in the United States were represented in the final study sample.

Hurley used Pearson’s product-moment correlations to measure the relationships between and among the study variables. Study findings indicated that power and job satisfaction were significantly and moderately correlated \( r = 0.40, p < .000 \). Because stress was found not to be significantly correlated to job satisfaction, the examination of the stress to power relationship was not explored. “A simple regression analysis was done which revealed that power contributed 16% of the variance in job satisfaction” (Hurley, 2005, p. 7). The negligible negative relationship between stress and job satisfaction \( r = - 0.11 \) was not significant \( p = 0.23 \).
Hurley (2002) discussed possible weaknesses in the study design that may have contributed to the unexpected outcomes, such as inconsistent nurse manager subjects’ perception of stress as a major or minor event, and differences among nurse managers’ perceptions of the fundamental nature of professional nursing related to daily job practices in the work setting. Hurley also suggested that the instrument used to measure stress may not have been sufficiently robust to explore the stress experience. Overall, findings that indicated a significant, moderate correlation between power and job satisfaction support the theoretical premise that those “nurse managers who view themselves as participating in change should manifest power and experience job satisfaction” (p. 12). A strength of Hurley’s study is the randomized sample selection that used an anonymous, national electronic sampling methodology which supports generalization of the findings.

Wright (2004) was the first researcher to utilize Rogers’ SUHB (1970) theoretical perspective to examine the relationship between power and trust. Prior to Wright’s study, the literature theoretically linked trust and power, but had not yet reported an empirical relationship between the two variables. Wright utilized a Rogerian nursing framework with Barrett’s (1983, 2010) nontraditional view of power which is congruent with a sociologist trust framework (Gibb, 1978) that is open with the person, others and the environment.

Wright (2004) measured power with the PKPCT Version II (Barrett, 1983), and measured three dimensions of trust in a sample of 78 females 111 and males (N = 189): trust, trust of self, and trust of others with the TORI Self Diagnosis Scale (Gibb, 1978). Wright mailed 480 questionnaire packets to a randomly selected sample of adult high-school graduates, whose names and addresses were purchased from a database listing approximately eight million people in the U. S. and whose ages ranged from 21 to 65 years. Correlations of pattern manifestations of
the mutual interaction among the four variables in the human-environmental field process were measured using Pearson’s product-moment correlation analyses. Findings indicated a moderately positive relationship between trust and power ($r = 0.49$, $p < .001$) and a stronger, positive relationship between trust of self and power ($r = 0.57$, $p < .001$). The alpha coefficient for the total PKPCT was 0.96, with subscale coefficients ranging from 0.84 to 0.89, demonstrating strong reliability for the measure. Multiple regression analysis revealed that when power was regressed on trust of self and trust of others, trust of self was a significant predictor ($\beta = .66$, $p < .001$) of power, but trust of others was not a significant predictor. Trust of self and trust of others together accounted for 33% of the variance of the total power score ($F [2, 179] = 44.546$, $p < .001$) in the sample.

Wright’s findings of $t$-test and ANOVA demonstrated there were no significant relationships between and among the power or trust variables and marital status, education, or age. Participant scores for total power and three of the PKPCT subscale scores of awareness, choices, and creative change were significantly correlated to sex with female ($n = 78$) power scores ($M = 268$, $SD = 33.08$) significantly higher ($p = .018$) than male ($n = 111$) power scores ($M = 256.15$, $SD = 35.13$, $p = .018$). The gender difference for power found in Wright’s study was not consistent with earlier studies that utilized the PKPCT. The earlier studies (Barrett, 1983; Trangenstein, 1988; Rizzo, 1990) did not report significant differences in power scores by gender which was consistent with Barrett’s (1990) theoretical view that power is gender free. In addition, although small differences in trust and power relative to males and females were found, Wright stated that these differences may not be quantifiable and possibly only exist in pattern manifestations. The alpha reliability coefficient for the total PKPCT was 0.95, for trust of self
0.92, and for trust of others 0.90 which demonstrated strong reliability for the measure in Wright’s study.

Throughout the nursing literature in the last three decades, Barrett’s description of power as the ability to participate knowingly in change has been supported and overall findings from numerous studies indicate that when individuals participate knowingly in change, they actualize certain measurable potentials. In contrast to the earlier perspectives of power as domination-and-control, power can be viewed from Barrett’s (1983, 2010) nursing science perspective of power as a phenomenon that facilitates human growth through awareness, choice, freedom to act intentionally, and involvement in creating change. Barrett’s (2003, 2010) perspective of power-as-freedom suggests that everyone has power; no one can give it, and no one can take it away. As nurse managers utilize Barrett’s (1983, 2010) theory of power, and as human-environmental field manifestations are realized through awareness and deliberate choosing, nurse managers are free to act intentionally and therefore, can initiate changes and improvements in the healthcare environment with their own power to knowingly participate in change. Moreover, factors such as choice and participation are theoretically relevant to the practice of nurse managers, whose decision making is intrinsic to their ability to make choices and participate in what Rogers (1970) defined as a mutual process with managers at the organizational level and with staff nurses at the unit level.

To date, literature specifically related to the nurse manager role has focused on descriptions of work-related outcomes experienced by nurses in management positions. Such literature focuses on the heightened responsibility demanded of the nurse manager in the current, acute care hospital environment. Nurse managers are expected to carry out their responsibilities within the context of actualizing and maintaining the professional nursing goals of best practices
that support optimal patient care outcomes. Although data that focus on nurse managers’ work-related outcomes are important, they fail to provide insight into the nurse manager’s human ability that is, or can be, actualized as nurse manager’s role behavior.

From a wholistic perspective, it can be theoretically proposed that nurse managers activate their potential to knowingly participate in change through professional relationships with others, and especially relationships with their unit-based staff nurses. Nurse managers and staff thrive in certain work environments and not in others (Laschinger, Leiter, Day, Gilin-Oore, & Mackinnon, 2012). Unfortunately, there are currently no rules, or formulas for anticipating which work environments are best, or even why such differences exist. Based on Barrett’s (2010) theory of power, one can theoretically conjecture that a positive work environment is one in which power of the nurse manager and staff nurse to knowingly participate in change is operationalized as a deliberate mutual choice to maintain optimal professional nursing practice. This wholistic and open systems approach to power is especially relevant in today’s healthcare environment, which requires nurse managers to deliberately make decisions and choices that directly and/or indirectly impact patient care outcomes and which ultimately affect the overall success of the larger, and constantly evolving acute care hospital organization.

The nurse manager is the chief individual responsible for assuring that the mission of the hospital organization is translated into optimal, professional nursing practice (Barnun-Stevens & Kerfoot, 1995). Nurse managers who can actualize leadership ability and utilize Barrett’s (1983, 2010) concept of power will activate their individual power in a mutual process with the environment, and therefore, will optimize staff nurse competence and efficiency in daily operations that ensure optimal patient care. Nurse managers are at the center of work issues that impact staff nurse retention. Reports indicate that a key reason given by staff nurses who leave a
job is their negative relationship and lack of trust with their direct supervisor (Laschinger et al., 2012). In contrast, a relationship of trust with a supervisor has been linked to improved job satisfaction, creation of a meaningful work environment, and motivation of staff to develop and grow professionally (Kouzes & Pozner, 2002; Laschinger et al., 2012; McNeese-Smith, 1997).

Trust

Trust is broadly accepted as a concept that is paramount to effective human functioning in individual relationships, society, and organizations. The literature discusses trust as a psychological construct that is focused on relational trust and societal trust. Relational trust refers to the trust that is built into relationships. It is based on many factors, including respect, personal regard, competence, and personal integrity. Bryk and Schneider (2002) define relational trust as a specific set of role interactions that require synchrony of mutual expectations and obligations. Relational trust occurs when the mutual obligations of two parties, based on each other’s expectations, are met. Societal trust builds on relational trust and extends the focus to individuals in the broader society. Societal trust dictates that mutual obligations and expectations will be met between and among the broader group of individuals (Bryk and Schneider).

Societal trust incorporates the tenets of relational trust, which is operationalized as nurse manager and staff nurse trust in mutual process with the organization/environment. This study will focus on trust as it supports the nurse manager serving as the individual in mutual process with the environment.

The expectation for accountability in healthcare is greater today than ever before. The focus on high performance and related outcome standards, pay for performance, market share, competition and financial viability, are considered fundamental to operating a productive healthcare organization (Covey, 2006). Cook and Wall (1980) identified trust as a critical
concept that enhances organizational effectiveness. Trust provides a competitive advantage in the race for recruiting professionals and supporting long-term stability with employees (Laschinger, Finegan, & Shamian, 2001a). High performing and successful organizations provide evidence that they value their employees, and deliberately create a culture of mutual trust among members of the organization as a whole, as well as between the organization’s management personnel and employees (Phillips, 1997).

In 1998, Annison and Wilford described how trust mattered in healthcare more than ever before, especially since at that time the United States government had enacted greater restrictions on Medicare and Medicaid, the country’s largest public healthcare insurance carrier. Now, more than a decade later, the pace of change continues to accelerate with increasing restrictions on private, commercial and government backed Medicare and Medicaid insurance plans. These changes are impacting hospital and physician reimbursements, causing chaos and escalating organizational complexities within the healthcare system. Currently, nurses in management positions face heightened responsibility in more demanding roles within the exceedingly complex, increasingly diverse and fast changing healthcare environments. Thus, it is vital for hospital leaders to provide a supportive work environment to retain nurses in management positions and to encourage and support nurse manager job satisfaction and commitment to the organization (Laschinger, Wong, McMahon, & Kaufmann, 1999; Sofarelli & Brown, 1998; Upenieks, 2003).

In the United States, national political and judicial rulings, such as the United States Supreme Court decision that upheld the legality of the federal healthcare law (Liptak, 2012), have required changes in the healthcare system. These changes elicit continuous debate, and the future of healthcare delivery systems remains uncertain. More than a decade ago, Annison and
Wilford (1998) characterized American healthcare as unlike any other provider business due to the unique relationship between the physician as provider and patients. As the healthcare business continues to evolve at a rapid pace, a definition of trust that is appropriate to healthcare and different from the generic definition currently worthwhile for non-healthcare businesses is needed.

The literature provides a theoretical perspective on the critical expectation of trust in a social system. In his classic work on social systems, Parsons (1951) theorized that social systems are neither concrete, nor directly observable entities; but rather they are analytically defined domains of objects. Social systems can be identified only by abstracting social interactions, relationships, and institutions from environmental phenomena, which may be physical, biological, psychological, and cultural. Yet, social systems also share elements with their environments. A social system can be viewed as it relates to change and its relationship to “the basic nature of living, of interaction, of process and of being” (Gibb, 1978, p. 80).

Gibb (1978) developed the theory of trust, characterized by being, opening, realizing and interdepending, as a general, unitary theory that can be applied to all formal and informal social systems. The trust theory is structured to be particularly adapted to the engineering of system change in learning communities, therapeutic communities, management systems, change-inductive small groups and organizations. Gibb’s trust theory is founded on the premise that trust with fullness means that I “discover and create my own life” (p. 20). The trusting life is an interflowing and interweaving of the processes of discovery and creation.

Gibb’s (1978) trust theory is comprised of two major dimensions which are discussed as trust of self and trust of others. Gibb’s theory supports an application of change, as well as four correlates of trust of self and trust of others, which are manifestations of the human patterns of
being, opening, realizing, and interdepending. *Being* is the unique process of one’s becoming who one is; *opening* is understanding oneself and showing oneself to others; *realizing* is actualizing one’s wants; and *interdepending* is freely sharing and relating with others (Gibb).

Although Gibb did not conduct research on the trust theory, several researchers utilized his trust concepts in later studies.

People manifest patterns of trust through their perceptions of their human and environmental fields (Wright, 2004). According to Rogers’ (1970, 1990b) SUHB perspective, human beings knowingly make choices which influence the life process, and also knowingly participate in change. The life process creates change evidenced by pattern manifestations, which are unique to the human-environmental field (Rogers, 1983). Trust is fundamental to social change, and effective change creates trust. Moreover, “change is the basic nature of living, of interaction, of process, and of being, therefore, trusting is a catalytic force that evolves with life processes” (Gibb, 1978, p. 81).

*Being*, the first correlate in Gibb’s (1978) TORI theory is explained as the process of becoming who one is, which develops identity and an authentic self. The process of discovering one’s being is congruent with Rogers’ (1970, 1990b) mutual process of continuous change. The second correlate, *opening*, according to Gibb, focuses on being open to change and growth. The process of opening theoretically relates to the mutual process of open systems in the universe as described by Rogers. The third correlate of Gibb’s trust theory, *realizing*, refers to doing what one wants, actualizing and creating one’s own paths and flows, and understanding one’s own nature. The construct of realizing reflects Rogers’ description of an individual knowingly participating in change. Individuals create and actualize their own identity, as in the case of power of change described by Rogers’. The final correlate of Gibb’s theory is *interdepending*. 
which represents being with others, and creating and discovering a community. The individual interacts and relates while integrating with others in intimacy and with freedom. The human energy field is integral with its environmental field and acts as an energy field creating change (Rogers).

Only a few studies, none of which were conducted in healthcare settings, utilized Gibb’s (1978) concept of trust. Two studies, one conducted by Pedersen (1980) and another conducted by Meeker (1986) used the concept to investigate trust levels among elementary and middle school employees. Pedersen (1980) used a descriptive correlational design to examine the perceived leadership styles and patterns of group relations in a sample \((N = 138)\) of elementary and middle school administrators who were school principals \((n = 9)\) and educational professionals who were identified as staff members \((n = 129)\). The sample was recruited from nine schools in one school district located in southeastern Michigan. Each subject completed two instruments: the Leadership Appraisal Survey (Hall, 1979) and a modified version of the TORI Self-Diagnosis Scale (Gibb, 1978). The Leadership Appraisal Survey is a 12-item diagnostic instrument which assesses leadership practices as perceived by the leader’s subordinates. The TORI Self-Diagnosis Scale is a 96-item scale, which contains two, unique 48 item subscales. One 48 item subscale measures trust of self and the other 48 item subscale measures trust of others. In this study, Pedersen used the 48 items which measure trust of others.

Pedersen used participants’ responses on both of these instruments to determine whether or not a relationship existed between leadership styles and the trust of others variable in the sample. Results of the Pearson’s correlation coefficient analysis with \(p = .05\) was used to test for relationships between styles of leadership and group levels on each of the four variables of TORI Self-Diagnosis Scale and trust of others TORI level.
Pedersen (1980) found that perceptions of leadership style highly correlated with perceptions of trust and interdependence at the .001 level of significance. Significant correlations were found between teachers’ perceptions of the principals’ leadership style and each TORI variable, therefore, Pedersen determined that a substantial relationship existed between trust and leadership style. This finding demonstrated that the school principals in the study were achieving school goals and outcomes with and through other staff members. Alpha reliability was not reported for the modified instrument which measured individual perceptions of the group.

In another descriptive correlational design study, Meeker (1986) used Gibb’s TORI trust tool to examine the relationship between teachers’ perceptions of organizational climate in the work place and their perceptions of the trust level toward fellow staff members. A sample of 140 study participants was recruited from 12 schools in two Massachusetts school systems. Each subject completed two instruments: the Organizational Climate Description Questionnaire (OCDQ; Halpin & Croft, 1966) and the TORI Scale (Gibb, 1978).

The OCDQ contains 80 items that include biographical data questions and Likert-type responses to identify whether an item describing perceived organizational climate occurred within a range of “rarely” to “very frequently.” The OCDQ was used to measure the perceptions of individual teachers with respect to four teacher-related behaviors and four principal-related behaviors in their schools. The TORI scale, a 96 item, Likert-type scale, was used to measure the perception of individual teachers with respect to their trust level of self as well as trust of others, represented in the study as fellow staff members. Although the study participants answered all 96 items on the TORI Scale, Meeker primarily used responses to the 48 items related to trust of others as a measure of group trusting, opening, realizing and interdepending.
Results from Meeker’s (1986) study demonstrated that a statistically significant, moderately positive correlation existed between the climate openness index and trust, 
\( r = 0.55, p < .05 \), thus establishing that a relationship exists between work climate and trust. Meeker also found that a relationship exists between openness and trust of others. Wright (2010) was the first researcher to link Rogers Science of Unitary Human Beings and Barrett’s power as knowing participation in change to Gibbs theory of trust.

Gibb’s trust theory supports the premise that trust is a most important factor in an individual’s discovery of self. Gibb stated that “trust is an integrating and wholizing force. It is a property of the whole mindbodyspirit” (1978, p. 17). “Trust provides an environment that nourishes personal growth, holistic health, spirituality, and the discovery of the soul” (p. 19). Gibb also suggested that trust is the key to understanding the larger social system which consists of groups, institutions, and nations and that the trust level emerges from these same interflowing processes. Gibb added that “trust level is the central variable that determines the interaction of the processes and the resulting effectiveness of the systems” (p. 31).

In today’s uncertain, chaotic, complex, and changing society, creating and building the framework for a trusting climate in the workplace remains a central responsibility of management (Gini, 2004). Managers must not only exercise awareness as they open up to others, but must also begin to trust themselves so that, eventually, they will develop a sense of having become more powerful. Managers will then be able to use their power to make appropriate system-wide changes through creative actions (Gini). Gibb (1978) claimed that greater trust of self and greater trust of others, create both an increased capability to knowingly participate in change and a larger capacity for power.
Gibb (1978) described trust as a life process in which individuals create change, open themselves to others, and realize paths in an interdepending manner of freedom. Gibb’s theory is aligned with Rogers’ (1990b) concept that the organization of the system is one of mutual process, in which the whole is more than the sum of its parts, which in turn is aligned with Rogers’ concept of human pattern and the environment. Two examples of unique pattern manifestation are trust and power (Barrett, 1983, 2010). Trust, as described by Gibb, is an evolving life process with a focus on discovering change. Power, as characterized by Barrett involves humans knowingly making change, utilizing awareness, making choices, having the freedom to act intentionally, and being involved in change, all of which allow individuals to actualize their potentials.

In a 2004 study built on the foundational work of Rogers’ (1970, 1990b) SUHB and Barrett’s (1983, 2010) theory of power, Wright utilized Gibb’s (1978) TORI Scale and Barrett’s PKPCT to examine the relationship between trust and power respectively, in a sample of 189 adult male (n = 111) and female (n = 78) high school graduates whose ages ranged from 21 – 65 years. Wright’s investigation is the most recent study in the literature that reports on the use of Gibb’s TORI Scale.

Wright examined four variables to explore pattern manifestations of unitary human beings which included power, trust, trust of self and trust of others. Pearson correlation coefficient calculations were used to examine relationships between variables and multiple regression analysis for relationships among variables. Study findings revealed significantly positive relationships between trust and power, between trust of self and power, and between trust of others and power. Correlations were strongest between trust of self and power.
(r = 0.57, p < .001) and trust and power (r = 0.49, p < .001). Although trust of others and power were also positively related (r = 0.32; p < .001), the relationship was slightly weaker than that of the other two trust variables; in other words, trust of others explained only a small amount of the variance in power ($r^2 = 10\%$). Wright (2004) also found that “multiple regression analysis demonstrated that when power is regressed on trust of self and trust of others, trust of self was a significant predictor ($\beta = .66$, $p = < .001$) of power, but trust of others was not. Trust of self and trust of others together accounted for 33% of the variance of the total power score (F [2, 179] = 44.546, p < .001)” (p. 5).

Wright’s (2004) findings suggest that trust is a human-environmental field pattern that enhances power, and it is characterized by being, opening, realizing, and interdepending. Moreover, Wright’s findings demonstrated that trust and trust of self and trust of others are pattern manifestations of the mutual process of freedom of choice and change, which is congruent with Rogers’ (1970) perspective of change and with Barrett’s (1983, 2010) theory of power. In linking trust (Gibb, 1978) with power as knowing participation in change (Barrett, 1983), Wright’s findings suggest that when individuals trust themselves to become more aware of who they are, they are more powerful and are more likely to make their own choices. As Wright noted, “people who trust are more likely to use their power to make changes through creative and responsible actions” (p. 3).

In order to discover unitary pattern manifestations of the trust and power variables, Wright (2004) examined canonical correlations between the trust and power scales. Wright found all four aspects of power loaded high on the power variate (awareness = 0.81; choices = 0.88; freedom = 0.79; change = 0.80), with the power variate predicting 82 percent of the variance of the power variable, and 28 percent of the variance of the trust variate. Analysis of
the four PKPCT power scales and the additional measures of trust on the TORI scale; being, opening, realizing, and interdepending found supplementary canonical correlations consistent with the previous analysis of trust and power scales. The four aspects of power had a high load on the power variate (awareness = 0.87; choices = 0.90; freedom = 0.96; change = 0.85), as did the four aspects of the trust variate (being = 0.96; opening = 0.91; realizing = 0.86; and interdepending = 0.86). Wright reported the “trust variate predicted 80.8 percent of its own trust variable, and the power variate predicted 80.5 percent of its own variance of the power variable. Both the power variate and the trust variate predicted about 17 percent of each other’s variance” (2004, p. 5). Wright’s (2004) study was the first to examine and link the empirical relationship of trust and power utilizing the Rogers’ (1970, 1990a) SUHB, Barrett’s (1983, 2010) power theory and the PKPCT with Gibb’s (1978) TORI theory of trust, trust of self, and trust of others.

Bennis (1990) suggested that the ability to build and support trusting relationships generates success for both the leader and the organization. Fukuyama (1995) noted that trust is a precondition for prosperity and economic well-being and is the “social glue” (p. 25) for all human interactions. Fukuyama’s viewpoint implies that leaders must exemplify the art of trusting, which, in turn, inspires trust of others.

To reaffirm the positive role of the leader in promoting trust to increase the effectiveness of an organization, Covey (1990) recommended that organizational leaders establish trust at a personal level, engage in trust at an interpersonal level, exercise power at a managerial level, and promote peer alignment at an organizational level. In a discussion of ways to improve professional nursing practice, Swearington (2011) suggested that climates of trust in workplaces are linked not only to positive organizational environments, behaviors and attitudes, but also to
increased retention of nurses who enjoy job satisfaction, autonomy and dedication to their organization.

Trust remains increasingly more important to organizational relationships, particularly in light of ongoing and dramatic work place changes designed to flatten organizational structures and place more decision making control in the hands of front-line employees (Hart, Capps, Cangemi, & Callouet, 1986). Laschinger et al. (2000) described trust as an increasingly important element that influences employee performance, commitment to the organization, and job satisfaction.

More than a decade ago, Laschinger et al. (2000) noted that nurses, the largest professional group of healthcare providers in hospitals, were being particularly hard-hit by recent downsizing. The same observation remains true today, with perhaps even more ongoing evidence documenting the negative impact on nurses as hospitals continue to downsize. Nurse executives know that staff nurses’ trust of nursing management erodes each time organizational change occurs, since historically the changes significantly impact the nurse employees more than any other group of hospital employees. These changes are often related to budget adjustments, regulatory requirements, consumer/quality metrics (national patient satisfaction scores), evidence-based practice changes, and pay for performance reimbursement programs for hospitals and physicians (Moore & Hutchison, 2007). In today’s dynamic hospital work setting, nurses are experiencing the impact of organizational turbulence and resultant negative work experiences. To buffer this, it is imperative that management level nurses join with staff level nurses through trust and mutual use of power to create positive changes in the workplace.
Job Satisfaction

Literature on the concept of job satisfaction spans the fields of psychology, sociology, nursing, business, and organizational behavior. Job satisfaction is generally considered a complex set of attitudes and subjective beliefs about one’s job that is affected by many variables both within and outside the work organization (Stamps, 1997). Understanding the factors that determine job satisfaction can help both the employer and employee identify ways to improve the work setting and proactively support strong job satisfaction. In the hospital environment, the nurse manager is critical to the success of the objectives, mission, and goals of the organization, and this success is a product of the nurse manager’s ability to positively impact nurse staff attitudes that optimize the delivery of patient care (Hurley, 2005).

From the perspective of the SUHB (Rogers 1970, 1992, 1994), individuals and their world interact in a human-environmental mutual process that supports participation by people who create their own reality. Within the Rogerian framework, job satisfaction may be viewed as a pattern manifestation of the person-environment mutual process of change. In this case, the pattern manifestation is conceptualized as the behavior of an individual who is working in the environment and has the opportunity to accept and experience work challenges that do not exceed the individual’s ability to be successful (Hurley, 2005). According to Hurley, when an individual’s ability is equal to the work challenges, then it is through the individual’s “deliberate choice … [that] both the individual and environment change together and the individual experiences a feeling that in and of itself is rewarding and not necessarily dependent on the outcome of the event” (p. 15). Additionally, when individuals believe they have participated in workplace change through the exercise of power, satisfaction in their job is enhanced (Hurley).
Whitley and Putzier (1994) also defined job satisfaction as a pattern manifestation of the human-environmental field; however, they conceptualized the pattern manifestation as the quality of satisfaction resulting from an individual’s experience of “work and [the] work environment” (p. 44). Whitley and Putzier developed a 38-item Work Quality Index (WQI) scale, comprised of six subscales used to measure each of six aspects of the registered nurses’ work environment and its related culture of work quality believed to affect job satisfaction. Subscales measure professional work environment, autonomy, work worth, professional relationships, role enactment, and benefits. The researchers developed the WQI as an outgrowth of their prior 1994 study that examined job satisfaction as well as the work and work environment of registered nurses (N = 245) at a large, acute care hospital located in the northwest region of the United States. Whitley and Putzier used factor analysis to establish construct validity for the WQI and reported an alpha coefficient of 0.94 for total scores on the WQI scale in a sample of (n = 188) registered nurses who completed the scale in a tool development pilot study. Internal consistency of test items on the WQI subscales was supported by alpha coefficients that ranged from 0.72 to 0.94. Specific subscale alpha coefficients were reported as follows for: professional work environment, \( \alpha = 0.87 \); autonomy, \( \alpha = 0.84 \); work worth, \( \alpha = 0.79 \); professional relationships, \( \alpha = 0.80 \); role enactment, \( \alpha = 0.72 \); and benefits, \( \alpha = 0.79 \). The scores of the six subscales were equally weighted and when analyzed along with the demographic items for each study participant, the findings demonstrate an opportunity for nurses and nurse administrators to gain insights about, and participate in, organizational activities to create positive change that can improve the nurses’ work environment. Use of the WQI is beneficial to nurse administrators since it measures nurses’ satisfaction with their entire quality of work and the work environment and supports the organizational rationale needed to implement work environment and work.
culture improvements. Whitley and Putzier suggest that nurses desire and want to work in environments that professionally recognize peers and respect, value and appreciate individual and group contributions that positively influence the work culture.

Stamps (1997) suggested that job satisfaction must be described within the context of the organization being discussed because job satisfaction is highly correlated with the organization's culture, values and attitude toward the importance of a unique work role. Although it is generally agreed that job satisfaction reflects a positive attitude toward work, there is less agreement about how to measure the level of positive or negative attitudes in job satisfaction. In a study of nurses ($N = 100$) and job satisfaction, Stamps found that the factors of pay, autonomy, organizational policies, professional status, task requirement, and interaction influenced job satisfaction. Although Stamps’ findings may appear similar to some of the work quality aspects measured by Whitley and Putzier (1994), Stamps failed to evaluate each of the variables in the study as a pattern manifestation of the human-environmental field. Thus, the value of Stamps’ findings for the open systems perspective being used in this study may be limited although the importance of correlating organizational context with job satisfaction has merit.

Similar to Stamps’(1997) investigation, Tumulty, Jernigan, and Kohut (1994) explored the causal relationship between work environment and job satisfaction in a sample of registered nurses ($N= 159$) from two acute care hospitals in southeastern United States. Findings indicated that nurses who were highly satisfied were more positive about their overall work environment, than were the unsatisfied coworkers. However, like Stamps, Tumulty et al. did not consider the mutual interaction of subjects and the environment, therefore, the value of their findings for the perspective being used in this study is also questionable, although consideration of the link between work environment and job satisfaction in nurses has some value.
McNeese-Smith (1997) found that nurse manager behaviors contribute positively to staff nurse job satisfaction when nurse managers provided staff nurses with recognition and appreciation for their work. Nurse managers in McNeese-Smith’s study met the personal needs of individual nurses when they used their leadership skills to actively help and guide each nurse to effectively meet unit needs and when they supported other unit-based team efforts. Findings indicated that nurse manager behaviors that contribute negatively to job satisfaction are failing to provide staff nurse recognition or support, failing to follow through with problem resolution, failing to help staff when patient care loads are heavy, and criticizing the staff as inefficient during such heavy work load situations. Although this study provides insight into cause-and-effect relationships between nurse manager behaviors and staff nurse job satisfaction, it does not offer insight into the nurse manager-staff nurse mutual process as a trust-based process that is manifested as feelings about the job.

Just as with staff nurses, job satisfaction is particularly important for understanding success in the nurse manager role, since it is directly and inversely associated with staff nurse job turnover. If healthcare administrators can identify the factors related to their employees’ job satisfaction, they can then explore the impact of those factors on job satisfaction, especially for employees whose jobs require professional supervisory interactions such as those that occur between nurse managers and staff nurses. Once understood, administrators can develop specific strategies to improve nurse manager job satisfaction and decrease turnover (Lu, While, & Barriball, 2005; Sengin, 2003).

Failla and Stichler (2008) compared three leadership styles, transformational, transitional, and laissez-faire for differences in nurse manager and staff nurse job satisfaction. The researchers hypothesized that staff nurse satisfaction is more positively related to
transformational leadership style in their nurse manager than to either the transitional or the laissez-faire style of leadership. Subjects \(N = 92\) included nurse managers \(n = 15\) and their staff nurse direct-reports \(n = 77\). The managers had been in their positions for at least 6 months and each had at least three staff nurses who directly reported to them. Findings indicated a small correlation between nurse manager transformational leadership style and staff nurse job satisfaction \(r = 0.348, p < .05\). Although the correlation was correctly reported as significant, Falla and Stichler failed to note that nurse manager leadership style explains only 12% of the variance in job satisfaction \(r^2 = 0.121\) which although significant, may be a questionable relationship.

As noted earlier, job satisfaction is complex, multidimensional, and not extensively studied in nurse managers (Acorn, Ratner & Crawford, 1997). Yet, in spite of sparse empirical data related to the nurse manager role, Laschinger (2007), whose research studies are focused on staff nurses, stated that job satisfaction remains one of the strongest predictors of an employee’s intention to leave a current job. Since only sparse data are available to link job satisfaction and variables related to feelings about a current job in nurse managers, it is reasonable to conjecture that a possible theoretical link between job satisfaction and retention of nurse managers exists as a measureable, acausal reflection of the nurse manager-work environment mutual process. Laschinger’s studies were all conducted with Canadian nurses and from the causal worldview perspective and thus, fail to provide direction to United States based nurse manager and job satisfaction research from an open-systems-based study perspective.

To date, only two studies have examined job satisfaction of nurses from the open-systems perspective based on the Rogerian (1983) SUHB framework. The first study, conducted by Mahoney (1999), examined the relationship of the actualization of job satisfaction and power in
a sample of 118 female home care nurses in New Jersey home care community settings. Study participants were recruited from 50 home care agencies located in New Jersey. The nursing directors from each agency were contacted by telephone and asked to distribute study packets to female home care nurses in their respective agency. After obtaining institutional research review board approval, the directors distributed to each agency nurse a research packet that contained the following three paper and pencil study measures: the PKPCT, Version II (Barrett, 1983, 2010); the Personal Orientation Inventory (POI; Shostrom, 1977); the WQI (Whitley & Putzier, 1994); and a demographic data sheet. Completed study packages were returned directly to the researcher in a postage paid, researcher self-addressed envelope that was also included in the original research packet. Mahoney’s (1999) study findings reported a Pearson product moment correlation and multiple regression which demonstrated a significant relationship of power and job satisfaction with home care nurses at p < .001.

In the second study that examined job satisfaction of nurses from the open-systems perspective, Hurley (2002) examined the relationships between and among job satisfaction, stress and power within the Rogerian (1983) SUHB framework of mutual-process pattern manifestations in the human experience of change. Research packets were mailed nationwide to a randomized sample of 600 nurses. Among the 45% of nurses who responded, only 124 matched the inclusion criteria of the study’s target sample of female nurse managers. The correlation between job satisfaction and power in this study, although only moderate, provides a theoretical rationale for Hurley’s perspective that nurse managers who view themselves as participating in change can manifest power and experience job satisfaction. This study supports Barrett’s (1983) theory of power as knowing participation in change, linking the idea that nurse managers who experience power will realize job satisfaction.
Hurley (2002) reported that the nurse managers were satisfied with their jobs with 96.5% reporting a high to moderate level of job satisfaction. Hurley’s findings did report that job satisfaction was not related to stress ($r = -0.11$, $p = 0.23$) and the four manifestations of stress including individualism, challenge, opportunity and consciousness raising with correlations ranging from $r = 0.02$ to $r = 0.13$. When discussing the lack of correlation between stress and job satisfaction in the study, Hurley suggested that the stress instrument may not have been sufficiently robust to explore the experience of stress in subjects. In addition, Hurley questioned whether the number of subjects ($n = 124$) was sufficient to test variable correlations. Delimiting the sample to females was also identified as a possible limitation of the study since findings were generalizable to female nurse managers only. Hurley suggested that in future studies, the study population should include males to allow for comparison of gender differences in job satisfaction, stress and power. Gender comparisons based on findings of empirical data would be beneficial to nursing in the future. The findings of the study by Hurley (2002) suggest that nurse managers who view themselves as participating in change should manifest power and experience job satisfaction, which is also reflective of Barrett’s (1983) theory, and suggests that life is in constant change, and job satisfaction is a manifestation of the living experience.

A number of events are currently provoking change in the healthcare arena. Contributing factors for healthcare changes in the acute care setting include competition, reimbursement, technological advances and the nursing shortage (Kleinman & Saccomano, 2006). These factors have motivated forward-thinking hospital administrators to reorganize, restructure, and, in the context of nursing management, consider innovative strategies to improve job satisfaction in order to retain registered nurses and nurse managers (Erickson, Duffy, Gibbons, Fitzmaurice, Ditomassi & Jones, 2004). Therefore, it would be meaningful for nurse managers to utilize their
power and capitalize on trust relationships in order to create and lead the way in advocating for positive work environments that lead to staff nurse and nurse manager retention and job satisfaction.

Summary

This chapter presents a review of the literature from the acausal worldview and provides a theoretical perspective of proposed relationships among the variables of power as knowing participation in change, trust, trust of self, trust of others and job satisfaction. Barrett’s (1983) Theory of power and Power as Knowing Participation in Change Test (PKPCT) provided the theoretical foundation for understanding and measuring power from a nursing science perspective.

Over the last twenty five years, several descriptive correlational studies were designed using Rogers’ Science of Unitary Human Being as the conceptual framework and Barrett’s (1983) theory of power to knowingly participate in change as the theoretical perspective (Trangenstein, 1988; Rizzo, 1990; Caroselli-Dervan, 1991; Mahoney, 1999; Hurley, 2002; Wright, 2004) to test and extend the reliability and validity of the PKPCT in a variety of populations. Of these, two studies focused on the relationship between power and nurse job satisfaction (Mahoney, 1999; Hurley, 2002). Wright’s 2004 study was the first quantitative research study to theoretically link, within an acausal perspective, Barrett’s theory of power and Gibb’s (1978) overall theory of trust which includes trust of self and trust of others. Taken together, the significant findings of these studies provide a theoretical basis to extend the acausal nursing perspective of power through examination of a possible theoretical link between nurse manager job satisfaction as an outcome variable related to the interaction of power and trust in the acute care work environment.
Based on Barrett’s (1983) theory of power, one can theorize that a preferred work environment is one in which the power of the nurse manager and staff nurse to knowingly participate in change is operationalized as a deliberate mutual choice to maintain optimal professional nursing practice. Nurse managers who actualize leadership ability that reflects Barrett’s theory of power to knowingly participate in change will activate their individual power through a mutual interactive process with the environment. Thus, this leadership will optimize staff nurse competence and efficiency in daily operations that will ensure optimal patient care. Barrett (1983) tested the validity and reliability of the original PKPCT, Version I measure of power, in a pilot study of 267 males and females divided into two separate evaluation groups. One group tested items that measured theoretical field behaviors and the second group tested items that described power. Based on the results of the pilot, Barrett revised the original test and developed PKPCT, Version II. Reliability and validity of the PKPCT, Version II was tested on a sample of 625 highly educated adult male and female subjects. The range of alpha reliability coefficients for the subscales in the study were strong, ranging from 0.89 to 0.93. Construct validity, initially established by expert judges was followed by factor analysis of the final sample responses to the PKPCT, Version II which when calculated, yielded coefficients which were low to moderate 0.56 to 0.70.

Additional quantitative studies extended reliability and validity data for the PKPCT, VII as a measure of power from the acausal worldview (Trangenstein, 1988; Rizzo, 1990; Caroselli-Dervan, 1991; Mahoney, 1999; Hurley, 2002; Wright, 2004). The range of alpha reliability coefficients from 0.94 to 0.96 for studies that used the PKPCT, VII (Barrett, 1983) was reported by several researchers (Trangenstein; Rizzo; Caroselli-Dervan; Mahoney; Hurley; Wright). Factor analyses yielded a wide range of validity coefficients (0.55 to 0.90) for analyses of
power responses in each of the four studies by Trangenstein (1988), Rizzo (1990), and Mahoney (1999) which utilized Barrett’s PKPCT, VII to measure power.

Caroselli-Dervan (1991) who utilized Barrett’s power theory to develop a correlational design study to test a hypothesized relationship between power, measured with the PKPCT, Version II, and feminism, measured with the Index of Sex Role Orientation in a sample of 89 nurse executives, reported a 0.95 alpha reliability for the PKPCT, Version II in the study. Caroselli-Dervan posited that the sub-constructs of awareness, choices, freedom to act intentionally and involvement in creating change that comprise Barrett’s theory of power are also congruent with feminism. In Carroseli-Dervan’s study that examined the correlation of power and feminism, her findings indicated that only one of the four subconstructs, freedom to act intentionally was even minimally (r = 0.24, p < .01) correlated with feminism. Caroselli-Dervan theorized (Barrett & Caroselli, 1998) that the tool used to measure feminism may not have been a valid measure of the variable and that Barrett’s concept of power “can be seen as transcending the idea of feminism” (p.17). Caroselli-Dervan’s study population of nurse executives was a homogeneous, all female subjects. After almost 25 years, a gap in the literature that examines power in nurse executives still exists since no studies have examined power in a heterogeneous population where equal samples of males and females in positions of nursing leadership can be compared. Understanding whether similarities and differences in power related behaviors are correlated with being male or female will offer new insights into nurse leadership behaviors. Such findings can contribute to the body of research for nurse leaders.

Hurley (2002) used Rogers’ (1970) SUHB framework in the first descriptive correlational study to examine the human experience of change in nurse managers as a job-related, mutual-process pattern. In this study, the relationships among power to knowingly participate in change,
job satisfaction, and stress were examined and findings indicated that power and job satisfaction were significantly and moderately correlated ($r = 0.40$) which supported the theoretical premise that nurse managers who view themselves as participating in change should manifest power and job satisfaction. Hurley linked job satisfaction and power to nurse managers who view themselves as participating in change which is reflective of Barrett’s (1983) theory and suggests that life is in constant change and that job satisfaction is a manifestation of the living experience.

Wright (2004) was the first and only researcher to examine the acausal relationships between power, measured with the PKPCT, VII (Barrett, 1983) and trust: trust, trust of self, and trust of others, measured by the TORI scale (Gibb, 1978) using a descriptive correlational design in a random sample of 189 high-school educated adults. Since no psychometric or alpha reliability data were available for the TORI scale, Wright conducted a pilot study prior to using the TORI scale in her study. The pilot demonstrated an acceptable Cronbach alpha reliability of 0.94 for total trust on the TORI scale, 0.86 for trust of self and 0.87 for trust of others. In Wright’s correlational study of the relationship between power and trust, the total TORI scale alpha reliability was reported as 0.96, trust of self as 0.92 and trust of others as 0.90. Findings indicated a moderately positive relationship between trust and power ($r = 0.49$, $p < .001$) and a more strongly, positive relationship between trust of self and power ($r = 0.57$, $p < .001$). The finding of limited differences according to gender in Wright’s studies was not consistent with homogeneous samples that used the PKPCT, VII to measure power (Barrett, 1983; Trangenstein, 1988) and where power was found to be gender neutral and consistent with Barrett’s (1990) theoretical view that power is gender free.

Gibb (1978) proposed that trust of self and trust of others are fundamental to effective social change which further enhances a pattern of trust and supports the premise that trust is a
most important factor in an individual’s discovery of self. Wright’s (2004) findings support that trust, trust of self, and trust of others are unitary pattern manifestations of the mutual process of freedom of choice and change. These findings demonstrate an empirical acausal relationship between the variables of trust and power that is consistent with Rogers’ (1970, 1990a) SUHB, Barrett’s (1983) theory of power and Gibb’s (1978) theory of trust, trust of self, and trust of others.

Hurley’s (2002) theoretical link between Barrett’s (1983) power theory with nurse manager job satisfaction, was supported by findings that demonstrated a moderate correlation between power and job satisfaction in nurse managers in the work environment. Nurse managers who utilize Barrett’s (1983) power to knowingly participate in change and Gibb’s trust can actualize their own power and trust and can create a positive work environment that should lead to increased job satisfaction for themselves and the staff nurses with whom they mutually interact.

A weakness identified in sample selection for Hurley’s (2002) study suggests that a number of subjects in the overall sample may not be representative of the current generally accepted professional qualifications of the population of nurse manager in the acute care work environment. Specifically, Hurley failed to delimit professional education to BSN and higher and to require that subjects have at least two years or more experience in the nurse manager role. Study findings may be questionable because Hurley’s nurse manager participants reported a wide range of educational levels that included diploma, associate degree of nursing, BSN and MSN degrees with fewer than 50% of the 124 subjects holding a BSN degree. In addition, 50% of the study participants reported being in their current position five years or less, with 2.4% of them having reported being in their current position for less than one year. Therefore, there is a strong
need to replicate the study with a diverse group of nurse managers delimitated to RN’s with a BSN or higher education level and at least two years as a nurse manager on a specific patient care unit in the same hospital. The rationale for the education delimitation is based on well recognized data that support the BSN as entry level into professional nursing practice, which Aiken, Clarke, Cheung, Sloane & Silber (2003) demonstrated as having strong links to positive patient outcomes, decreased mortality and increased quality patient care. The need for minimum role experience is explained by Barnum-Stevens and Kerfoot (1995) and suggests that learning role behaviors evolves with experience as one acclimates to a new leadership role, especially within the first year of practice and that the individual personal leadership style subsequently develops during the second year. Because there is a gap in the literature regarding the importance of entry level education and work experience for nurse managers and their job satisfaction, and Hurley’s study design had weaknesses in sample selection there remains a strong need to replicate Hurley’s study with improved sample selection criteria.

A major strength of the PKPCT, VII is that it demonstrates the appropriate use of its strong theoretical underpinnings and it has accumulated substantial evidence of high reliability and validity based on data from the studies reporting its use as a measure of acausal power. Barrett’s toolkit which contains guidelines for use of the PKPCT, VII incorporated a conceptual basis that suggests two possible options for its use in research studies. Each option has a unique method for scoring which is also explained in the toolkit. It would be beneficial and important to continue efforts to enhance reliability and validity data for the total score PKPCT option and its alternate, four subscale score option. Thus future researchers must continue to report alpha reliability statistics for each of the two options, namely the total PKPCT alpha, or the four subscale PKPCT alpha. By way of example, Hurley (2002) and Wright (2004) utilized all four
scales to measure and obtain a total score with nurse managers and high school educated adults respectively while Mahoney (1999) utilized the PKPCT four subscales version with nurses in the home care setting to measure selected subscale concepts and obtained a score.

Mahoney (1999) and Hurley (2002) utilized the Whitley and Putzier (1994) Work Quality Index (WQI) to measure job satisfaction in registered nurses and nurse managers which demonstrated strong empirical evidence and sufficient validity and reliability for the WQI as a measure of nurse job satisfaction. The WQI was simple and easy to complete with alpha reliabilities reported at 0.94 for the total scale scores in both studies.

This chapter presents a review of the literature representing the Rogerian framework and the acausal worldview which provides a theoretical perspective of proposed relationships among the variables of Barrett’s (1983) power as knowing participation in change, Gibb’s (1983) trust, trust of self, trust of others and job satisfaction. This study examined pattern manifestations of the mutual human-environment process of power as knowing participation in change, trust, trust of self and trust of others and job satisfaction in nurse managers in the acute care hospital. It is hypothesized that nurse managers who utilize power in making their professional nurse manager role behavior choices and employ the concepts of trust, trust of self and trust of others will experience and manifest job satisfaction. This study, as well as future research would provide strategies for nurse administrators to promote, guide and mentor present and future nurse managers in order for them to assume leadership roles in the ever dynamic healthcare environment.

Since literature about the relationships of power, trust, and nurse manager role behaviors is largely theoretical, the findings of this study will offer nurses in acute care organizations the foundation to design innovative initiatives that support the nurse manager’s ability to
 operationalize power as knowing participation in change in the work environment. These initiatives based on research will also support nurse managers to independently enhance, or learn to develop and use power-as-freedom when exercising their managerial skills. When nurse managers manifest human-environmental field patterns in a mutually interactive process of power and trust, these actions support professional role behaviors and job satisfaction. From the perspective of an acausal worldview, research that examines the relationship of the concepts of power as knowing participation in change, trust, trust of self and others, and job satisfaction in nurse managers in an acute care setting has not been reported.
CHAPTER III

THE METHOD

Design of the Study

In this descriptive, correlational study the relationships between and among power as knowing participation in change, trust, trust of self, trust of others and job satisfaction in nurse managers working in acute care hospitals were examined. The relationships between variables were analyzed using Pearson’s Product-moment correlations and among variables by multiple regression analysis. Exploratory analyses were conducted with selected demographic characteristics to determine their relationship to power as knowing participation in change, trust, trust of self, trust of others and job satisfaction, and to examine whether they, in turn, correlate with the relationships between and among the above mentioned variables. Demographic characteristics included age, gender, race, marital status, total household income, education level in nursing, annual salary, perception of salary fairness, type of current work unit, number of years worked as a registered nurse at current hospital, years worked as nurse manager on current unit, total number of years worked as a nurse manager during overall professional career, total number of years worked as a nurse leader in any nurse manager capacity, number of years worked as a registered nurse since graduation, as the current nurse manager how many registered nurses directly report and how many non-professional staff directly report to participant.

Description of Population and Sample

The sample for this study consisted of full-time registered nurse managers with a BSN degree or higher whose job description requires 24-hour seven days a week responsibility for current work unit which included accountability for managing the unit’s operational budget. In addition, the nurse manager must monitor and maintain organizational standards for overall
patient care services, and for unit based patient satisfaction scores in an acute care hospital. Since the literature strongly suggests that role performance in a work position evolves over time, only nurse managers who have worked as a nurse manager for a minimum of two years on the same and current patient care unit in an acute care hospital were included in this study.

A sample of 98 volunteer subjects were recruited for this study from fifteen acute care hospitals in New Jersey. One hundred eighty-six research packets were distributed across 15 acute care hospitals, of those 102 were returned and four packets were not useable, thus the sample consisted of 98 volunteer subjects. A sample size of at least 76 nurse managers was needed to detect a medium effect size, \( r = 0.30 \), at the alpha level of .05 and a power greater than .80 as justified by Cohen (1988) to serve as the midpoint in correlations between discriminately different psychological variables. A sample size of at least 91 subjects was required to determine a medium size effect of \( f^2 = 0.15 \), and \( R = 0.36 \) (Cohen) in a multiple regression analysis of the interaction of multiple variables. This minimum sample size of 91 was consistent with Pedhazur’s (1982) recommendations for multiple regression analysis when using up to seven predictors. The sample size of 98 subjects obtained for this study was sufficient.

**Setting**

The setting was the nurse manager’s patient care unit work-site within 15 acute care hospitals in NJ that were each licensed by the NJ State Department of Health as an acute care hospital and currently listed on the NJ State Department of Health roster of acute care hospitals.

**Ethical Considerations**

The protection of human rights of the subjects in this investigation was maintained throughout the course of the study. Proposal review by the Seton Hall University (SHU) Institutional Review Board (IRB) requires proof of access to potential study subjects. In order to
demonstrate preliminary study site approval of access to study subjects, the Chief Nurse Executives (CNOs) of 15 state licensed acute care hospitals were individually approached and after each was provided with an oral explanation (see Appendix A) of the study, the researcher requested and received a preliminary oral agreement, with a written e-mail confirmation of each CNO’s agreement to allow recruitment of nurse managers for participation in the study. Each CNO’s e-mail confirmation to recruit nurse manager participants for the study in their hospital was submitted with the SHU IRB proposal review application as evidence of access to recruit the sample for the study.

Following the study’s approval by the SHU IRB, and prior to data collection, the researcher followed the electronic IRB approval application process required by each of the 15 hospitals and submitted an e-mail copy of the SHU IRB study approval letter and a hospital specific cover letter requesting hospital IRB approval to conduct the study. Although offered, no hospital IRB review committee requested a copy of the completed SHU IRB study application, while three hospital IRB committees did request a copy of the full dissertation study proposal before granting approval to conduct the study in their hospital. Following electronic receipt of the formal written approval from each hospital IRB, and according to the SHU IRB approval process the researcher forwarded each hospital’s approval letter to the SHU IRB chairperson who filed it with the original SHU IRB application. The original documents indicating all hospital IRB approvals are being maintained by the researcher.

The researcher contacted the CNO of each hospital after having forwarded a copy of his or her hospitals IRB study approval, to discuss the best way to contact a senior level nurse manager to request an invitation to attend a regularly scheduled general nurse manager meeting when at least 20 minutes of the meeting agenda could be allocated for discussion of the study. Because
the senior nurse manager was to be invited in the study he or she was only told that the reason for the request was to recruit nurse managers to participate in this nursing research study. Although all nurse managers at the meeting were invited to attend the researcher’s brief presentation of the study proposal the nurse managers had been informed earlier that only nurse managers who met study sample inclusion criteria could participate in the study.

On the day before the scheduled nurse manager meeting, the researcher telephoned the contact senior nurse manager to confirm earlier plans for the researcher to attend the nurse manager meeting scheduled for the next day. At the meeting, and following an introduction by the nurse manager meeting leader, the researcher explained to the attendees that the reason for requesting an invitation to their meeting was to present an oral overview of the study (see Appendix C) and to recruit nurse managers, who met inclusion criteria, to volunteer as participants in the study.

An oral explanation of the nurse manager’s right to independently decide whether, or not, to participate as a volunteer in the study was given. Potential volunteers were informed that a written copy of the meeting presentation information, as well as the participant’s rights was included in the Letter to Participant-Nurse Manager (see Appendix D). The letter was contained in the research packet which was distributed to attendees in a larger unsealed manila envelope at the meeting. The Letter to Participant-Nurse Manager provided specific information about the following: researcher’s academic affiliation, purpose of the study, duration of time for data collection, data collection procedures, a description of all questionnaires, the suggested process for completing the research study forms and for returning the packet of completed study documents. Also included was information about the nature of voluntary and anonymous participation in the study, benefits and risks for participation in the study, payment for
participation and specific contact information to use if the participant had questions about the study or his or her rights as a study participant. There was a clear statement in the Letter of Participation that submission of completed study data forms implied consent to having voluntarily participated in the research study and thus, no formal consent form was included in the packet and that no signature was requested, expected or required. The Letter also stated that it would take approximately 60 minutes to complete the three variable measures (see Appendices E, F, G) and Demographic Data Information Form (see Appendix H). During the discussion, potential participants were assured that whether they chose to participate, or not, would be an anonymous decision since all individual research data collected during the study were collected anonymously in that no participant was asked to identify him, or herself on any research documents. The researcher reassured the individual nurse managers that no one, including the researcher knew who chose to participate in the study or not, since all data were returned anonymously. Potential volunteers were asked to seal and return the research documents in the large manila envelope which was originally distributed with study documents regardless of whether they decided to take part in the study or not.

The nurse managers had been advised that even if they began to complete the data collection forms, they still had the right to withdraw from participation in the study without reprisal returning their incomplete data collection forms in the manila envelope and that packets with incomplete data would be discarded. To avoid any possible hospital specific identification of nurse manager participants either by name, or by overall number of participants, (1) the manila envelopes containing the research material were identified by code number (2) the participants self-sealed the envelopes and returned them to the sealed box provided by the researcher who (3)
placed the box in the staff office suite. In addition, the researcher personally retrieved all returned envelopes and maintained them in a secure area.

All potential participants who attended the nurse manager meeting received a large, unsealed manila envelope which contained the research material that included the following five documents: Letter to Participant-Nurse Manager (see Appendix D), the PKPCT, Version II (see Appendix E), the TORI Scale (see Appendix F), the WQI (see Appendix G) and the Demographic Data Information Form (see Appendix H). To maintain the integrity of the research process, insure there would be no loss of copyrighted research documents and assure that the predetermined, sequential order of the documents contained in the manila envelope was maintained, the researcher asked the nurse managers to refrain from opening the manila envelope at the meeting. Instead, they were asked to open the envelope when they were in a quiet place, such as at home, where they would be undisturbed and could thoughtfully respond to questions on each of the four data collection forms. The researcher explained that each manila envelope had a unique randomly assigned identification (ID) number stamped in the upper right-hand corner which matched the ID number stamped on all data collection forms in each envelope being distributed. During discussion of the data collection process, the researcher opened and showed the nurse managers the contents of the sample study packet in order to demonstrate various aspects of the data collection process. Nurse managers were shown that the same randomly assigned ID number stamped in the upper right-hand corner of the manila envelope was also stamped on each of the three questionnaires and the Demographic Data Information Form. Nurse managers were informed that ID codes allowed for data organization and statistical linking of each participant’s data set during the analysis phase without identifying individual respondents who completed the numerically coded forms. Furthermore, data were analyzed
within and across variables without reference to individual responses. Analyses and reporting were based on aggregate data sets.

Potential participants were instructed not to write their name on any of the four, numerically coded data collection forms in the envelope. The first of the five documents in the manila envelope was the Letter to Participant-Nurse Manager. The researcher read aloud the letter to the nurse manager group and explained that the letter should not be returned with the other four research forms; it should be retained for the future as a written record of the research process being discussed at the current meeting. The letter generally described the study and stated its purpose, the data collection procedures and approximate duration of time needed to complete the three variable measures and the Demographic Data Information Form. Voluntary participation and the time sensitive parameters for withdrawal from participation, without reprisal, at any time until the manila envelope was deposited into the sealed data collection box was also discussed. Since the envelopes were submitted anonymously, no request to withdraw from the study was possible after being co-mingled with the envelopes of nurse manager peers. A written, formal consent form was not required nor included, since completion of the data collection forms and return of the completed research packet documents were tacit, informed consent and implied participants informed willingness to participate in the study. The researcher stated that at the completion of the study, in order to advise nurse managers of the overall findings/results of the study, a notice shall be sent to all nurse managers at participating hospitals via internal e-mail, inviting them to attend a presentation and discussion of the findings of the research study. The researcher will schedule a separate presentation at each hospital site that had participated in the study.
Nurse managers were informed that after they completed the data collection forms they should place all research forms into the large manila envelope, seal it and return the envelope by placing it into the medium sized, sealed white box with a slotted top and labeled “M. Schneider Completed Research Questionnaires” which was located in the nursing staff office. The nurse managers were informed that the researcher would return to the hospital nursing staff office seven days after current meeting and again on day 14 to pick up the large manila envelopes that had been deposited in the sealed white box. This planned process of research packet return and timely retrieval by the researcher assured that individual subject’s responses on data collection forms would remain secure and under researcher control. In addition, the researcher asked that nurse managers who received a research packet at the meeting and later chose not to participate in the study, return the unused or partially completed research forms in the manila envelope originally distributed at the Nurse Manager meeting. This request was made because two of the three variable measures are copyrighted and authors granted limited use of the tools to the needs of the study. In addition, return of all research material enhanced the promised anonymity of the data being collected and maintained during the research process.

The researcher created a master list of all ID code numbers used during the study with sub lists of the code numbers assigned to each hospital. These master and sub-lists are currently maintained by the researcher as a single electronic document stored on a secure individual thumb drive. The number of participants from each hospital was used for data analysis only and not shared or published. The thumb drive containing the electronic master list of hospital ID codes is stored and kept in a locked desk drawer in the researcher’s locked, private office at home. The only desk drawer key is kept by the researcher. Data will be securely stored and maintained by the researcher for three years and then destroyed.
**Instruments and Measurement Methods**

The following four instruments were used to collect and measure data from the study participants: the Power as Knowing Participation in Change Test, Version II; the Trust, Openness, Realization, and Interdependence Self Diagnosis Scale; the Work Quality Index and the Demographic Data Information Form. Each data collection instrument in each study packet was stamped with a matching, randomly assigned identification number.

**Power as Knowing Participation in Change Test, Version II (PKPCT, V. II)**

The Power as Knowing Participation in Change Test, (PKPCT), V. II was administered to measure nurse manager power (see Appendix E). The PKPCT, VII is a paper and pencil, 52 item, paired bipolar adjective list that uses the semantic differential technique to measure operational indicators of power (Barrett, 1983) that best describe the meaning of each indicator for the respondent, at the current point in time. Each paired bipolar item response is scored on a 7-point continuum scale where a score of one indicates being low on power and seven being high, with four being a neutral power score. The 52 pairs of bipolar adjectives measure the four field manifestations of power as subscales including awareness, choices, freedom to act intentionally and involvement in creating change (Barrett, 1983). Of the 52 pairs of bipolar adjectives, only 48 adjective pairs make up the total score on the test; the remaining four pairs are used as retest items and the retest item scores are not included in the sum of response scores. The sum of scores for each of the four subscales range from 12 to 84 and a number of items are reverse scored. The sum of all four subscale scores, which ranges from 48 to 336, provides the overall total score for the PKPCT, V. II. The higher the score, the greater the sense of power (Barrett).
Validity of PKPCT

Barrett (1983) tested content validity for the original PKPCT, Version I in two separate evaluations by New York University faculty, with doctorates in nursing, who were experts in the Rogerian SUHB (Barrett). Each expert was assigned to judge in only one of two separate groups that evaluated the PKPCT content. The first group of five judges reviewed Barrett’s theoretical foundation and examined PKPCT words, phrases and field behaviors used to define power for theoretical appropriateness. Scoring was completed based on a semantic differential technique. Also, using a semantic differential technique, the second group of judges rated a list of 38 bipolar adjective pairs according to how well each pair described power. Out of 38 rated, only the 24 bipolar adjective pairs with the highest factor loading on a factor analysis were retained for the PKPCT, Version I (Barrett).

The PKPCT, Version I, was initially piloted with a sample of 267 men and women, aged 19 to 60 years and tested the hypothesis that power would correlate with human field motion. The reported reliability correlations for this first pilot ranged from 0.55 to 0.99. Barrett (1983) revised the original tool and tested the validity of the revised bipolar item pairs, as well as the theoretically appropriate incorporation of current items that test for power related to one’s environmental contexts of self, family and occupation. Reliability of the revised PKPCT, Version I was tested in a sample of 625 men and women whose ages ranged from 21 to 60 years. Based on results the original test items were again revised for clarity and new bipolar adjective pairs were added to the then existing bipolar pairs which yielded a 48 item paired bipolar adjective list. In addition to the 48 item list, Barrett added another four bipolar adjective pair items, which were included for use as retest items only and whose scores were not to be included in overall earned scores on the measure.
Thus, based on tests for item validity and theoretically sound revisions, Barrett (1983) created the current 52 item, PKPCT, V. II. Tests of the congruence of power and the contexts of one’s environment, when perceived as self, family and occupation yielded a congruence coefficient of 0.99 across all context items, indicating no differences with power according to context. A decision was made to delete tests of context differences with the newly developed 52 item version of the PKPCT, V. II. The theoretical explanation and elimination of context from the PKPCT, V. II provided the theoretical assumption that power was relatively stable across contexts.

Construct validity of the PKPCT, V. II was established with factor analysis of the final sample responses that yielded reliability coefficients which ranged from 0.56 to 0.70 Reliability of the PKPCT, VII, was determined by combining the variances of the factor scores which ranged from 0.63 to 0.99. The subscales of the PKPCT, V. II were derived from the original four concepts of the initial PKPCT (awareness, choices, freedom to act, intentionally, and involvement in creating change). The reliability coefficients for the PKPCT, V. II were reported based on the findings of studies by several researchers. Rizzo (1990) reported an alpha 0.96, Mahoney (1999) reported an alpha 0.96, and Wright (2004) reported an alpha of 0.96 and each researcher utilized the instrument to measure power.

Reliability

Further reliability of the PKPCT, V. II, was confirmed by Caroselli and Barrett (1998) who reported the use of factor analysis, and combined the variances of items with the factor scores which ranged from 0.89 to 0.93. Retest reliabilities ranged from 0.81 to 0.85. The subscales of the PKPCT, V. II, were derived from the original four concepts of the initial PKPCT
(awareness, choices, freedom to act, intentionally, and involvement in creating change) without differentiation of the contexts (Barrett, 1990; Caroselli & Barrett, 1998).

Reliability coefficients for the PKPCT, V. II (Barrett, 1983) have been reported by several researchers. In a study investigating power, job diversity, and job involvement among female staff nurses (N = 326), Trangenstein (1988) summed the four power subscales for a total power score and alpha reliability coefficient of 0.96 for the PKPCT, V. II in the study. Test-retest reliability scores for each of the four subscales of the PKPCT, V. II yielded alpha coefficients ranging from 0.81 to 0.85, each of which measured one of the four power constructs (Trangenstein). Rizzo’s (1990) study of power and life satisfaction among the elderly (N = 84) reported an alpha coefficient of 0.94 for the total measure of the PKPCT, V. II, with alpha reliability coefficients ranging from 0.81 to 0.87 for the individual subscales. Caroselli-Dervan (1991) investigated power and feminism of female nurse executives (N = 89) and reported an alpha reliability coefficient of 0.95 for the PKPCT, V. II, and reported power measures of the subscales ranging from 0.83 to 0.89. Wright (2004) studied power and trust in adults (N = 189) utilizing the PKPCT, V. II, and reported an alpha reliability coefficient of .96. Wright’s study findings are consistent with the findings of Barrett (1983); Trangenstein; Rizzo; and Caroselli-Dervan which each reported alpha coefficients ranging from 0.94 to 0.96. Therefore, there is sufficient evidence of the validity and reliability for the PKPCT, V. II as a measure of Power as Knowing Participation in Change to support its use as a measure of power in this study.

**TORI Self-Diagnosis Scale**

The TORI Self-Diagnosis (TORI) Scale developed by Gibb (1978) was used to measure nurse managers’ trust, trust of self and trust of others (see Appendix F). The TORI Self-Diagnosis Scale is a paper and pencil, 96 item scale that is designed to measure perceptions of
the individual with respect to the trust level of self and measures trust in the individual and others. Participants are instructed to indicate their agreement or disagreement with each statement on a four-point Likert scale, by writing whether they strongly disagree (SD), disagree (D), agree (A), or strongly agree (SA) in the space in front of each statement. The 96 items are divided into two theoretically appropriate 48 item scales that measure trust of self and trust of others respectively. The two, 48 item scales were again subdivided into four, 12 item subscales, each of which measures being, opening, realizing and interdepending respectively. The TORI scale is organized with a sequence of four item questions in order to measure being, opening, realizing and interdepending which reflect trust of self and trust of others throughout the 96 item survey. The range of weights for each item is from zero to three and the weight, based on the measure of trust for the item, is assigned after the scores are transferred to the score sheet. The total score on the TORI Self-Diagnosis Scale ranges from 0 to 288, with a range of scores from 0 to 144 for trust of self and 0 to 144 for trust of others. Higher scores indicate more trust.

**Validity**

Validity of the TORI Self-Diagnosis Scale was not reported by Gibb, whose contribution to the development of the TORI was its theoretical foundation. The empirical use of the TORI Scale in several hypothesis testing research studies as a measure of the concept of trust has provided an acceptable level of construct validity. Pedersen (1980) utilized the 48 trust-of-others items on the TORI Scale to measure teachers’ trust of others based on their trust of their principal. In the sample of elementary school teachers \((n = 129)\) trust of others was significantly related to trust of their principal \((n = 9)\) based on TORI trust of others item scores, \((r = 0.28; p < .001)\). Pedersen also found a significant relationship between teachers’ trust of others and their perception of principals’ democratic leadership styles \((r = 0.29; p < .001)\).
Parker (1983) demonstrated the TORI Scale’s construct validity in an experimental study of group formation with (N = 41) male and female adults and found correlations between the TORI scale scores and five other trust research instruments which Parker stated were correlated to trust. Although construct validity was reported by Parker based on significant correlations between the TORI Scale and the five research instruments, none of the instruments was identified and specific correlations were not reported in the study. Thus, while Parker’s reported correlations of the TORI Scale scores with unnamed instrument scores used to measure the three variables of self-esteem (r = 0.38; p < .01), faith in people (r = 0.48; p < .001), and Machiavellianism (r = -.038; p < .001) they are questionable; however, the study findings that positively correlate the TORI Trust Scale and five other measures of trust has value to support use of the TORI in this study. Meeker (1986) demonstrated construct validity for the 48 trust-of-others items on the TORI Scale in a study of teachers’ (n = 140) trust-of-others and school climate (n = 12 schools). Teachers’ trust-of-others was moderately correlated (r = .55; p < .05) with school climate, based on TORI Scale scores.

Reliability

Parker (1983) did not report reliabilities for studies using the total trust or the trust of self and trust of others subscales of the TORI Scale. Retest reliabilities of subscales for half the sample (N = 41) of male and female adults were reported overall to range from 0.49 to 0.74, and subscales being/self at 0.74, openness/self 0.66, realizing/self at 0.49, interdepending/self at 0.50, being/other at 0.42, openness/other at 0.70, and realizing/other at 0.60. Pearson Product-moment correlations for the TORI Scale were reported by Meeker (1986) for the 48 TORI Scale items related to trust of others. Correlations reported ranges from r = 0.64 to r = 0.78 overall, with
For being/opening, \( r = 0.71 \) for being/realizing, \( r = 0.76 \) for being/interdepending, \( r = 0.64 \) for opening/realizing, \( r = 0.75 \) for opening/interdepending and \( r = 0.78 \) for realizing/interdepending. Wright (2004) conducted a pilot study to establish reliability of the TORI Scale by mailing the scale to 240 men and 240 women. Based on a 52% response rate (\( N = 250 \)) a Cronbach alpha coefficient of 0.94 was reported for the total TORI Scale scores and alpha coefficients of 0.86 for trust of self and 0.87 for trust of others were also reported.

After establishing reliability of the TORI Scale, Wright (2004) utilized the scale to measure trust, trust of self and trust of others in a sample of 189 adult participants, using the Pearson Product-moment correlation statistic to measure relationships between study variables. Findings indicated the Cronbach alpha for the total TORI score was 0.95 which demonstrated high internal consistency for the overall TORI Scale. Additionally, the Cronbach alpha for the trust-of-self scale was 0.92 and for the trust-of-others scale was 0.90. Prior to Wright’s research study, no psychometric data were reported for the TORI in previous studies. Wright’s findings of significant relationships between the theoretically proposed trust and power \( (r = 0.49, p < .001) \), trust of self and power \( (r = 0.57, p < .001) \), and trust of others and power \( (r = 0.32, p < .001) \) variables provided additional evidence of the reliability of the TORI Scale as a measure of various aspects of the concept of trust from an acausal worldview.

Taken together, the research findings of Parker (1983), Meeker (1986), and Wright (2004), who each utilized the TORI Self-Diagnosis Scale in doctoral dissertation work has demonstrated empirical evidence that supports the theoretical basis of the scale. There is sufficient evidence of the reliability and validity of the TORI Scale to support its use as a measure of trust in this study.
**Work Quality Index**

The Work Quality Index (WQI), developed by Whitley and Putzier (1994), was used to measure job satisfaction of nurse managers (Appendix G). The WQI is a 38-Likert-like item, paper and pencil scale that measures six components of job satisfaction, with each represented as a separate subscale on the index. The six components are professional work environment, autonomy of the worker, work worth, employee relationships, role enactment, and employee benefits. All items on the WQI are of equal weight and each item is scored by the degree of job satisfaction indicated by the respondent on a seven-point Likert scale ranging from one for “not satisfied” to seven for “satisfied”. The higher the total score is on the WQI, the higher the level of job satisfaction. There are two options for using the WQI. The first, which was used in this study, measures job satisfaction as a total entity, thus the total score for the WQI was obtained by summing all subscales scores. The second option, which was not used in this study, sums each of the six subscale scores individually. Based on the total score option selected for this study, the range of possible scores is from 38 for the lowest job satisfaction to 266 for the highest.

**Validity**

The 38 Likert-item scale measures nurse job satisfaction, the nurse work environment and quality of the work that the nurse performed. The data collection instrument was developed by Whitley and Putzier (1994) and was tested in a large acute healthcare organization in the midwest with a sample of registered nurses (N = 245). Factor analysis of data was computed to ascertain construct validity based on a minimum 0.5 factor loading. Items were selected for inclusion in the final version of the measure along with the total job satisfaction index. In addition, the selected items that were loaded on specific concepts were allocated to one of the six subscales (professional work environment, autonomy of the worker, work worth, employee
relationships, role enactment, and employee benefits) in the final index. Thus, Whitley and Putzier, (1994) established initial construct validity of the WQI through factor analysis and item rotations in the index development stage. Whitley and Putzier tested the WQI with a sample of registered nurses \((N = 245)\) measuring job satisfaction. Construct validity was confirmed through factor analysis. Factor rotations and reliability for each subscale with formatted scale items generated an alpha coefficient total score of 0.94 and an alpha coefficient ranging from 0.72 to 0.87.

**Reliability**

Other researchers have used the WQI in studies that demonstrated the effectiveness of the instrument as a measure of job satisfaction. Mahoney (1999) used both the WQI and the PKPCT, Version II for a sample of 118 home care nurses to examine job satisfaction, actualization, and power using Rogers’ (1990b) acausal science-based nursing perspective. Based on study data, Mahoney reported acceptable alpha coefficients of 0.94 for the total WQI score and for each of the six WQI subscales as 0.87 for autonomy of the worker, 0.76 for work worth, 0.83 for employee relationships, 0.65 for role enactment, 0.85 for work environment, and 0.86 for benefits.

Hurley (2002) also utilized both the WQI and the PKPCT in a descriptive correlation study to investigate the relationships between and among job satisfaction, power and stress in a study sample generated from a random sampling of an electronic national data bank of registered nurses \((N = 600)\). The response rate was 45%, out of which 124 female registered nurse managers were identified for participation in the study. Hurley used the Pearson Product-moment correlation coefficient and simple regression to measure the relationships between and among variables. Findings revealed that power and job satisfaction were moderately related \((r = 0.40, p\)
while stress and power were weakly related ($r = 0.19, p = .03$). Based on the findings, Hurley stated that “the correlation between job satisfaction and power reflects the theoretical rationale that managers who view themselves as participating in change should manifest power and experience job satisfaction” (p. 12). Hurley reported that the alpha coefficient for the total WQI score was 0.94 and the alpha coefficients for the scores on each of the six subscales ranged from 0.67 to 0.90.

The high alpha for the total WQI score has merit since only total WQI scores will be used in this study. Taken together, the research findings of Mahoney (1999) and Hurley (2002) who used the WQI in doctoral dissertation work have demonstrated empirical evidence to support that there is sufficient validity and reliability for the Work Quality Index as a measure of job satisfaction.

**Demographic Data Information Form**

The Demographic Data Information Form (see Appendix H), constructed by the researcher, is a paper and pencil questionnaire which elicited data on a variety of demographic characteristics of study participants. Each respondent was asked to respond to questions about demographic characteristics including age, gender, race, marital status, total household income, educational level in nursing, annual salary, perception of fairness of salary, type of current work unit, years working as a nurse at current hospital, as nurse manager on current unit, as nurse manager during overall career, as nurse leader in any other capacity, years of active nursing experience since graduation, number of direct report registered nurses on unit and number of direct report non-professional staff included in the current unit’s budget. The researcher recorded information about the hospital that is available as public information on the hospital’s web-site, such as whether the hospital is public or private, for profit or not-for-profit, and the American
Data Collection Procedures

Volunteer subjects were recruited from 15 New Jersey State licensed acute care hospitals. CNO’s of hospitals who are members of the New Jersey Hospital Association (NJHA) Chief Nurse Constituency Group were contacted by the researcher and were given a general explanation of the study, along with the researcher’s request for a written Letter of Invitation indicating his or her agreement for recruitment of nurse managers at the hospital for participation in this study. The CNOs’ Letters of Invitation were submitted with the SHU IRB Application documents as evidence of access to potential study subjects. Following study approval by the SHU IRB, and prior to data collection, a copy of the SHU IRB study approval letter with a hospital specific cover letter and a copy of the IRB Application for study approval documents was submitted to the IRB or designated research approval committee for each participating hospital for review and approval to conduct the study.

Following formal written notification of approval from the IRB of each hospital, the researcher contacted each CNO by email (see Appendix B) outlining the overall needs of the researcher. Within 10 days of the email, a telephone contact was made with each CNO of each hospital to confirm that IRB approval had been granted by SHU and the hospital’s IRB committee and to discuss the best way to contact a senior level nurse manager who could best facilitate a guest invitation for the researcher to attend a regularly scheduled nurse manager meeting. The researcher contacted the senior nurse manager, either by email or by telephone to request a guest invitation to the next scheduled nurse manager meeting with the allocation of at least 20 minutes time on the meeting agenda for discussion of the research study and to request
study participants. On the day before the scheduled nurse manager meeting, the researcher confirmed the researcher’s attendance at the meeting by telephone. At the meeting, the researcher explained the general reason for requesting the invitation and presented an oral overview of the study (see Appendix C). Ethical issues related to participation in the study were presented as well as the eligibility criteria for participation and a formal request for volunteers for the study was made. Research packets, contained in a manila envelope were distributed to nurse managers who met the inclusion criteria, for completion at a later time and all study documents and the research process, including tacit informed consent and anonymity were discussed.

After distribution of a large, unsealed manila envelope containing the research study packet, to each potential nurse manager study participant, the researcher asked that the envelope not be opened until the manager was ready to work on completing the study documents, preferably in a quiet place away from the workplace. The researcher opened a sample study packet to use when presenting information about study requirements and variable measures. Each research study packet distributed at the meetings contained five documents including the following:

1. Letter to Participant-Nurse Manager which explains the overall study, requirements for participation, rights of participants, informed consent, contact information for questions, timeframe for completing data collection documents and method for returning the completed study packet (see Appendix, D).

2. PKPCT, Version II which measures one’s beliefs about trust (see Appendix, E).
3. TORI Self-Diagnosis Scale, which measures trust, trust of self, trust of others (see Appendix, F).

4. WQI, which measures job satisfaction (see Appendix, G).

5. Demographic Data Information Form which requests anonymous information about the individual participant and work situation (see Appendix H).

The researcher demonstrated that the large manila envelope and each variable measure and the Demographic Data Information Form enclosed in its research packet have the same randomly assigned identification (ID) number stamped in the upper right-hand corner of the first page of each data collection form. Managers were told that the ID number on each of the data forms allowed for matching of demographic data sets across variable measures and facilitates statistical analyses of data. Assurance was given that the ID number cannot be linked with the identity of any nurse manager since all data collection completed and submitted is anonymous. Furthermore, data sets for nurse managers from each hospital site and across all hospital sites were analyzed within and across variables based on aggregate data sets.

Completion of the study measures took approximately 60 minutes based on a trial done by three volunteers who met study inclusion criteria, and who did not participate in the actual study. An oral explanation of the nurse managers’ rights to independently decide whether or not to participate as a volunteer in the study was given and potential volunteers were informed that a copy of these rights is contained in the Letter to Participant-Nurse Manager (see Appendix D), which was read aloud at the meeting. Assurance was given to the nurse managers that there were no known benefits or risks for participating in the study, that their participation was completely voluntary and anonymous, and that their responses on the forms contained in the research
packets would remain anonymous. Potential participants were informed that in order to preserve the anonymity of all individuals who participate in the study and the data collected from them, informed consent was assumed by completion and return of the study measures and no signed informed consent is required or requested for participation in the study. Neither the researcher, nor anyone else would know whether any individual nurse manager chose to participate in the study. While a record of the set of ID numbers assigned to each study hospital and the overall number of nurse managers working in each study hospital is kept on a thumb drive by the researcher, the names of nurse managers in any study hospital is unknown to the researcher and thus will never be recorded. The thumb drive is stored in a locked desk drawer in the researcher’s locked, private office at home and researcher will maintain the single key securely. In addition, to facilitate the opportunity for those nurse managers who may wish to learn about the findings of the study when it is completed, all nurse managers will be notified via a nurse manager group hospital email by the researcher, which will provide details of a scheduled meeting at each hospital site when the researcher will provide a formal presentation of the study.

Potential volunteers were asked to return the completed study documents to the large manila envelope, which they should seal, and deposit into the medium sized, sealed white box with a slotted top – labeled “M. Schneider, Completed Research Questionnaires” which was placed in the nursing staff office by the researcher at the end of the current meeting. The nurse managers were informed that the researcher would return to the hospital twice, at one week intervals from the date of the current meeting, to pick-up the sealed manila envelopes that had been deposited in the sealed white box in the nursing staff office. After the first week the researcher did send an e-mail to the senior nurse manager to request that a reminder e-mail be sent to the nurse managers in order to return completed research documents within the next seven days. The
reminder e-mail insured that the nurse managers received the notice, because the researcher did not know who returned the research packets. An e-mail was sent to each CNO and senior nurse manager thanking them for their support and assistance with the study. Additionally, the researcher sent an e-mail of appreciation to the registered nurses for their participation in the study which was sent to the CNO and which was requested to be forwarded to each nurse manager in the organization.

**Analysis of Data**

Cronbach’s alpha coefficients for internal consistency reliability for all psychometric measures used for data collection were computed. To assess for normal distribution of the sample, demographic data were analyzed using descriptive statistics for continuous variables including frequency, percentage, mean, and standard deviations and chi-square analysis for categorical variables. Descriptive statistics were used to analyze scores for main variables including possible range of scores for each measure, the actual range of scores, mean and median scores and standard deviations. To assess correlations between and among main variables the Pearson’s Product-moment correlation directional one-tail was utilized. To test the relationships between and among the main variables, bivariate correlation and multiple regression was used. Baseline descriptive data for the nurse manager samples were compared across the major variables, power, trust and job satisfaction utilizing linear regression for continuous variables and chi-square analysis for categorical variables such as annual salary and or unit managed.
Research Question Testing

Research Question Testing. Bivariate correlation and multiple regression were performed to assess the relationship among the variables, and the interactive effects of the predictor variables on power:

RQ: Does the combination of trust of self, trust of others and job satisfaction predict the variance in power as knowing participation in change in nurse managers in acute care hospitals?

Hypothesis Testing

Hypotheses 1 through 2. The Pearson Product-moment correlation coefficient tested the correlation relationships between the following:

H₁: There is a positive relationship between power as knowing participation in change and trust of self in nurse managers working in acute care hospitals.

H₂: There is a positive relationship between power as knowing participation in change and trust of others in nurse managers working in acute care hospitals.

Hypothesis 3 and 4. Multiple regression tests were used to analyze data among variables for the following:

H₃: There is a positive relationship between power as knowing participation in change, trust of self and job satisfaction in nurse managers working in acute care hospitals.

H₄: There is a positive relationship between power as knowing participation in change, trust of others and job satisfaction in nurse managers working in acute care hospitals.
CHAPTER IV

RESULTS

Data Analysis Procedures

This study investigated the relationships between and among power as knowing participation in change, trust, trust of self, trust of others and job satisfaction of nurse managers working in acute care hospitals. There were 186 study packets disseminated to nurse managers at fifteen acute care hospitals with 102 packets returned, at a 54.8% rate of return and 98 participants met criteria for inclusion in the study. The nurse managers participating in this study [females 92.8%, \( n = 91 \) and males 7.2%, \( n = 7 \)] was consistent with the gender distribution of U.S. nurse managers which suggests that the inferential statistics can be generalized. All participants were working full time as nurse managers in an acute care hospital.

Participants completed the Barrett PKPCT Version II, the TORI Scale, the Work Quality Index and a Demographic Data Information Form. Data were analyzed using the Statistical Package for the Social Sciences (SPSS 16.0 for Windows Release, 16.1) subprograms for the Pearson Product-Moment Correlation and the Multiple Regression. The sample size was adequate for the hypotheses, since a sample size of 76 full-time nurse manager subjects, with two or more years’ experience as a manager on the same unit in the current hospital was sufficient and justified by Cohen (1988) to detect a medium effect size \( r = .30 \) at the alpha level of .05 and a power greater than .80 in order to detect the midpoint in correlations between discriminately different psychological variables. For the research question, a sample size of 91 subjects was required to detect a medium effect size in a multiple regression analysis of the interactive variables. Descriptive analysis provided information about characteristics of the sample as well as study variables. Demographic data that provided information about
characteristics of the sample as well as for the study variables included age, gender, race, marital status, total household income, annual salary, perception of salary fairness, education level in nursing, type of current work unit, number of years working as a registered nurse at the current hospital, number of years working as nurse manager on current unit, total number of years working as a nurse manager during overall professional career, total number of years worked as a nurse leader in any other nurse manager capacity, total number of years of active working as a registered nurse since graduation, in the current nurse manager position, how many registered nurses directly report to the respondent and how many non-professional staff directly report to the respondent.

Demographic variables with categorical responses are reported in frequencies and percentages in Table 1. Demographic variables with non-categorical responses were calculated for means and standard deviations and are reported in Table 2. The variables were examined in order to determine if the sample met assumptions required for conducting proposed inferential statistical procedures. Analyses of data met the assumptions and are displayed in Tables 1 and 2.

<p>| Table 1 | Descriptive Statistics – Variables with Categorical Responses (N = 98) |
|------------------|-------------------|-------------------|
| CHARACTERISTICS  | N   | Total | Percent   |
| <strong>Demographics</strong> |     |       |           |
| Are you a Nurse Manager | 98  |        |           |
| Yes              | 98  | 100%  |           |
| No               |     | 100%  |           |
| Do you have 24 hr.- 7 day week responsibility | 98  |        |           |
| Yes              | 98  | 100%  |           |
| No               |     | 100%  |           |
| Full-time        | 98  |        |           |
| Yes              | 98  | 100%  |           |
| No               |     | 100%  |           |</p>
<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>N</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td></td>
<td>92.8%</td>
</tr>
<tr>
<td>Male</td>
<td>7</td>
<td></td>
<td>7.2%</td>
</tr>
<tr>
<td>Race</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian &amp; Alaska Native</td>
<td>1</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>White</td>
<td>87</td>
<td></td>
<td>88.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>3</td>
<td></td>
<td>3.1%</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td></td>
<td>4.1%</td>
</tr>
<tr>
<td>Native Hawaiian &amp; other Pacific Islander</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Marital status</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>7</td>
<td></td>
<td>7.14%</td>
</tr>
<tr>
<td>Married/Partnered</td>
<td>79</td>
<td></td>
<td>80.61%</td>
</tr>
<tr>
<td>Divorced/now single</td>
<td>11</td>
<td></td>
<td>11.22%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td></td>
<td>1.02%</td>
</tr>
<tr>
<td>Total household income</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 49,000</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>50,000 - 74,999</td>
<td>1</td>
<td></td>
<td>1.02%</td>
</tr>
<tr>
<td>75,000 - 99,999</td>
<td>4</td>
<td></td>
<td>4.08%</td>
</tr>
<tr>
<td>100,000 - 149,999</td>
<td>37</td>
<td></td>
<td>37.76%</td>
</tr>
<tr>
<td>150,000 or more</td>
<td>56</td>
<td></td>
<td>57.14%</td>
</tr>
<tr>
<td>The highest level of education completed</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSN degree</td>
<td>50</td>
<td></td>
<td>51%</td>
</tr>
<tr>
<td>Master’s degree in nursing/NP</td>
<td>5</td>
<td></td>
<td>5.12%</td>
</tr>
<tr>
<td>Master’s degree in nursing /CNS</td>
<td>5</td>
<td></td>
<td>5.10%</td>
</tr>
<tr>
<td>Master’s degree in nursing/management</td>
<td>20</td>
<td></td>
<td>20.4%</td>
</tr>
<tr>
<td>Master’s degree in nursing/CNL</td>
<td>1</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Master’s degree non-nursing</td>
<td>14</td>
<td></td>
<td>14.3%</td>
</tr>
<tr>
<td>Doctoral degree DNP/PhD</td>
<td>2</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Annual salary</td>
<td>98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 49,000</td>
<td>0</td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>CHARACTERISTICS</td>
<td>N</td>
<td>Total</td>
<td>Percent</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50,000 - 74,999</td>
<td>1</td>
<td></td>
<td>1.02%</td>
</tr>
<tr>
<td>75,000 - 99,000</td>
<td>13</td>
<td></td>
<td>13.27%</td>
</tr>
<tr>
<td>100,000 – 149,000</td>
<td>76</td>
<td></td>
<td>77.55%</td>
</tr>
<tr>
<td>150,000 or higher</td>
<td>8</td>
<td></td>
<td>8.16%</td>
</tr>
<tr>
<td><strong>Perception of fairness of salary</strong></td>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completely Fair</td>
<td>16</td>
<td></td>
<td>16.5%</td>
</tr>
<tr>
<td>Generally Fair</td>
<td>44</td>
<td></td>
<td>45.4%</td>
</tr>
<tr>
<td>Somewhat Fair</td>
<td>27</td>
<td></td>
<td>27.8%</td>
</tr>
<tr>
<td>Not Very Fair</td>
<td>10</td>
<td></td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>Description of unit</strong></td>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Department</td>
<td>12</td>
<td></td>
<td>12.2%</td>
</tr>
<tr>
<td>ICU</td>
<td>16</td>
<td></td>
<td>16.3%</td>
</tr>
<tr>
<td>CCU</td>
<td>2</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Medical-Surgical</td>
<td>28</td>
<td></td>
<td>28.6%</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>10</td>
<td></td>
<td>10.2%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>2</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Ambulatory</td>
<td>5</td>
<td></td>
<td>5.1%</td>
</tr>
<tr>
<td>Operating Room</td>
<td>5</td>
<td></td>
<td>5.1%</td>
</tr>
<tr>
<td>Behavioral Health</td>
<td>3</td>
<td></td>
<td>3.1%</td>
</tr>
<tr>
<td>Neonatology</td>
<td>2</td>
<td></td>
<td>2%</td>
</tr>
<tr>
<td>Research</td>
<td>1</td>
<td></td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>11</td>
<td></td>
<td>11.3%</td>
</tr>
</tbody>
</table>

Table 2  
*Descriptive Statistics – Variables with Non-Categorical Responses (N = 98)*

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>97</td>
<td>31</td>
<td>67</td>
<td>51.04</td>
<td>7.4</td>
</tr>
<tr>
<td>Years at current hospital</td>
<td>98</td>
<td>2</td>
<td>35.00</td>
<td>13.98</td>
<td>9.69</td>
</tr>
<tr>
<td>Years as Nurse Manager on current unit</td>
<td>98</td>
<td>2</td>
<td>16.80</td>
<td>6.47</td>
<td>3.79</td>
</tr>
<tr>
<td>Years as Nurse Manager over career</td>
<td>98</td>
<td>2.25</td>
<td>41.00</td>
<td>12.27</td>
<td>8.86</td>
</tr>
<tr>
<td>Years as Nurse Leader in other capacity</td>
<td>98</td>
<td>.00</td>
<td>41.00</td>
<td>10.34</td>
<td>10.07</td>
</tr>
<tr>
<td>Years of active nursing experience since graduation</td>
<td>98</td>
<td>3.00</td>
<td>48.00</td>
<td>25.68</td>
<td>9.55</td>
</tr>
<tr>
<td>Number of RNs who report directly to respondent</td>
<td>98</td>
<td>0</td>
<td>150</td>
<td>48.89</td>
<td>33.77</td>
</tr>
<tr>
<td>Number of non-professionals reporting directly to respondent</td>
<td>98</td>
<td>1</td>
<td>109</td>
<td>24.14</td>
<td>19.24</td>
</tr>
</tbody>
</table>
Research Participants

One hundred percent \((N = 98)\) of the study participants were nurse managers who had a BSN degree or higher, had 24-hour, seven-days a week responsibility for supervising professional and non-professional staff members, and were employed as full-time nurse managers on the same patient-care unit(s) for two or more years in an acute care hospital. Approximately 92.9% \((n = 91)\) of the participants were female. American Indian/Alaskan represented 1% \((n = 1)\) of the sample, 88.8% \((n = 87)\) were Caucasian, 3.1% \((n = 3)\) were African Americans, 6.2% \((n = 6)\) were Asian, and none of the participants indicated they were Hispanic. Most of the participants were married/partnered 81% \((n = 79)\). More than half, 57% \((n = 56)\) of the participants reported household incomes of $150,000 or more. While all of the participants reported holding a baccalaureate degree in nursing, 14.3% \((n = 14)\) of nurse managers reported having a non-nursing graduate degree and 2% \((n = 2)\) reported having a DNP or PhD. As reported in Table 1, a majority 77.55% \((n = 76)\) of the nurse managers reported annual salaries between $100,000 to 149,000 and 8.16% \((n = 8)\) reported salaries over $150,000. Of the 98 nurse manager respondents, the largest portion, 45.4% \((n = 44.9)\) reported that their salary was generally fair. The nurse managers worked across 15 acute care hospitals in New Jersey in one of the following departments: Emergency Department 12.2% \((n =12)\), Intensive Care Unit 16.3% \((n =16)\), Critical Care 2% \((n = 2)\), Medical-Surgical 28.6% \((n = 28)\), Obstetrics 10.2% \((n = 10)\), Pediatrics 2% \((n = 2)\), Ambulatory 5% \((n = 5)\), Operating Room 5.1% \((n = 5)\), Behavioral Health 3.1% \((n = 3)\), Neonatology 2% \((n = 2)\), Research 1% \((n = 1)\) and other 11.3% \((n = 11)\).

Table 2 displays a comprehensive summary of the demographic information about the participants. On average the participants were 51 years of age \((M = 51.04, SD = 7.40)\) however, their ages ranged from 31 to 67 years. The length of time as a registered nurse at the current
hospital ranged from 2 to 35 years ($M = 13.98$, $SD = 9.69$), time in the nurse manager position on the current unit ranged from 2 to 16.8 years ($M = 6.47$, $SD = 3.79$), time as a nurse manager during overall career ranged from 2.25 to 41 years ($M = 12.27$, $SD = 8.86$), time as a nurse leader in any other capacity ranged from 0 to 41 years ($M = 10.34$, $SD = 10.07$) and years of active nursing experience since graduation ranged from 3 to 48 years ($M = 25.68$, $SD = 9.55$). The number of RN’s who reported directly to the nurse manager ranged from 0 to 150 ($M = 48.89$, $SD = 33.77$) and the median was 38.5 years. The number of non-professional staff who reported to the nurse manager ranged from 1 to 109 ($M = 24.14$, $SD = 19.24$) and the median was 18 years.

**Descriptive Statistics of the Main Variables**

The descriptive statistics for the main variables shown in Table 3 highlight the overall mean, standard deviation, median, possible and actual ranges, and the skewness of the three main variables: power, trust and job satisfaction. As demonstrated by the participants’ means scores on all three tools, the midpoints [Power = 192, Trust = 144, Job satisfaction = 152] of the possible ranges were exceeded. In addition, actual ranges of the participants’ means scores were reported greater than the minimum scores on the tools.

Possible scores for the total Power as Knowing Participation in Change Version, II (PKPCT) ranged from 48 to 336. The actual scores for the total PKPCT. VII range from 205 – 325 for the sample. Possible scores for the total Self-Diagnosis TORI Scale which measured trust range from 0 to 288. The actual scores for the total TORI ranged from 117 - 174 for the sample. Possible scores for the Work Quality Index (WQI) which measured job satisfaction range from 38 to 266. The actual scores for the WQI ranged from 79 - 265 for the sample (see Table 3).
Table 3
Overall Scores and Sub-Scores for Power, Trust and Job Satisfaction (N = 98)

<table>
<thead>
<tr>
<th>Main Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Possible Range</th>
<th>Actual Range</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PKPCT</td>
<td>265.40</td>
<td>28.44</td>
<td>267</td>
<td>48 - 384</td>
<td>205 - 325</td>
<td>.05</td>
</tr>
<tr>
<td>TRUST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust - TORI</td>
<td>149.13</td>
<td>10.74</td>
<td>148</td>
<td>0 - 288</td>
<td>117 - 174</td>
<td>-.126</td>
</tr>
<tr>
<td>Trust/Self</td>
<td>90.27</td>
<td>12.70</td>
<td>90</td>
<td>0-144</td>
<td>43-122</td>
<td>-.27</td>
</tr>
<tr>
<td>Trust/Others</td>
<td>69.45</td>
<td>5.54</td>
<td>70</td>
<td>0-144</td>
<td>55-85</td>
<td>-.03</td>
</tr>
<tr>
<td>JOB SATISFACTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>195.11</td>
<td>39.93</td>
<td>203</td>
<td>38 - 266</td>
<td>79 -265</td>
<td>-.75</td>
</tr>
</tbody>
</table>

Presentation of Results

Research Question

The research question examined whether the combination of trust of self, trust of others, and job satisfaction predict the variance in power as knowing participation in change, in nurse managers working in acute care hospitals. The results as shown in Table 4 utilized a multiple regression model and reported the combination of trust of self, trust of others, and job satisfaction explained 19% of the variance in power $F(3, 94) = 7.28, p \leq .001$. However, only job satisfaction made a significant unique contribution to the model.

Table 4

Regression Analysis of Power, Trust of Self, Trust of Others and Job Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>$F$ (df = 3,94)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant (Power)</td>
<td></td>
<td>7.28</td>
<td>.001</td>
</tr>
<tr>
<td>Trust\Self</td>
<td>.01</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Trust\Other</td>
<td>.03</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.43</td>
<td>.001</td>
<td></td>
</tr>
</tbody>
</table>

$R = .43, R^2 = .19$ (19%)
Hypotheses Testing.

Central tendency was computed for each participant’s score on the measures between the major study variables (PKPCT, TORI and WQI). Since the scores for the major variables were at an interval or ratio level, the Pearson Correlation statistics were conducted to determine whether relationships exist between the variables.

H$_1$ Hypothesis 1 stated there is a positive relationship between power as knowing participation in change and trust of self in nurse managers working in acute care hospitals. The one tailed Pearson correlation coefficient for the relationship between power as knowing participation in change and trust of self was positive and statistically significant ($r = .25, p \leq .001$). This hypothesis was supported. (see Table 5).

Table 5

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Power – PKPCT</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Total Trust – TORI</td>
<td>-.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Trust\Self</td>
<td>.25**</td>
<td>-.26**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Trust\Others</td>
<td>.03</td>
<td>-.84**</td>
<td>.06</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. Job Satisfaction - WQI</td>
<td>.43**</td>
<td>-.20*</td>
<td>.56**</td>
<td>.01</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (1 – tailed)
**Correlation is significant at the 0.01 level (1 – tailed)

H$_2$ Hypothesis 2 stated there is a positive relationship between power as knowing participation in change and trust of others. The one tailed Pearson correlation coefficient for the relationship between power as knowing participation in change and trust of others indicates a negligible, non-significant relationship ($r = .03, p = .38$). This hypothesis was not supported. (see Table 5).
H₃  Hypothesis 3 stated there is a positive relationship among power as knowing participation in change, trust of self and job satisfaction. The multiple regression analysis was conducted to evaluate the relationship of power as knowing participation in change, and the combination of trust of self and job satisfaction in nurse managers in acute care hospitals. As shown, in Table 6, trust of self and job satisfaction together explains 19% of the variance in power $F(2, 95) = 11.00, p \leq .001$. Clearly stated, a combination of increased trust of self and job satisfaction predicted increased power scores. This hypothesis was supported. However, only job satisfaction made a significant unique contribution. A multiple correlation showed that trust of self and job satisfaction together were 44% correlated to power, however, the contribution of trust of self to the relationship is negligible and statistically insignificant; 19% is accounted for in job satisfaction.

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>$F$ (df = 2,95)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant (Power)</td>
<td></td>
<td>11.00</td>
<td>.001</td>
</tr>
<tr>
<td>Trust of Self</td>
<td>.01</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.43</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>R = .44, $R^2 = .19$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H₄  Hypothesis 4 stated there is a positive relationship among power as knowing participation in change, trust of others and job satisfaction. Multiple regression analysis was performed to examine the relationship between power as knowing participation in change and the combination of trust of others and job satisfaction. Trust of others and job satisfaction together explain 19% of the variance in power $F(2, 95) = 11.04, p \leq .001$. However, the beta weight shown in Table 7
indicates that job satisfaction contributed 43% of the variance in power. This hypothesis was supported and the investigator rejected the null hypothesis. A multiple correlation showed that trust of self and job satisfaction together were 43% correlated to power, however, the contribution of trust of others to the relationship is negligible and statistically insignificant; 19% is accounted for in job satisfaction. A change in job satisfaction score would predict a change in power score ($\beta = .43$, see Table 7).

Table 7
Regression Analysis Predicting Power as Knowing Participation in Change, Trust of Others and Job Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>$F$ ($df = 2,95$)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant (Power)</td>
<td>11.04</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Trust of Others</td>
<td>.03</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.43</td>
<td>.001</td>
<td></td>
</tr>
</tbody>
</table>

$R = .43$, $R^2 = .19$

Reliability of Measures

To test the reliability of the PKPCT, V. II, the TORI scale and the WQI instrument Cronbach alpha coefficients were computed. The measure of internal consistency of an instrument is the alpha coefficient which indicates the degree that all scale items measure the same trait (Bannon, 2014). It is a calculation of the correlations among all the scale items with each other and between each item and the total score.

The PKPCT, V. II (Barrett, 1983, 1986) was used to measure power. To determine its reliability, the coefficient alpha was computed. In this sample of nurse managers the alpha for the total PKPCT, V. II was .93 and was .82, .85, .89, and .91 for the subscales; awareness, choices, freedom to act intentionally, and involvement in creating change respectively. Also, shown in Table 8, the alpha coefficient for the TORI scale (Gibb, 1978) used to measure trust, trust of self, and trust of others in this study was .66, .73, and .70 respectively. The alpha
coefficient for the Work Quality Index; WQI (Whitley & Putzier, 1994) used to measure job satisfaction in this study was .97. The individual alpha reliability coefficient for use of the measures in this study for the PKPCT, V. II (power), the TORI scale (trust, trust of self and trust of others) and the WQI instrument (job satisfaction) were consistent, with some variation for the TORI Scale, with the alpha coefficients reported for use of each measure in prior studies which in the literature, were reported as .97, .86, .87, and .94 respectfully.

Table 8

*Cronbach’s Alpha Reliability Coefficients*

<table>
<thead>
<tr>
<th>Scales</th>
<th>Alpha Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power – PKPCT</td>
<td>.93</td>
</tr>
<tr>
<td>Awareness</td>
<td>.82</td>
</tr>
<tr>
<td>Choices</td>
<td>.85</td>
</tr>
<tr>
<td>Freedom</td>
<td>.89</td>
</tr>
<tr>
<td>Creating</td>
<td>.91</td>
</tr>
<tr>
<td>Total Trust – TORI</td>
<td>.66</td>
</tr>
<tr>
<td>Trust of Self</td>
<td>.73</td>
</tr>
<tr>
<td>Trust of Others</td>
<td>.70</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.97</td>
</tr>
</tbody>
</table>

Ancillary Analysis

Further analysis of the data using Pearson Correlation revealed a positive correlation coefficient between perceived power and the participants’ belief that they were fairly compensated \((r = .20, p = .05)\), and years with current hospital \((r = -.24, p = .02)\) as shown in Table 9. Job satisfaction was found to have a weak positive relationship with years as nurse manager on current unit \((r = .25, p = .01)\), and a moderate inverse relationship with feeling fairly compensated \((r = .47, p \leq .001)\). Finally, an inverse relationship was noted between participants annual salary with feeling fairly compensated \((r = -.21, p = .04)\).
Table 9  
**Bivariate Pearson Correlations of Select Variables (N = 98)**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Power – PKPCT</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Total Trust – TORI</td>
<td>-.14</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Job Satisfaction</td>
<td>.43**</td>
<td>-.20</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Annual salary</td>
<td>.18</td>
<td>-.20</td>
<td>.19</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Compensated Fairly</td>
<td>-.20*</td>
<td>.17</td>
<td>-.47**</td>
<td>-.21*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Years with Current Hospital</td>
<td>-.24*</td>
<td>-.04</td>
<td>.07</td>
<td>-.18</td>
<td>.05</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>7. Years as Manager on current unit</td>
<td>.16</td>
<td>-.17</td>
<td>.25*</td>
<td>.02</td>
<td>-.08</td>
<td>.37**</td>
<td>1</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2 – tailed)  
**Correlation is significant at the 0.01 level (2 – tailed)

A multiple regression analysis was conducted to evaluate the relationship of job satisfaction and fair compensation on power in nurse managers working in acute care hospitals. As shown in Table 10 a strong significant positive ($R = .44$) relationship was found to exist between power and the combination of fair compensation and job satisfaction for nurse managers. However, only Job Satisfaction made a significant unique contribution to the model

Table 10  
**Regression Analysis Job Satisfaction and Compensated Fairly Predicting Power**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>$F$ (df = 2,94)</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>10.95</td>
<td>.000</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>.44</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Compensated Fairly</td>
<td>.007</td>
<td></td>
<td>.95</td>
</tr>
</tbody>
</table>

$R = .44$, $R^2 = .19$ (19%)

**Summary**

This study indicates that within this sample of nurse managers who work in acute care hospitals, the power as knowing participation in change was statistically and positively related to trust of self ($r = .25$, $p \leq .001$). In other words, as participants’ scores on the TORI Scale for perception of *trust of self* increased their scores on the PKPCT, V. II for power as knowing participation in change also increased.
Pearson correlation analysis revealed a significant positive relationship between power and job satisfaction ($r = .43, p \leq .001$). While trust did not have a statistically significant relationship with power, ($r = -.14, p = .09$), the subcategory of trust i.e. trust of self, had a significant, positive relationship with power ($r = .25, p = .01$).

A multiple regression analysis was conducted to evaluate the relationship of power and the interaction of trust of self, trust of others and job satisfaction in nurse managers working in acute care hospitals. A strong significant positive ($R = .43$) relationship was found to exist between power and the combination of trust of self, trust of others, and job satisfaction.
CHAPTER V
DISCUSSION OF FINDINGS

This study examined the relationships between and among power as knowing participation in change, trust, trust of self, trust of others and job satisfaction in nurse managers who are employed in acute care hospitals. To investigate these relationships, 98 participants completed the Power as Knowing Participation in Change Version, II, the TORI Scale, the Work Quality Index (WQI) and a Demographic Information Form. The findings of this study demonstrated a positive relationship between power as knowing participation in change and trust of self. A combination of trust, and job satisfaction explain 19% of the variance in power. A combination of increased trust of self, trust of others and job satisfaction was associated with increased higher power. There was no relationship found between power as knowing participation in change and total trust, as well as with the relationship between power as knowing participation in change and trust of others. To avoid rejecting a null hypothesis when it is true, (Type I error) the level of significance was set at 0.05, That is, the probability of making a Type I error is less than 5%. That is, the probability that the statistical difference when it was set at 0.80 (power). In other words, to avoid failing to reject the null hypothesis (Type II error) when it is true, an 80% power level was used as suggested by (Grove, Burns & Gray, 2013). Additionally, power and trust of self both had a statistically significant positive relationship with job satisfaction.

Power as knowing participation in change, in this study, was presented as a nurse manager’s ability to participate knowingly in the nature of change, characterized by the continuous patterning of the human and environmental fields (Barrett, 1990) and manifested awareness, choices, freedom to act intentionally, and involvement in creating change (Barrett,
Barrett (2010) viewed power as a potential possessed by an individual that may, or may not be manifested. Power-as-freedom exists as a unitary manifestation of the whole in accordance with an acausal worldview (Barrett, 2010) and thus emphasizes mutual process rather than a causal (control) view. Caroselli and Barrett (1998) found that human beings can exercise power by utilizing their awareness, choice and, thus, they can create change. Therefore, according to Barrett (1983) people (nurse managers) exhibit their own power and are in mutual process with the environment.

Trust, in this study, was presented as a nurse manager’s ability to participate in the manifestation of the human patterns of being, opening, realizing, and interdepending and additionally manifest patterns of trust through perceptions of human and environmental fields. Gibb (1978) related trust to power in that it is viewed as a pattern manifestation of a mutual process. The literature supports the link of power and trust with human and environmental fields. Wright (2004) demonstrated that power and trust were positively related human-environment pattern manifestations. Moreover, for this dissertation the researcher hypothesized that a combination of the environmental field (job satisfaction) and trust have a positive influence on nurse managers’ perception of power. Wright (2004) was the first researcher to report an empirical relationship between power and trust in an adult population. Wright reported that as trust, a human-environmental field, increases, so does power and that trust of self and trust of others are pattern manifestation of mutual trust.

The Sample

The study sample consisted of 98 volunteer nurse manager participants recruited from 15 New Jersey acute care hospitals which were representative of large health care systems, large and mid-sized independent hospitals, academic-teaching and community based, magnet and non-
magnet designated hospitals and nursing union and non-union hospitals. Similar to Hurley (2005) this sample of 98 nurse managers in this dissertation were predominately white female nurses. The perceptions of power and trust may have been influenced by race, and gender had this study’s participants been a more heterogeneous sample.

Although, the sample size of 98 met the power requirements for study significance as power, level of significance, effect size, and sample size were used to avoid type II error, the homogeneous nature of the sample confines the findings of this study to White women. While, based on a power of .80, an alpha level of .05, and an effect size of .30, a sample size of 91 full-time nurse managers were adequate to detect significant relationships between the variables (Cohen, 1998), recruiting nurses from fifteen different hospitals in New Jersey may not have produced a sample that reflects the demographics of New Jersey’s nurse manager.

The Instrument

The psychometric properties of both the PKPCT, V. II, as conceptualized by Barrett (1983) that measured Power as knowing participation in change, and the Work Quality Index (WQI), developed by Whitley and Putzier (1994), to measure job satisfaction produced consistent findings. However, the Gibb (1978) TORI Scale that measured total trust, trust of self and trust of others produced inconsistent reliability scores when compared to prior studies.

Gibb (1978) developed the TORI instrument but never reported reliability coefficients. Similar to Gibb, Pederson (1980) and Meeker (1986) never reported reliability coefficients for the TORI Scale in their studies. Wright (2004) conducted a pilot (N = 238; n = 126 females; n = 112 males) on the TORI Scale and reported alpha coefficients of .93, .86 and .87 for total trust, trust of self and trust of others respectively. Wright (2004) also utilized the TORI scale to examine total trust, trust of self and trust of others in a sample of 189 (n = 78; n = 111 males)
adult participants, and reported a Cronbach alpha of 0.95 for the total TORI, 0.92 for the trust-of-self subscale, and 0.90 for the trust-of-others subscale.

In this study of nurse managers the alpha reliability for total trust was .66, trust of self was .73 and the alpha coefficient for trust of others was .70. An alpha coefficient of .60 to .70 is an acceptable range according to Cavana, Delahaye and Sekeran (2000). Furthermore, Frank-Stromborg and Olson (2004) reminded researchers that an alpha reliability score below 0.50 may be due in part to the lack of numerous studies with diverse populations.

The lack of reporting by Gibb (1978), Pederson (1980) and Meeker (1986), and the inconsistency in reliability coefficients across this dissertation and Wright’s findings brings into question the scoring technique for the total scales and its subscales. Moreover, while a larger sample size may yield a decreased change of a type II error, the effect size of the TORI on any variable is questionable.

**Discussion of Results**

**Research Question**

Does the combination of trust of self, trust of others and job satisfaction predict the variance in power as knowing participation in change in nurse managers in acute care hospitals?

The multiple regression analysis reported the combination of trust of self, trust of others, and job satisfaction explained 19% of the variance in power $F (3, 94) = 7.29, p \leq .001$. In other words, regression analyses was performed in which power was used as the dependent variable and trust of self, trust of others, and job satisfaction were independent variables. However, only job satisfaction had a significant unique relationship supporting the model as shown by the non-significant beta coefficients for both trust of self ($\beta = .01$) and trust of others ($\beta = .03$). Similar to
findings among nurses by Mahoney (1999) \((r = .35, p < .0001)\) and Hurley (2005) \((r = .40, p < .000)\) this dissertation revealed a relationship between job satisfaction and power.

Findings from this dissertation, Mahoney (1999) and Hurley (2002) suggest that the conceptual rationale was appropriate. Indeed, job satisfaction and power reflect Barrett’s (1990) conceptual rationale, which suggests that individuals who manifest power experience job satisfaction \((\beta = .43, p \leq .001)\). Hurley’s work supports the concept that through deliberate choice the individual makes patterning changes within the environment thereby increasing their job satisfaction. Both Mahoney (1999) and Hurley maintain the premise that power and job satisfaction are linked patterns that manifest in a mutually interacting process, and that individuals who increase their awareness acknowledge their power which is then reflected in increased job satisfaction.

**Hypotheses**

As predicted by the first hypothesis, there was a significant positive relationship between power as knowing participation in change and trust of self. The correlation between power as knowing participation in change and trust of self was positive and statistically significant \((r = .25, p \leq .001)\) and was the highest correlational value of all relationships explored and therefore, the investigator rejected the null. This was similar to findings reported by Wright (2004) where trust of self was related to power in a group of adults. While Wright’s participants were not nurse managers, they were similar to participants in this study since both studies measured adults whose ages ranged between 21 to 60 years of age all of whom have graduated from high school.

Data from Wright’s and this current study support the notion that adults, including nurse managers who manifest patterns of awareness and choice, which are two aspects of power, experience trust of self. In other words, the adult participants with increased perceived power
also reported trust in one’s self. Gibb (1978) described trust as continuous and universal in the sense that it is a process of discovering one’s life. Likewise, Wright (2004) suggested that “trust is viewed as a manifestation of the dynamic nature of the energy field pattern of human[s] and their environment” (p. 5). Therefore, nurse managers who internalize power from a Rogerian perspective are more likely to experience an increase in trust of self.

In contrast to the findings of Wright’s (2004), this study did not find support for the second hypothesis that there is a positive relationship between power as knowing participation in change and trust of others in nurse managers working in acute care hospitals. In this study, the relationship between Barrett’s (1983) definition of power as knowing participation in change and Gibbs (1978) measure of trust were not apparent. This hypothesis was initially built on the premise that when a person experiences an acausal worldview of power; power is related to trust of others. However, whether the nurse managers in this study had an acausal worldview or not was not directly measured nor was it an inclusion criteria for the sample. That is the nurse managers may have defined power as causal (power-as-control) as opposed to acausal (power-as-freedom). A measure that defines power-as-control may have produced a positive relationship with trust of others, meaning as power-as-control would increase trust of others would increase.

Nurse managers in this study without an acausal worldview may manifest minimal trust of others when they find they are not able to influence others in the work environment. Narasimhan, Nair, Griffin, Arlbjorn, and Bendoly, (2009) who tested the beliefs of workers in a business work setting describe power as a measure of control and influence without regard for the workers’ worldview. Therefore, from a control perspective, nurse managers with a casual worldview, which is control, are more likely to experience an increase in trust of others.
This study found support for the third hypothesis that there is a positive relationship between power as knowing participation in change, trust of self, and job satisfaction in nurse managers working in acute care hospitals. This study also found support for the fourth hypothesis that there is a positive relationship among power as knowing participation in change, trust of others and job satisfaction. However, it should be noted that only job satisfaction demonstrated a significant unique contribution to the model.

Mahoney (1999), and Hurley (2002), using an acausal worldview also found positive relationships between power and job satisfaction, without any reference to the concept of trust. Thus, the findings of the third and fourth hypotheses support the original relationship between power and job satisfaction. The finding in this study which added the aspect of trust that may have deepened ones understanding of how trust influences the relationship between power and job satisfaction was not supported. In other words, as shown in Tables 4, 5, 6 and 7 the summated measure of trust and or its subscales; trust of self and trust of others, do not relate to or predict power.

Ancillary Findings

Analyses of demographic variables for trends in the characteristics of the sample related to power, trust of self, trust of others and job satisfaction was performed. Most of the demographic variables (age, gender, race, marital status, total household income, educational level in nursing, type of current work unit, as nurse manager during overall career, as nurse leader in any other capacity, years of active nursing experience since graduation, number of direct report registered nurses on unit and number of direct report non-professional staff included in the current unit’s budget) did not relate to the concepts of concern (see Table 9). However, the
following relationships were statistically significant though most were weak (Grove, et al., 2013):

- Power was negatively associated with both perception of fair compensation \( (r = -0.20, p = 0.05) \) and number of years worked as a registered nurse at current hospital \( (r = -0.24, p = 0.02) \).
- Total Trust was negatively associated with job satisfaction \( (r = -0.20, p = 0.05) \), annual salary \( (r = -0.19, p = 0.05) \) and years as nurse manager on current unit \( (r = -0.21, p = 0.03) \).
- Trust of self was negatively associated with perception of fair compensation \( (r = -0.25, p = 0.01) \) and years as nurse manager on current unit \( (r = 0.22, p = 0.03) \).
- Trust of others was positively associated with years as nurse manager on current unit \( (r = 0.20, p = 0.05) \).
- Job satisfaction was somewhat surprisingly moderately and negatively associated with perception of fair compensation \( (r = -0.47, p = 0.01) \) and weakly but positively associated with years as nurse manager on current unit \( (r = 0.23, p = 0.02) \).

As noted above, these data are consistent that the inverse relationships of the major variables and perception of fair compensation were evident. This may be due in part to the nurse managers’ number of years in a position. Hurley (2002) reported that as years increased so did salary. Perhaps the nurse managers in this study were being underpaid as it is a practice of some
departments of human resources to adjust salary ranges within a particular pay structure.

Moreover, unlike Hurley’s sample of nurse managers who were less educated (less than 50% held a bachelor’s degree), 45% of the nurse managers of this study held a master’s degree and all held a bachelor’s degree in nursing. It is understandable that nurses expect an increase in salary with increased education. Additionally, most of the bivariate relationships were quite small.

It was also noted that years as nurse manager on current unit had a statistically significant positive relationship with trust of self, trust of others and job satisfaction. In other words, as the number of years a nurse manager remained on a patient care unit increased so did trust of self, trust of others and job satisfaction levels increased. Theoretically, these findings are congruent with Rogerian postulates since satisfaction is a human pattern manifestation and there are mutual processes of human and environmental fields manifesting trust of self and others.

The inverse relationship between power and number of years worked as a registered nurse at current hospital may suggest that nurse managers did not need to have many years in a hospital to feel the freedom of making informed choices in creating change. Additionally, younger nurse managers may be less hierarchically focused and may tend to feel more power as a result of a cohort effect. That is the cohort of nurses with fewer years in the current hospital may also be younger nurses, and it is questionable whether these younger nurses are less hierarchically in their thinking. Defined by Barrett (1983) as the four field manifestations; 1) awareness, 2) choice, freedom to act intentionally, and 4) involvement in creating change, power may have been exhibited in this study’s participants since increased years was not related to increased perceived power. It is likely that nurses with a sense of power from within would need years in a given hospital to manifest power.
The lack of statistically significant relationships among the demographic variables with the concepts of concern (age, gender, race, marital status, total household income, educational level in nursing, type of current work unit, years working, as nurse manager during overall career, as nurse leader in any other capacity, years of active nursing experience since graduation, number of direct report registered nurses on unit and number of direct report non-professional staff included in the current unit’s budget) raises issues for future research.

Additionally, the lack of a relationship between power with race and gender warrant further investigation. The literature, suggests that minorities and females perceive less power (Livingston, 2013). For example, Livingston postulates that black women may be penalized for ambition as it may represent a threat to the status hierarchy. Moreover, black women may not be permitted to obtain power in its classical sense. Relative to gender, Upenieks (2003) claims that women who gain access to leadership positions may perceive diminished power. Furthermore, behaviors the women learned in prior positions may be no longer appropriate according to Upenieks. While race and gender were not related to power in this dissertation study, this may be due in part to a sample size which was too small to detect racial and gender differences.

Summary

This was the first study of its type to empirically test the relationship of the concepts of power as knowing participation in change, trust, trust of self and others, from the perspective of Barrett’s (1983) theory of power which involved nurse managers in the acute care setting and nurse manager job satisfaction.

This study examined the evolving pattern manifestations of nurse manager power as knowing participation in change (Barrett, 1983, 2010) trust, trust of self and trust of others (Gibb, 1978; Wright, 2004) in mutual process with the acute care hospital environment as
reflected in nurse manager job satisfaction. Barrett’s acausal perspective of power is an open systems worldview whereby the mutual processes of human and environmental systems support power-as-freedom and infinite changeability. Therefore, nurse managers using power-as-freedom may experience higher power than employees working in a causal environment. Nurse managers who manifest power forge ahead autonomously to create improved work conditions for staff and therefore, staff experience increased job satisfaction evidenced by high retention and low turnover metrics. Rogers (1970), Barrett (1983, 2010) and Wright (2004) provided evidence that nursing supports an alternate view of power that is consistent with an acausal worldview where nurse managers can mutually interact, or not, with organizational entities as appropriate in order to operationalize role behaviors.

The empirical evidence of this dissertation, was congruent with Barrett’s (1983, 2010) Nurse manager’s display acausal power theory that an acausal (open) worldview of power, demonstrated that power and job satisfaction were strongly correlated. Barrett’s (2003, 2010) open system perspective, suggests that everyone has power; no one can give it, no one can take it away and power is infinite. Therefore, nurse managers are encouraged to use power-as-freedom to mutually interact, or not, with organizational entities as appropriate in order to operationalize role behaviors and attain desired outcomes. Therefore, when nurse managers utilize power-as-freedom in their daily work, mutually interacting with various patient care situations and professional nursing activities, they will experience an increase in power and therefore, experience more job satisfaction.

Gibb (1978) and Wright (2004) found that trust, trust of self and trust of others is also viewed from an acausal worldview and that trust is a pattern manifestation of the human and environmental process. This is the first study to report that the empirical evidence found trust of
self and power were significantly related positively and therefore, supported the prior work of Wright. However, there is an opportunity for future research to conduct a study with a larger randomized sample to further test the trust theory since conceptually it is congruent with Barrett’s power theory.

This study provided the opportunity to further test Rogers’ SUHB (1970, 1986, 1990a) and Barrett’s (1983, 2010) Power as Knowing Participation in Change theory in mutual process with trust. Secondly, the study examined the process of the mutual human field pattern of power, trust, and trust of self and trust of others as it related to nurse managers and their role in the hospital. Additionally, the study examined whether nurse manager job satisfaction is a mutual process related to the evolving mutual patterning of power and trust. There was a strong positive relationship found between job satisfaction and power which suggests that nurse managers who perceive an acausal worldview and internalize power are more likely to experience job satisfaction. Finally, this study reexamined through empirical research in a nurse manager population, a strong reliability for the use of the Power as Knowing Participation in Change Test, Version II (Barrett, 1983). This study continues to support the use of the PKPCT, V.II instrument for future research utilizing Barrett’s power theory.

This study contributes to the advancement of Rogers’ Science of Unitary Human Beings as well as Barrett’s power theory. The reported findings generated from this study demonstrate that as nurse managers manifest power they are in mutual process with the hospital environment. This is showcased by nurse managers making important choices based on the awareness of options regarding the delivery of patient care on their unit. Examples of important decisions made by the nurse manager are as follows, the selection of staff, management of multimillion dollar budgets, assessment, planning and coordination of staff education, quality performance
and patient satisfaction initiatives. By involvement in creating change on patient care units and staff engagement, the nurse managers display that they are in mutual process with their environment and therefore, their manifest power. The manifestation of power will serve nurse managers to actively participate and contribute to innovative and creative methods of transforming care in the future healthcare system.

Another major contribution accomplished by this study was the reporting of empirical findings that offer the opportunity to add depth to the literature on trust. Trust remains a highly valued behavior especially in management and although, much has been studied in the causal worldview, there is limited literature on trust with Barrett’s (1983) power theory. Trust is a highly complex behavior and thus, this study contributed to the body of knowledge and created an opportunity for future nursing.

This study demonstrated that among nurse managers in an acute care hospital setting, job satisfaction predicted increased capacity for power as defined by Barrett (1990). The positive relationship between job satisfaction and power may mean that nurse managers who perceive an acausal worldview and internalize power are more likely to remain with their present hospital. Outcomes from the positive relationship between job satisfaction and power may benefit and ensure both nurse manager and the hospital organization as a whole. Moreover, the relationship may yield improved patient outcomes as there is less turnover of management and consistent nursing staff due to increased retention among the nurses at various levels.

Total trust, trust of self and trust of others as defined by Gibb (1978), while conceptually congruent with Barrett’s acausal worldview, may have empirical challenges. The conflicting findings between Table 4 (positive Pearson correlation between power and trust of self), and Table 5 (regression analysis showing a beta weight of .01 for trust of self on power) lead the
investigator to question the measure of trust of self and therefore, suggest an opportunity for future study.

The ancillary findings indicated that most of the demographic variables were not related to power, total trust, trust of self, trust of others and/or job satisfaction. While the participants of this study were similar to the national data on registered nurses in the United States, both diversity in race and gender were lacking and may have influenced the results. Therefore, studies that look at the relationship among power, total trust, trust of self, trust of others and/or job satisfaction are needed in this area.
CHAPTER VI
SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Summary

This descriptive, correlational study was the first research study to examine the relationships between and among power as knowing participation in change, trust, trust of self, trust of others and job satisfaction in nurse managers working in acute care hospitals. Participants completed the Power as Knowing Participation in Change Test, Version II (PKPCT) for measurement of nurse manager power (Barrett, 1983), the TORI Self Diagnosis Scale (TORI) to measure nurse managers’ trust, (Gibb, 1978), the Work Quality Index Questionnaire (WQI) to measure work satisfaction in nurse managers (Whitley and Putzier, 1994) and a Demographic Data Information Form.

This study was designed to examine power as knowing participation in change, which is Barrett’s acausal worldview (power-as-freedom) theory (Barrett, 1983). Power was conceptualized as a nurse manager’s potential to manifest power from within as a unitary manifestation of the whole. Additionally, the nurse manager’s power is realized through mutual process with the environment (Barrett, 1983). Nurse manager role behaviors, when viewed through the lens of the acausal worldview, illustrate that as the mutual process of the nurse manager’s power evolves, pattern manifestations of change in the work environment occur. Prior research on power as knowing participation in change has examined and focused on staff nurses, nurse managers and adults with a minimum of a high school education.

The volunteer, convenience sample for this study consisted of 98 nurse managers employed in 15 acute care hospitals in New Jersey. Participants were 31 years and older, and employed as nurse managers in the same hospital for a minimum of one year and worked at in
the nurse manager role for at least two years. Subjects completed the Power as Knowing Participation in Change Tool, V. II, the TORI Scale, the WQI and a Demographic Information Form. One hundred and eighty-six packets, which included the four data collection forms, were distributed at a nurse manager monthly meeting at each of the fifteen hospitals. The data collection forms were recommended to be completed at home in a quiet location. The researcher returned to each hospital twice at one week intervals to pick up the completed forms.

Conclusions

Results of this study provide evidence that power and job satisfaction are related. When viewed from the acausal perspective that nurse managers possess power, they experience increased job satisfaction. Thereby, the findings are congruent with Barrett’s (1990) view of power. When viewed from an acausal worldview, trust of self is a pattern manifestation of the human and environmental process. While job satisfaction explains 19% of the variance in power, 81% of what explains power was not found in this study. Further, despite the theoretical prediction, trust of others was not found to have a significant relationship with power.

In the acute care organizational environment power, trust and job satisfaction play a role among nurse managers. This study supports the notion that an acausal view of power is related to job satisfaction. Within an acausal worldview the use of power by the nurse manager who freely and knowingly participates in the desired organizational changes may achieve organizational goals. Today’s health care organizations are faced with multiple challenges, and they may benefit from an understanding that nurse managers who perceive power as knowing participation in change report increased job satisfaction. These study findings coupled with empirical evidence that job satisfaction is related to improved quality health outcomes depict the pivotal role of the nurse manager in the continued success of hospitals.
Organizationally invested nurse managers with perceived acausal power will attract and positively influence the retention of clinical nurses who will deliver quality nursing care to diverse patient populations in the workplace. For this reason, it is imperative that nursing leaders explore opportunities to promote nurse manager job satisfaction.

Ancillary findings show an unexpected negative relationship between the nurse managers’ perception of fair compensation as a factor related to perception of power. In other words, nurse managers with decreased perceived power reported increased perception of fair compensation. Furthermore, the perception of fair compensation appears to be related to power, trust of self and job satisfaction for nurse managers. As the perception of fairness in compensation increased and the perception of power decreased, it suggests that money was not a source of power for this sample of nurse managers. For these nurse managers the internal sense of value or manifestation of power is unrelated to external manifestation such as compensation.

**Limitations**

A study may have limitations related to sample, design and instrumentation. Therefore, study limitations should be considered when interpreting the study’s data. The inclusion criteria limited participation to nurse managers. Since several of the hospital recruitment sites denoted different job titles for the first line nurse manager, the sample may not be homogenous. Furthermore, a possible limitation for using purposeful sampling procedure is that the hospitals and participants were self-selected and not randomized. The participants were self-selected, which may possibly skew the results of the study. The literature suggests that a response rate of 50% is adequate for data analysis, a rate of 60% is good and 70% is very good (Babbie, 1973), thus the response rate of 53.8% in this study is considered adequate which underscores the adequacy of the participant sample in this study but would be better if randomly selected.
As with any convenience sampling methodology, there is an intrinsic limitation to the external validity or generalizability of the findings. While the sample size was adequate according to power analysis, a larger sample size may be recommended in the future. The use of an on-line survey process for data collection may be helpful to obtaining a larger sample and increasing participation. There are major advantages with the use of on-line surveys rather than paper and pencil surveys since there is guaranteed anonymity for respondents, because the respondents may feel more relaxed and at ease responding anonymously to sensitive matters such as their personal opinion on their organizational environment (Tuten, Urban, & Bosnjak, 2000).

While the study design addressed the purpose of the study and was feasible given the realistic constraints, threats to the study’s validity centered on control over the environment and measurement. The purpose of a correlational descriptive design is to describe variables and identify relationships among variables. The design also addressed the feasibility issues of high census activity during the winter season, patient care needs and staffing coverage. However, control over extraneous variables, such as personal events at home or in participant lives was not possible.

Cronbach alpha of a multidimensional instrument is not useful when the questions are testing more than one dimension (Grove, et al., 2013). Combining the multiple dimensions needed to measure trust may have caused the .66 alpha coefficient, total scores tend to inflate the alpha which poses a threat to the findings measurement reliability. Therefore, the reader is cautioned when generalizing findings. Wright’s previous studies (2004), with larger populations have yielded high reliability for this tool.
**Recommendations for Future Research**

The measure on trust needs further development with regard to the two theoretically appropriate 48 item scales that measure trust of self and trust of others. Trust as theoretically congruent with Rogers had an inverse relationship with job satisfaction (see Table 4). In other words, as total trust decreased, job satisfaction increased therefore, studies are needed to explain this inverse relationship. Perhaps the sum of the 96 items is inappropriate, and the length of the tool may impact the effectiveness of its use. The subscale trust of self may provide adequate information and therefore, an item analysis may provide useful insights to the results and may assist with the scoring issue. A study that may refine and clarify the scoring of the TORI Scale may be helpful in explaining variables’ relationships with trust. In addition, the following relationships are brought into question due to the instrument’s reliability coefficients: Total trust with job satisfaction, annual salary, years as nurse manager on current unit; trust of self with perception of fair compensation, and years as nurse manager on current unit; trust of others with years as nurse manager on current unit.

Additionally, future studies that examine the nurse manager role should possibly explore and broaden the nurse manager title to include various hospital organizational titles (Nurse Manager, Clinical Coordinator and Patient Care Director) which are inclusive of the work and job responsibilities of the nurse manager role. Current trends in the nurse manager role and leadership structure are expanding the scope of responsibility on the unit and throughout the organization for the nurse manager. Scientific investigation that increases an understanding of the expanded first-line management role on job satisfaction is critical to nurse manager job retention.
Furthermore, the relationship of power with race and gender warrant future research. Despite progress, the literature suggests that women and minorities perceive less power. (Livingston, 2013). Therefore, there is an opportunity to conduct additional studies on gender and minority diversity since the majority of nurse managers are white women which may be a rationale to provide education and support in order to promote ethnically diverse women manifesting power and increasing job satisfaction. Moreover, today’s use of electronic devices require e-versions of prior pencil and paper instruments. The on-line survey process would also improve time utilization and participation for busy nurse managers.

**Implications**

The relationship between power and job satisfaction suggests that nurse managers who experience increased job satisfaction are using their power. It is important for nurse managers to have increased job satisfaction (Duffield, et al., 2011) as they are in a pivotal role in the health care organization which determines staff retention, improved patient care outcomes especially when organizations are reimbursed by patient care outcomes. Nurse managers with greater job satisfaction will generate, create and maintain vigorous work environments which support professional nursing practice and staff nurse job satisfaction (Duffield, et al., 2011).

The nursing literature emphasizes the important role that nurse managers play with staff retention, work productivity, quality of patient care, budgets, pay-for-performance, clinical outcomes and overall unit operations, as well as supporting the health care organizational goals. Therefore, it is suggested that administrators focus on gaining a better understanding of the acausal “interplay of [nurse manager] power-as-freedom” (Barrett, 2010, p. 52), and the acute care hospital environment. Health care organizations must develop strategies to increase job satisfaction for nurse managers as it will present opportunities for them to exercise acausal power
according to this study’s findings. The traditional sense of power-as-external-control, and causal that currently prevails in most healthcare organizations, is contrary to the mutually interacting process of humans and the environment, as proposed by Rogers (1990a) and Barrett (1983). Therefore, quality of patient care and clinical outcomes may improve as organizations adopt an acausal perspective of power and its relationship to job satisfaction.

**Practice and Education**

Nurse managers are essential for organizations to thrive, grow and succeed in meeting new challenges and goals in a dynamic healthcare marketplace. It is vitally important for chief nurses and hospital administrators to explore and cultivate management strategies to increase nurse manager job satisfaction in order to retain strong nurse managers and staff nurses organizations. One such strategy is to create an organizational culture that encourages and supports nurse managers to exercise their potential for Barrett’s acausal power. The increased demands for quality patient outcomes with the pay for performance reimbursement program highlight for administrators the pivotal role that nurse manager’s play in ensuring that the hospital meets or exceeds quality outcomes in order for hospitals to effectively compete in the healthcare marketplace and also be financially viable.

This study represents an opportunity for nurse administrators to promote Rogerian science with nurse managers in order to potentially manifest power with evolving mutual pattern manifestations in a mutually interactive process and experience job satisfaction in the acute care work environment. Nurse managers who experience job satisfaction will create and maintain work environments for nurses to practice that support quality patient outcomes.

Additionally, nurse administrators can introduce educational scenario courses in nurse manager leadership orientation programs and on an ongoing basis which promote Barrett’s view
of acausal power with nurse managers and staff nurses. This approach may encourage nurse managers to utilize their power and thusly, increase their job satisfaction.

Finally, Barrett’s conceptual framework on power has meaning and impact for today’s nursing students. With a better understanding of power from an acausal worldview they may be better positioned to join an acute care hospital organizations to produce enhanced quality work behaviors and improved patient outcomes. Schools of nursing that prepare nurses with an acausal worldview, may not only help them with attainment of organizational goals but also position them to fulfill their professional goals.
REFERENCES


APPENDICIES

Appendix A

Script for Interested Chief Nurse Officer and Nurse Researcher

General Introductory Information:

My name is Maureen Schneider. I am a doctoral student in the PhD Program at Seton Hall University College of Nursing, in South Orange, New Jersey. As part of the requirements for my degree, I have developed a research proposal to investigate how nurse managers accomplish their role related behaviors while working as a leader in an acute care hospital. I am requesting your agreement to have your hospital included as a site to recruit nurse managers to participate in the study. If you are agreeable to having your hospital nurse managers participate, I will need a written Letter of Invitation that indicates your preliminary agreement for use of your hospital. Your letter will be included with my SHU IRB Application for study approval as evidence of having access to my study population. After SHU IRB approval, I will request study approval from IRB or designated research committee of your hospital. After formal notification of study approval from your hospital’s IRB, I will contact you to discuss other aspects of the study prior to contacting your nurse managers.

Closing the Dialogue:

- Thank the CNO for her or his interest in participating in the nurse research study.
- Answer any questions the CNO may have regarding the study.
- Reiterate my plan to contact the CNO after the Hospital IRB approval is received.
Appendix B

Letter of Invitation to the CNO

Date:

Dear Chief Nurse Officer:

The purpose of this communication is to ask for your help as a participant organization in a research study I am conducting as part of the requirement for a PhD in Nursing degree at the College of Nursing, Seton Hall University. The purpose of this study is to assist nurse managers with their roles in hospital management.

At this time I am requesting that you allow me to come to your hospital and meet with your nurse managers who have been working as the nurse manager on the same unit for a minimum of two years. In order to conserve nurse manager time, I would like to contact a designated nurse manager to assist in attending a Nurse Manager meeting to discuss my research study, which should take approximately 60 minutes, and to seek their individual permission to voluntarily participate in the study. There are data collection tools for this study, which potential nurse manager participants who volunteer will be asked to complete in a quiet setting. The nurse manager participation in this study is voluntary, anonymous and if they choose not to participate in the study there is no penalty and no one will know who did or did not participate. Their responses will not be shared with anyone. I will not ask for names, or report individual responses, but rather will combine responses of all participants for data analysis and report only group results. I will be more than happy to provide the final research report and a presentation of the study with the nurse managers and with you as CNO at a management meeting.

I hope the findings of this research study will help nurse leaders with understanding how to use the resources of acute care hospitals in order to enhance nurse manager and staff nurse retention. The overall results of the research study may be published, but the names of the CNO and organization will not be used.

Please also be aware that this study has been approved by your hospital’s Research Review Committee and the Institutional Research Board of Seton Hall University. I wish to thank you in advance for your support of this study with the participation of your nurse managers, it is greatly appreciated. If there are any questions, please feel free to contact me. Thank you for your time and assistance with this research.

Sincerely,

Maureen Schneider, MSN, MBA, RN, NEA-BC
Student, Seton Hall University
400 South Orange Avenue
South Orange, New Jersey
Phone: (973) 761-9266
E-mail: maureen.schneider@student.shu.edu
Appendix C

Script for Nurse Manager Meeting

- Thank you for agreeing to meet with me and allowing me the opportunity to explain the purpose of my research study and discuss your possible participation in this quantitative study.

- I am pursuing my PhD at the Seton Hall University College of Nursing. In order to partially fulfill the requirements for my degree, I am conducting a research study to investigate how the role of the nurse manager is operationalized in an acute care hospital.

- In order to participate in this study, you must be (a) currently working full-time in a nurse manager position in the same hospital for two years or longer, (b) have a BSN degree, (c) responsible for one or more inpatient unit(s) with twenty-four hour, seven days a week operational responsibility.

The larger, unsealed manila envelope which I am now distributing to each of you contains the research documents, all of which I will review with you in detail today. I ask that you do not open the manila envelope until you are in a quiet place where you are able to begin completing the documents. Today, I will use the contents of a sample manila envelope to explain each document to you. Everything I will say to you today about your potential participation in my research study is also contained in the Letter to Participant-Nurse Manager which is contained in the envelope and can be used as a reference when you begin reviewing the contents of the manila envelope. The manila envelope contains a complete set of research documents which include the following:

- Letter to Participant-Nurse Manager for the overall study
- A set of three paper pencil, self-report questionnaires that measure the variables related to the study
- Demographic Data Information Form

All documents except the Letter to Participant-Nurse Manager have a numerical ID code in the upper right corner which matches the number on the envelope you have in your hands. This ID code is used in statistical analysis of the data and assures that your responses will be recorded anonymously.

I am asking that you complete all the materials in the packet at home, rather than at work where it is usually difficult to have enough undisturbed time to adequately complete the task. At a convenient time at home, I ask that you find a private place where you can sit, undisturbed and complete the contents of the research packet.

- The first document you should read is the Letter to Participant-Nurse Manager which explains the study.
- The next set of three documents is the paper and pencil questionnaires that measure the study variables. Each questionnaire contains its own response directions.
- The last document is a Demographic Data Information Form which asks about your job experience and responsibilities, your age, education as a nurse and other information which will help to describe the overall study participants.

It would be ideal if you could complete all the questionnaires in the packet in one seating which usually takes approximately 60 minutes to complete. If you need to split your time, I ask that you fully complete any single document, before taking a break. After you have completed all the research materials in the packet, please place them into the original, numerically coded, manila envelope which you should then seal before returning.

You should return your sealed manila envelope to the Nursing Staffing Office where I have placed one secured and labeled white box. You should place your sealed manila envelope with the 4 data collection forms into the white box labeled “M. Schneider-Returned Research Questionnaires”. All collected data will remain strictly confidential and you are not being asked to report whether you have returned your research material or not. If you do not wish to participate in the study please place your unused packet in the white box labeled “M. Schneider-Returned Research Questionnaires”.

If you have any questions regarding your rights as a research participant please call the Seton Hall University IRB Director, Dr. Mary Ruzicka, using the contact telephone number or mailing information noted on the Letter to Participant-Nurse Manager. If you have any questions regarding this study or the research process, please call me, Maureen Schneider, or my dissertation committee chairperson, Dr. Mary Anne McDermott, at the Seton Hall University, College of Nursing using the contact telephone numbers and mailing information located in the Letter to Participant-Nurse Managers.

Thank you.
Appendix D

Letter of Solicitation to Participant-Nurse Manager

Dear Nurse Manager:

My name is Maureen Schneider, MSN, MBA, RN, NEA-BC and I am a PhD student at Seton Hall University College of Nursing. In order to meet the degree requirements for the PhD, I am conducting a study that will assist nurse managers with their roles in hospital management.

**Purpose:** The purpose of this study is to better understand the role of nurse managers practicing in acute care hospitals. Findings of this study may serve as an impetus for nurse leaders of acute care organizations to design innovative initiatives that can promote the nurse manager’s leadership ability in the work environment.

**Duration:** The estimated time for your participation in this research study will be approximately 60 minutes to complete the Demographic Data Information Form and the three questionnaires.

**Procedures:** I am attending your Nurse Manager meeting today to discuss and review my research study and to briefly review the study packet which is comprised of a Letter with study information and four paper and pencil questionnaires which are contained in the unsealed manila envelope that I will distribute at this meeting to all nurse managers who meet the inclusion criteria for participation in the study. The criteria for participation in the study are that the nurse manager must have a BSN degree, work full time as a nurse manager and have unit-based, 24-hour, 7 days a week management responsibilities for all unit-based personnel and operational budgets. In addition, participants must have worked on the same/current patient care unit as the nurse manager for at least the past two years in the current acute care hospital.

The first questionnaire in the study packet is the Demographic Data Information Form which requests general demographic data and information about your nurse manager experience; the second questionnaire asks you to describe the meaning of day-to-day change in your life, based on four specific indicators; the third questionnaire asks you to indicate, on four point scale, the degree to which you agree or disagree with each statement; and the fourth and last questionnaire asks that you describe, on a seven point scale, your level of satisfaction with job correlated factors.

After you have completed the questionnaires, please reinsert all four completed questionnaires into the manila envelope and seal it. The last step is for you to deposit the sealed manila envelope, containing the completed questionnaires into the secured white box labeled “M. Schneider-Returned Research Questionnaires” which I have already placed in the Nursing Staffing Office for that purpose. I am the only one who will have access to the contents of the secured white box.

**Voluntary Participation:** Participation in this study is completely voluntary and declining to participate involves no penalty, reprisal or loss of benefits. You do not have to participate in this study and you can choose to withdraw from the study at any time prior to placing the sealed manila envelope in the secured white box. If you decide to not participate in the study, or if you begin to answer the questionnaires and then decide to not continue, you may stop completing the study questionnaires at any time and your decision to stop participation will remain anonymous.

**Anonymity:** Your participation will be anonymous. Please do not write your name or any personal identifiers on any of the questionnaires or the manila envelope. Each participant’s manila envelope and the four research questionnaires will have a unique, randomly assigned identification (ID) number stamped in the upper, right-hand corner. The ID number will allow for anonymous matching of demographic data across measures and facilitate statistical analyses of the data. The ID number cannot be linked with your identity since you are not being asked for any personal identifiers such as your name on any of the questionnaires. Please note, there is no consent form for you to sign. Your voluntary
completion and return of the questionnaires provides your implied, informed consent to participate in my study. In addition, because you are not being asked to sign a consent form, your anonymity is further assured.

As instructed earlier in this letter, after you complete the four questionnaires, you should place the questionnaires into the manila envelope, seal it and deposit the manila envelope into the secured white box labeled “M. Schneider Completed Research Questionnaires” located in the Nursing Staffing Office of your hospital. I will return to the hospital Nursing Staff Office to pick up the sealed manila envelopes from the sealed white box, seven days from today. I will return again after another seven days, i.e., 14 days from today to pick-up any additional sealed manila envelopes that are in the white box labeled “M. Schneider Completed Research Questionnaires.”

In order to preserve the integrity of the study and honor the copy write of three of the questionnaires, I am asking that all manila envelopes be returned, sealed, to the secured white box located in the Nursing Staffing Office, regardless of whether you fully participate, begin to participate and then decide to not participate, or decline to participate at all in my study. Also, only I will have access to the envelopes that are deposited into the secured box.

I will create a master list of ID code numbers assigned to each hospital and maintain it as a single electronic list that I will store on an individual, password protected thumb drive. The thumb drive will be stored in a locked desk drawer in my locked, private office at home. The only desk drawer key will be kept by me.

Benefits and Risks of the study: There are no known direct benefits and no known risks to you for participating in my study. It is hoped that the additional information gained from this study may be useful in developing innovative strategies and initiatives that can promote the nurse manager’s leadership ability in the work environment in the acute care hospital. Although, completion of the questionnaires should be as complete as possible, please know that if at any time you are uncomfortable answering any particular question, you may choose not to answer the question and you may, at any point, stop completing the questionnaires. If there are any concerns or questions about this study please contact the researcher, my Dissertation Committee Chairperson, or the Director of the SHU IRB office using the contact information listed below.

Payment or Remuneration for Participating in this Study: There is no payment or remuneration for participating in this study.

Contact Information: If you have any questions or possible concerns about your participation in this research study please feel free to contact the Principal Investigator, Maureen Schneider, MSN, MBA, RN, NEA-BC, at (973) 761 - 9266. You may also contact the Principal Investigator’s Dissertation Committee Chairperson Mary Anne McDermott, PhD, RN at (973 761 - 9266). If you have any questions regarding your rights as a research subject in this study, you should contact the Institutional Review Board Office Director, Mary Ruzicka, PhD, Professor, Seton Hall University at IRB@shu.edu or at (973) 313 - 6314.

As mentioned earlier, there is no consent form for you to sign. By voluntarily participating in this research study and returning the data in the sealed manila envelope you are providing implied consent.

Timeframe for Data Collection: I am asking that all questionnaires be returned in the sealed manila envelope within two weeks of this meeting.

Thank you for participating in my study,

Maureen Schneider, MSN, MBA, RN, NEA-BC
Doctoral Student, PhD in Nursing Program, Seton Hall University College of Nursing
400 South Orange Avenue, South Orange, New Jersey 07028
INTRODUCTION TO BARRETT'S PKPCT

The PKPCT is designed to help you describe the meaning of day-to-day change in your life. Four indicators of experiencing change are:

- AWARENESS
- CHOICES
- FREEDOM TO ACT INTENTIONALLY
- INVOLVEMENT IN CREATING CHANGE

It takes about 10 minutes to complete the PKPCT.

INSTRUCTIONS FOR COMPLETING BARRETT'S PKPCT

For each indicator, there are 13 lines. There are words at both ends of each line. The meaning of the words are opposite to each other. There are 7 spaces between each pair of words which provide a range of possible responses. Place an "X" in the space along the line that best describes the meaning of the indicator (AWARENESS, CHOICES, FREEDOM TO ACT INTENTIONALLY, or INVOLVEMENT IN CREATING CHANGE) for you at this time.

For example:
Under the indicator CHOICES, if your CHOICES are quite closely described as “informed,” your answer might look like this:

```
informed   |   X   |   |   |   uninformed
```

If your CHOICES are quite closely described as “uninformed,” your answer might look like this:

```
informed   |   |   |   |   X   |   uninformed
```

If your CHOICES are equally “informed” and “uninformed,” place an “X” in the middle space on the line. Your answer might look like this:

```
informed   |   |   |   |   X   |   |   uninformed
```

REMEMBER:
- There are no right or wrong answers.
- Record your first impression for each pair of words.
- You can place an “X” in any space along the line that best describes the meaning the indicator has for you at this time.
- Mark only one “X” for each pair of words.
- Mark an “X” for every pair of words.

PLEASE BEGIN TO MARK YOUR X'S ON BARRETT'S PKPCT

(Please go to NEXT PAGE and continue)
### BARRETT PKPCT, Version II

**MARK AN “X” AS DESCRIBED IN THE INSTRUCTIONS**

**MY AWARENESS IS**

- profound
- avoiding
- valuable
- unintentional
- timid
- leading
- chaotic
- expanding
- pleasant
- uninformed
- free
- unimportant
- unpleasant
- superficial
- seeking
- worthless
- intentional
- assertive
- following
- orderly
- shrinking
- unpleasant
- informed
- constrained
- important
- pleasant

**MARK AN “X” AS DESCRIBED IN THE INSTRUCTIONS**

**MY CHOICES ARE**

- shrinking
- seeking
- assertive
- important
- orderly
- intentional
- unpleasant
- constrained
- worthless
- following
- superficial
- informed
- timid
- expanding
- avoiding
- timid
- unimportant
- chaotic
- unintentional
- pleasant
- free
- valuable
- leading
- profound
- uninformed
- assertive

*©1984, 1987, 1998 by E.A.M. Barrett. All rights reserved. No duplication without written permission of author. Inquiries: Dr. E.A.M. Barrett, 415 East 85th Street, New York, NY 10028*
BARRETT PKPCT, Version II, PART 2

MARK AN "X" AS DESCRIBED IN THE INSTRUCTIONS

**MY FREEDOM TO ACT INTENTIONALLY IS**

<table>
<thead>
<tr>
<th>timid</th>
<th>assertive</th>
</tr>
</thead>
<tbody>
<tr>
<td>uninformed</td>
<td>informed</td>
</tr>
<tr>
<td>leading</td>
<td>following</td>
</tr>
<tr>
<td>profound</td>
<td>superficial</td>
</tr>
<tr>
<td>expanding</td>
<td>shrinking</td>
</tr>
<tr>
<td>unimportant</td>
<td>important</td>
</tr>
<tr>
<td>valuable</td>
<td>worthless</td>
</tr>
<tr>
<td>chaotic</td>
<td>orderly</td>
</tr>
<tr>
<td>avoiding</td>
<td>seeking</td>
</tr>
<tr>
<td>free</td>
<td>constrained</td>
</tr>
<tr>
<td>unintentional</td>
<td>intentional</td>
</tr>
<tr>
<td>pleasant</td>
<td>unpleasant</td>
</tr>
<tr>
<td>orderly</td>
<td>chaotic</td>
</tr>
</tbody>
</table>

MARK AN "X" AS DESCRIBED IN THE INSTRUCTIONS

**MY INVOLVEMENT IN CREATING CHANGE IS**

| unintentional | intentional |
| expanding | shrinking |
| profound | superficial |
| chaotic | orderly |
| free | constrained |
| valuable | worthless |
| uninformed | informed |
| avoiding | seeking |
| leading | following |
| unimportant | important |
| timid | assertive |
| pleasant | unpleasant |
| superficial | profound |

©1984, 1987, 1998 by E.A.M. Barrett. All rights reserved. No duplication without written permission of author. Inquiries: Dr. E.A.M. Barrett, 415 East 85th Street, New York, NY 10028
Appendix F

TORI SELF-DIAGNOSIS SCALE

Instructions: In front of each of the following items, place the letter that corresponds to your degree of agreement or disagreement with that statement.

SD = strongly disagree   D = disagree   A = Agree   SA = strongly agree

___ 1. I feel that no matter what I might do, people generally would accept and understand me.
___ 2. I feel that there are large areas of me that I don’t share with other people.
___ 3. I usually assert myself in most situations in life.
___ 4. I seldom seek help from others.
___ 5. Most people tend to trust each other.
___ 6. People are usually not interested in what others have to say.
___ 7. Most people exert little pressure on other people to try to get them to do what they should be doing.
___ 8. Most people do their own thing with little thought for others.
___ 9. I feel that I am usually a very cautious person.
___ 10. I feel little need to cover up the things I do and keep them from others.
___ 11. I usually try to do what I’m supposed to be doing.
___ 12. I find that people are usually willing to help me when I want help or ask for it.
___ 13. Most people in life are more interested in getting things done than in caring for each other as individuals.
___ 14. Most people usually tell it like it is.
___ 15. Most people do what they ought to do in life, out of a sense of responsibility to others.
___ 16. Most people that I meet “have it together” at a fairly deep level.
___ 17. I usually trust the people that I meet.
___ 18. I am afraid that if I showed my real innermost thoughts to most people, they would be shocked.
___ 19. In most life situations I feel free to do what I want to do.
___ 20. I often feel that I am a minority in the groups I belong to.
___ 21. People that I meet usually seem to know who they are; they have a real sense of being individuals.
___ 22. Most people I know and work with are very careful to express only relevant and appropriate ideas when we do things together.
___ 23. Most people’s goals are very clear to them and they know what they are doing in life.
Instructions: In front of each of the following items, place the letter that corresponds to your degree of agreement or disagreement with that statement.

**SD** = strongly disagree  **D** = disagree  **A** = Agree  **SA** = strongly agree

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Most groups I work with or live in have a hard time getting together and doing something they have decided to do.</td>
</tr>
<tr>
<td>25.</td>
<td>If I left most groups I belong to, they would miss me very little.</td>
</tr>
<tr>
<td>26.</td>
<td>I can trust most people I know with my most private and significant feelings and opinions.</td>
</tr>
<tr>
<td>27.</td>
<td>I find that my goals are different from the goals of most people I work with.</td>
</tr>
<tr>
<td>28.</td>
<td>I look forward to getting together with the people in the groups I belong to.</td>
</tr>
<tr>
<td>29.</td>
<td>Most persons I meet are playing roles and not being themselves.</td>
</tr>
<tr>
<td>30.</td>
<td>Most of the people I know communicate with each other very well.</td>
</tr>
<tr>
<td>31.</td>
<td>In most of the groups I belong to members put pressure on each other toward group goals.</td>
</tr>
<tr>
<td>32.</td>
<td>In an emergency most people act in caring and effective ways.</td>
</tr>
<tr>
<td>33.</td>
<td>I almost always feel very good about myself as a person.</td>
</tr>
<tr>
<td>34.</td>
<td>If I have negative feelings I do not express them easily.</td>
</tr>
<tr>
<td>35.</td>
<td>It is easy for me to take risks in my life.</td>
</tr>
<tr>
<td>36.</td>
<td>I often go along with others simply because I feel a sense of obligation to do what is expected.</td>
</tr>
<tr>
<td>37.</td>
<td>People in the groups I belong to seem to care very much for each other as individuals.</td>
</tr>
<tr>
<td>38.</td>
<td>Most people tend to be dishonest.</td>
</tr>
<tr>
<td>39.</td>
<td>Most people I know let others be where they are and how they are.</td>
</tr>
<tr>
<td>40.</td>
<td>Most people like either to lead or to be led, rather than to work together with others as equals.</td>
</tr>
<tr>
<td>41.</td>
<td>My relationships with most people are impersonal.</td>
</tr>
<tr>
<td>42.</td>
<td>Whenever I feel strongly about something I feel comfortable expressing myself to others.</td>
</tr>
<tr>
<td>43.</td>
<td>I feel that I have to keep myself under wraps in most life situations.</td>
</tr>
<tr>
<td>44.</td>
<td>I usually enjoy working with people.</td>
</tr>
<tr>
<td>45.</td>
<td>Most people I know seem to play definite and clear roles and to be respected on the basis of how well they perform the roles.</td>
</tr>
<tr>
<td>46.</td>
<td>When the people I know have negative feelings they usually express them at some point.</td>
</tr>
<tr>
<td>47.</td>
<td>A large portion of the people in groups I belong to are very apathetic and passive.</td>
</tr>
<tr>
<td>48.</td>
<td>Most of the people I am usually with are well integrated at many levels.</td>
</tr>
<tr>
<td>49.</td>
<td>I feel like a unique person and I like being unique.</td>
</tr>
</tbody>
</table>
Instructions: In front of each of the following items, place the letter that corresponds to your degree of agreement or disagreement with that statement.

SD = strongly disagree  D = disagree  A = Agree  SA = strongly agree

___ 50. I would feel very vulnerable if I told most people I know my most secret and private feelings and opinions.

___ 51. Most of the people I know feel that my personal growth is important.

___ 52. I often don’t feel like cooperating with others.

___ 53. People usually have a high opinion of my contributions to the groups I’m in and the conversations I have.

___ 54. Most people are afraid to be open and honest with others.

___ 55. The people that I know usually express what they want pretty well.

___ 56. Most people are pretty individualistic and do not work together well as member of a team.

___ 57. I often don’t feel very good about myself.

___ 58. I usually feel free to be exactly who I am and not to pretend I am something else.

___ 59. I feel that it is important in life to make a reasonable attempt to meet others’ expectations of me.

___ 60. I feel a sense of interconnectedness with the people I associate with and would miss anyone who left my circle of friends and associates.

___ 61. It is easy to tell who the “in” people are in the groups I associate with.

___ 62. Most people listen to others with understanding and empathy.

___ 63. It seems to me that a great many people spend energy trying to get others to do things they don’t really want to do.

___ 64. I think that most people I know enjoy being with people.

___ 65. The groups that I associate with see me as an important group member.

___ 66. My ideas and opinions are often distorted by others.

___ 67. My basic goals in life are similar to the basic goals of other people.

___ 68. People are seldom willing to give me help on the things that really matter to me.

___ 69. People usually listen to the things that I say.

___ 70. It seems to me that when they feel negative most people keep it to themselves.

___ 71. The groups that I’m associated with usually have a lot of energy that gets directed into whatever the groups does.

___ 72. You really have to have some power if you want to get anything done in this life.

___ 73. I often don’t feel very genuine and real when I’m with people.

___ 74. There is very little I don’t know about the friends that I associate closely with.

___ 75. If I did what I really wanted to do in life, I would be doing different things from what I am now doing.

___ 76. I am often aware of how other people help me in what I am trying to do in life.
Instructions: In front of each of the following items, place the letter that corresponds to your degree of agreement or disagreement with that statement.

SD = strongly disagree  D = disagree  A = Agree  SA = strongly agree

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>77</td>
<td>It seems to me that most people live in fear.</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>The people that I know are usually very spontaneous and uninhibited with each other.</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Most people are very unclear about what they want out of life.</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Most of the groups I work with or live in have good team or cooperative relationships.</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>I care very much for the people I associate with.</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>People often misunderstand me and how I feel.</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>When I am with others and we reach a decision about something we want to do I am usually in complete agreement with what we have decided.</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>I have no real sense of belonging to the groups I associate with.</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>In the groups I belong to, people treat others as important and significant people.</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>It is easy for me to express positive feelings, but very difficult for me to express negative feelings to others.</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>Most of the people I know are growing and changing all the time.</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>It seems to me that most people need a lot of controls to keep them on the right track.</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>I often feel defensive.</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>I keep very few secrets from my associates.</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>It is often not OK for me to be myself in the groups I’m in.</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>I feel a strong sense of belonging to several groups in my life.</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>In the groups I belong to it is easy to see who is important and who is unimportant.</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>Most people don’t keep a lot of secrets from others.</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>In the groups I belong to a lot of our energy goes into irrelevant and unimportant things.</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>It seems to me that there is very little destructive competition among the people I know and associate with.</td>
<td></td>
</tr>
</tbody>
</table>

Appendix G

WORK QUALITY INDEX (WQI)

This Questionnaire inquires about your level of satisfaction with 38 job correlated factors. Please indicate how satisfied you are in your present job with each of these items by circling the appropriate number.

<table>
<thead>
<tr>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
</table>

1. **The Work Associated With Your Position Allows You to Make Contribution To:**
   - .01 The hospital 1 2 3 4 5 6 7
   - .02 The Profession 1 2 3 4 5 6 7
   - .03 Your own sense of achievement 1 2 3 4 5 6 7

2. **You Receive Adequate Praise For Work Well Done From:**
   - .01 Your peers 1 2 3 4 5 6 7
   - .02 The hospital’s physician 1 2 3 4 5 6 7
   - .03 Nursing administration 1 2 3 4 5 6 7

3. **The Work Associated With Your Position Provides You With:**
   - .01 Opportunity to use a full range of nursing skills 1 2 3 4 5 6 7
   - .02 A variety of clinical challenges 1 2 3 4 5 6 7
   - .03 The opportunity to be of service to others 1 2 3 4 5 6 7

4. **The Nursing Practice Environment:**
   - .01 Allows you to make autonomous nursing care decisions 1 2 3 4 5 6 7
   - .02 Allows you to be fully accountable for those decisions 1 2 3 4 5 6 7
   - .03 Encourages you to make adjustments in your nursing practice to suit patient needs 1 2 3 4 5 6 7
   - .04 Provides a stimulating intellectual Environment 1 2 3 4 5 6 7
   - .05 Provides time to engage in research if you want 1 2 3 4 5 6 7
   - .06 Promotes a high level of clinical competence on your unit 1 2 3 4 5 6 7
   - .07 Allows opportunity to receive adequate respect from nurses on other units 1 2 3 4 5 6 7
Please indicate how satisfied you are in your present job with each of these items by circling the appropriate number.

<table>
<thead>
<tr>
<th>5. The Hospital Organizational Structure:</th>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01 Allows you to have a voice in policy making for Nursing Service</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.02 Allows you to have a voice in overall hospital policy making</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.03 Facilities patient care</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. You Receive:</th>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01 Enough time to complete patient physical care tasks</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.02 Enough time to complete indirect patient care tasks</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.03 Support for your work from nurses on other shifts</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.04 Support from your peers for your nursing decisions</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.05 Support from physicians for your nursing decision</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Good Working Relationships Exist Between You And:</th>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01 Your supervisor</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.02 Your peers</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.03 Physicians</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Nursing Service:</th>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01 Gives clear direction about advancement</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.02 Provides adequate opportunities for advancement</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.03 Decides advancements for nurses fairly</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Your Job Offers:</th>
<th>NOT SATISFIED</th>
<th>SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>.01 Opportunity for professional growth</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.02 Satisfactory salary</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.03 Adequate funding for health care premiums</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.04 Adequate additional financial benefits other than salary</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.05 A satisfactory work hour Pattern (8 hr., 10 hr., etc.)</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.06 Adequate vacation</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.07 Adequate sick leave</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>.08 Adequate inservice opportunities</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Appendix H

Demographic Data Information Form

ID#_______

Instructions: Please complete the following questions about yourself. Your responses will be anonymous and cannot be connected with your name. It is important that you answer each question as fully as possible. **Do not write your name on this Form.**

Carefully read each question and from the given options provided, please select the response that best describes you by placing an X mark within the bracket.

1. Are you a Nurse manager [ ] Yes [ ] No

2. Do you have 24 hour, 7 days a week management responsibility for your unit/s [ ] Yes [ ] No

3. What is your age? __________

4. What is your gender? [ ] female [ ] male [ ] other

5. What is your race? (Check all that apply)
   (a) [ ] American Indian or Alaska Native
   (b) [ ] White
   (c) [ ] Black or African American
   (d) [ ] Asian
   (e) [ ] Hispanic/Latino
   (f) [ ] Native Hawaiian or other Pacific Islander
   (g) [ ] Other
   (h) [ ] Two or more races

6. What is your marital status?
   (a) [ ] Single, never married
   (b) [ ] Married/Partnered
   (c) [ ] Divorced, now single
   (d) [ ] Other

7. Total household income:
   (a) [ ] Less than 49,000
   (b) [ ] 50,000 – 74,999
   (c) [ ] 75,000 – 99,999
   (d) [ ] 100,000-149,999
   (e) [ ] 150,000 or more
Carefully read each question and from the given options provided, please select the response that best describes you by placing an X mark within the bracket.

8. **The highest level of education that you have completed?**

   (a) [ ] BSN degree
   (b) [ ] Master’s degree in nursing/ NP
   (c) [ ] Master’s degree in nursing/ CNS
   (d) [ ] Master’s degree in nursing/ management
   (e) [ ] Master’s degree in nursing/ CNL
   (f) [ ] Master’s degree non-nursing
   (g) [ ] Doctoral Nursing degree DNP/PhD
   (h) [ ] Other (fill in) ____________

9. **Your annual salary:**

   (a) [ ] Less than 49,999
   (b) [ ] 50,000 – 74,999
   (c) [ ] 75,000 – 99,999
   (d) [ ] 100,000-149,999
   (e) [ ] 150,000 or higher

10. **How fairly do you think/believe you are being financially compensated for your work?**

    (a) [ ] Completely Fair
    (b) [ ] Generally Fair
    (c) [ ] Somewhat Fair
    (d) [ ] Not Very Fair

11. **Which of the following best describe(s) the hospital unit(s) you manage? (Check all that apply)**

    (a) [ ] Emergency Department
    (b) [ ] ICU
    (c) [ ] CCU
    (d) [ ] Medical-Surgical
    (e) [ ] Obstetrics
    (f) [ ] Pediatrics
    (g) [ ] Ambulatory
    (h) [ ] Operating room
    (i) [ ] Behavioral Health
    (j) [ ] Step down
    (k) [ ] Neonatology
    (l) [ ] Research
    (m) [ ] PACU
    (n) [ ] Other (fill in) ____________

12. **How long have you been employed as a nurse at your current hospital?**

    Years_____________
Carefully read each question and from the given options provided, please select the response that best describes you by placing an X mark within the bracket.

13. How long have you been in the Nurse Manager position on your current unit?
   ______________ Yrs. _________ months

14. How long have you been a Nursing Manager during your overall career?
   ______________ Yrs. _________ months

15. How long have you been a nurse leader in any other capacity?
   ______________ Yrs. _________ months

16. Years of active registered nurse experience since graduation?
   ______________ Yrs. _________ months

17. How many registered nurses report to you directly? _____

18. How many non-professional staff report to you directly? ________________

Thank you for completing this questionnaire