FACTORS THAT FACILITATE AND INHIBIT ENGAGEMENT OF REGISTERED NURSES: AN ANALYSIS AND EVALUATION OF MAGNET VERSUS NON-MAGNET DESIGNATED HOSPITALS

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DEDICATION

This journey is dedicated to my family for all their support. To my husband, Mike, and our children, Nick and Gabby...I love you. Thanks for standing by me during this time in my life. I hope my journey will inspire you to pursue your educational interests and persevere to attain your dreams.

I dedicate this work to my parents, John and Marilyn Hagedorn, who showed me the importance of family, faith, education, hard work, and persistence. Thanks for always being there for me.

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Finally, this work is also dedicated to the nurses and leaders that I met during my dissertation study. The excitement of that experience makes me eager to continue on the research journey to impact the care of patients.

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ABSTRACT

Amy C. Wonder

FACTORS THAT FACILITATE AND INHIBIT ENGAGEMENT OF REGISTERED

NURSES: AN ANALYSIS AND EVALUATION OF MAGNET VERSUS

NON-MAGNET DESIGNATED HOSPITALS

Work engagement of registered nurses (RNs) has gained attention in health care, as an organizational process that is requisite to promoting optimal patient outcomes. Improving patient outcomes has caused a movement to examine what can be done to bridge the disparity between good and excellent care. Standards that enhance RN engagement to promote professional care are seen as vital to excellence. Magnet designation, awarded by the American Nurses Credentialing Center, signifies an organization meets such standards. Therefore, the purpose of this study was to evaluate whether a correlation exists between RN engagement and the organizational structures common to Magnet designation. This study also evaluated the influence of social and institutional demographics on the relationship between engagement and Magnet designation. The variables in this study included: age (generation), gender, nursing degree, years of RN experience, years of unit longevity, shift, hours scheduled and worked per week, percentage of time in direct patient care, nursing unit, and shared governance council participation. Finally, this study evaluated the influence of RN perception related to organizational support for work on the relationship between engagement and Magnet designation. A total of 370 RNs in

Magnet (n = 220) and non-Magnet (n = 150) designated hospitals completed a 17-item engagement survey and a 15-item demographic survey. Major findings of the study indicated no significant difference in RN engagement between nurses who work at Magnet versus non-Magnet designated hospitals. Within the Magnet sample, significant relationships were found between engagement and shift, years of RN experience in any clinical setting, and RN perceptions related to organizational support for work. Scatter plots for nursing experience showed positive slopes for total engagement, vigor, dedication, and absorption. Post-hoc results for RN perception related to organizational support for work identified the significant areas of engagement were total engagement, vigor, and absorption. No significant post-hoc results were noted for the variable of shift. Through significant and non-significant findings, several insights were gained about engagement. As a result of this study, leadership can better assess the needs of the RN workforce to provide what RNs perceive to be important to professional practice and RN engagement.

Mary L. Fisher, PhD, RN, Chair

For my grandmothers, Olivia Hagedorn and Alma Knie so many ways.	es, you influence my life in
	— Amy Hagedorn Wonder

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ABBREVIATIONS

Abbreviation Term

ANCC American Nurses Credentialing Center

EBP Evidence-based practice

IOM Institute of Medicine of the National Academies

RN Registered nurse

UWES-17 Utrecht Work Engagement Scale-17

CHAPTER I. INTRODUCTION

Work engagement of registered nurses (RNs), as an organizational process that is requisite to promoting optimal patient outcomes, has garnered increasing attention in health care and caused a movement to examine what can be done to bridge the disparity between good and excellent care. Many strategies, such as those common to the American Nurses Credentialing Center (ANCC) Magnet model (2008), have emerged to facilitate engagement of RNs in an effort to promote quality nursing care and patient outcomes.

The need for strategies to facilitate engagement of RNs prompted the need to examine organizational structures. Organizational structures often determine organizational priorities and resources that impact the engagement of RNs (Donabedian, 1988; Hockenberry, Walden, Brown, & Barrera, 2007; Kanter, 1979; Laschinger & Finegan, 2005; Laschinger, Wilk, Cho, & Greco, 2009). The importance of organizational structure is consistent with Donabedian's quality assessment framework (1988). Donabedian (1988) asserts that good structures promote good process such as engagement and as a result promote good outcomes.

Although the importance of RN engagement in the clinical setting is well known and has justified much study, a limited depth of knowledge exists related to the influence of the Magnet model[®] (ANCC, 2008) on engagement. Thus, the investigator conducted an analysis and evaluation of RNs working in Magnet and non-Magnet designated hospitals to determine if a relationship exists between Magnet model (ANCC, 2008) structures and engagement. The findings will

contribute to what is known about the importance of organizational structures and the ability of Magnet designation to facilitate significantly higher levels of RN engagement.

The nursing workforce represents great social and institutional demographic diversity. RNs are different in many ways including age (generation), gender, nursing degree, and years of experience. The RNs that comprise the workforce also are unique in relation to individual perceptions of organizational support for work. Hence, it also was imperative to analyze and evaluate these variables to determine the influence on the relationship between Magnet designation and RN engagement.

Background of the Study

The ANCC Magnet model (2008) recognizes the importance of organizational structures that support professional practice and exemplify excellence. These structures are seen in hospitals achieving Magnet designation and have been recognized to cultivate RN engagement (ANCC, 2010; Laschinger & Leiter, 2006; Laschinger, Wong, & Greco, 2006). Therefore, the study investigator explored the influence of organizational structures consistent with Magnet designation on the organizational process of engagement of RNs. Organizational structures commonly associated with Magnet designation include organizational commitment, professional development, adequate staffing (ANCC, 2008; Upenieks & Abelew, 2006), decentralized decision-making, and accessible transformational leadership (ANCC, 2008).

Another central purpose of this study was to determine if social and institutional demographic variables influence the relationship between Magnet designation and RN engagement. Today's RN workforce reflects social and institutional demographic differences including age (generation), gender, nursing degree, nursing role, nursing unit, years of RN experience, and unit longevity. Other institutional demographic differences also exist in assigned shift, hours scheduled and worked per week, and shared governance council participation. The final purpose of this study was to determine whether RN perceptions related to organizational support for work influence the relationship between Magnet designation and RN engagement.

The vision of the ANCC Magnet model is to "lead the reformation of health care; the discipline of nursing; and care of the patient, family, and community" (ANCC, 2008, p. 3). The goals of the ANCC Magnet Recognition Program are to promote quality in a setting that supports professional practice, to identify excellence in the delivery of nursing services, and to disseminate *best practices* in nursing services (ANCC, 2010).

Evidence on how professional practice creates a positive work environment that fosters engagement, retention, and development of nurses comes from more than 25 years of research on Magnet hospitals (ANCC, 2010). Fasoli described changes associated with Magnet hospital designation as "transformational" (2010, p. 19), aligning staff and the organization to create a culture focused on the structures and processes necessary to attain improved outcomes for patients and nurses (ANCC, 2008, 2010).

The Magnet model (ANCC, 2008) recognizes the importance of structures including transformational leadership, professional development, and adequate staffing as a means to promote professional nursing practice and more favorable outcomes. The culture of Magnet-designated organizations embraces evidence-based practice (EBP) to promote quality outcomes such as improved satisfaction (patient and nurse), decreased fall rates, shorter lengths of stay, fewer medication errors, and post-procedure complications (HCPro, 2007). Organizational structures are important to support the processes needed to create and sustain a culture of engagement that embraces change and makes EBP a reality.

Conceptual Framework

The ANCC Magnet model (2008; Figure 1) is consistent with

Donabedian's quality assessment framework (Donabedian, 1988; Figure 2).

Donabedian asserts that good structure (important to quality and performance) promotes good process (care-related activities) to promote optimal outcomes (health, knowledge, satisfaction) for patients, staff, and organizations (Donabedian, 1988; Gawlinski, 2008; Upenieks & Abelew, 2006). Donabedian's model (1988) recognizes the importance of structure as elements of the care setting including material resources (equipment), human resources, and organizational policies. Process, within Donabedian's model (1988), represents the practitioner's actions associated with care provision, while outcomes reflect the effects of care. The framework identifies the link between structure and process and outcome as a means to assessing quality (Donabedian, 1988).

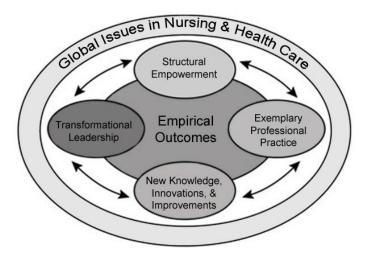


Figure 1. ANCC Magnet Model. Copyright 2008 American Nurses Credentialing Center. All rights reserved. Reproduced with permission (Appendix A) of the American Nurses Credentialing Center.

Structure → Process → Outcomes

Figure 2. Demonstrates the application of the principles of Donabedian's (1988) quality assessment framework to the ANCC Magnet model. *Journal of the American Medical Association*, 260(12), 1743–1748. Copyright 1988 American Medical Association. All rights reserved. Used with permission (Appendix B).

Based on Donabedian's model (1988) and the work of Upenieks and Abelew (2006), hospitals aspiring to attain Magnet designation need to have structures in place before attempting to alter processes such as engagement of RNs (Figure 3). The Magnet model (ANCC, 2008) supports structural factors such as organizational commitment, professional development, adequate staffing (Upenieks & Abelew, 2006), and transformational leadership to empower and develop staff (ANCC, 2008). After intentional structures are in place, organizational process can be developed and continually refined. The ultimate goal is optimal patient outcomes based on empirical evidence (ANCC, 2008, 2010).

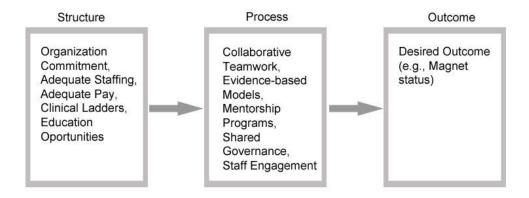


Figure 3. Flowchart, based on Donabedian's quality assessment framework and the work of Upenieks and Abelew, demonstrates that hospitals aspiring to attain Magnet designation need to have structures in place before attempting to alter processes such as engagement. Health Care Manager, 25(3), 243–253. Copyright 2006 Health Care Manager. All rights reserved. Used with permission (Appendix C).

Processes such as shared governance councils, engagement, collaborative teamwork, mentorship, and EBP models (Upenieks & Abelew, 2006) make it possible to achieve a "magnet [sic] culture" (p. 245). Intentional organizational structures and resources enable RNs to meet the challenges of the future instead of responding to existing problems (ANCC, 2008). As organizational culture emerges from continual dialogue about values (Seel, 2000) and priorities, it is imperative that conversations reflect a vision that unites the organization and RNs.

Creating a vision based upon what is valued provides direction for staff and promotes the development of an aligned effort for staff and the organization (ANCC, 2008; de Lusignan, Shaw, Wells, & Rowlands, 2005; Ingersoll, Witzel, & Smith, 2005; Kalisch, Curley, & Stefanov, 2007). The Magnet journey facilitates the cultural transformation necessary to foster engagement in a shared vision to create an environment of professional nursing practice (ANCC, 2008, 2010).

In 2008, the ANCC established a new vision with the revised Magnet model declaring,

ANCC Magnet recognized organizations will serve as the fount of knowledge and expertise for the delivery of nursing care globally. They will be solidly grounded in core Magnet principles, flexible, and constantly striving for discovery and innovation. They will lead the reformation of health care; the discipline of nursing; and care of the patient, family, and community." (p. 3)

The vision communicates the intention of Magnet to be involved in creating practice changes that are necessary to "the continued development of the nursing profession and quality outcomes in patient care" (ANCC, 2008, p. 3).

Successful integration of the Magnet model (ANCC, 2008) to achieve Magnet designation requires organizational support. Organizational support within Magnet-designated facilities is characterized by accessible leaders that foster decentralized decision-making, resources, and policies that support professional nursing practice, quality care, and a work/life balance (ANCC, 2008). Support is necessary to transform the professional structures and to facilitate the journey to excellence. Organizational support is critical because "when nurses perceive that their work environment supports professional practice, they are more likely to be engaged in their work" (Laschinger & Leiter, 2006, p. 265).

The current study largely focused on testing and evaluating the relationship between Magnet model (ANCC, 2008) structures and the process of engagement. Additionally, the study focused on social and institutional demographic differences and RN perceptions of organizational support for work

to determine whether specific variables influence the relationship between Magnet designation and engagement.

Engagement: Vigor, Dedication, and Absorption

Schaufeli, Salanova, Gonzalez-Roma, and Bakker define *engagement* as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (2002, p. 74). Schaufeli and Salanova define *vigor* as possessing "high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties" (2007, p. 180). *Dedication* speaks to "being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge" (Schaufeli & Salanova, 2007, p. 180). Absorption is characterized as "full concentration and being happily engrossed in one's work, whereby time passes quickly and one has difficulties to detach oneself from work" (Schaufeli & Salanova, 2007, p. 180).

A concept analysis completed by Wonder (2008) supported the definition of engagement by Schaufeli et al. (2002) and the sub-concept definitions for vigor, dedication, and absorption (Schaufeli & Salanova, 2007). Concept analysis begins with attention to antecedents for the concept as well as consequences (Walker & Avant, 2005).

In relation to antecedents of engagement, Laschinger et al. (2006) found that

it is reasonable to expect that when nurses are empowered to accomplish their work in meaningful ways, they are more likely to experience a fit between their expectations and their working conditions. That is, they will feel that they have reasonable workloads, control over their work, good working relationships, are treated fairly, are rewarded for their contributions, and that their values are congruent with organizational values. As a result, they are less likely to experience burnout and are more likely to be more engaged in their work. (p. 359)

The literature describes work engagement as the antithesis of burnout (Maslach & Leiter, 2008; Maslach, Schaufeli, & Leiter, 2001) when "energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness" (Maslach et al., 2001, p. 416). The belief that engagement and burnout are on opposite ends of the spectrum provides perspective because what reduces burnout theoretically should improve engagement and vice versa.

Studies of engagement and burnout have focused on organizational variables related to work such as work load, control, reward, community, fairness, and values (Laschinger & Finegan, 2005; Laschinger et al., 2006) as well as on individual variables such as demographic characteristics (Laschinger et al., 2006; Schaufeli, Bakker, & Salanova, 2006) and empowerment (Laschinger & Finegan, 2005). The complexity involved with the individual and organizational variables together creates the potential for engagement in one individual but burnout in another (Maslach et al., 2001; Schaufeli et al., 2006).

Models that attempt to "explain behavior in terms of the interaction of person and environment" (Maslach, 2003, p. 192) are better able to appreciate the complexity of the phenomenon rather than models that consider personal and structural factors separately. The following discussion relates the concept of engagement to the social and institutional demographic variables included in this study.

Engagement and Effects of Social and Institutional Demographic Diversity

Organizational structures consistent with the ANCC Magnet model (2008) have been found to yield high levels of nurse engagement (Laschinger & Leiter, 2006; Laschinger et al., 2006). Other values and priorities, however, also may influence engagement on a more personal level. Social and institutional demographics such as age (generation), gender, nursing degree, nursing unit, years of RN experience, and assigned shift may collectively or individually influence personal values, priorities, and levels of engagement. Because the convenience sample was not ethnically diverse, ethnicity was not included in this study.

Engagement and Generation Effects

Multi-generational diversity is not a new concept; however, with four generations of nurses currently in the workforce (Carver & Candela, 2008; Leiter, Jackson, & Shaughnessy, 2009; Sherman, 2006) it is important to assess the impact of age (aggregated by generation) on engagement. Generations are based upon groups of individuals who share birth years and common life experiences during formative years (Kupperschmidt, 2000; Stewart, 2006). Generational cohorts reflect a collective personality, attitude, and expectation toward authority, organizations, work, and self. While cohort characteristics predominantly are based upon observation of others and may not accurately reflect the values of all individuals, the cohort descriptions do provide a reference point to help others comprehend how life experience has affected the values,

work ethic, and behaviors of each generational group (Duchscher & Cowin, 2004; Jennings, 2000).

Common associations with each generation include the following:

- Veteran Generation (born 1925–1942) value hard work, loyalty,
 sacrifice, and experience (Carver & Candela, 2008).
- Baby Boomer Generation (born 1943–1960; Carver & Candela, 2008), the largest generational cohort (Sherman, 2008), "live to work" (Gursoy, Maier, & Chi, 2008, p. 451) and define personal identity by occupation.
- Generation X (born 1961–1981), the smallest generational cohort
 (Carver & Candela, 2008), "work to live" (Gursoy et al., 2008, p. 451)
 and seek a work–life balance (Carver & Candela, 2008).
- Generation Y (born 1982–2003) value meaningful work that is structured and supervised (Carver & Candela, 2008), seek a work–life balance, use technology, and work in team-based environments (Carver & Candela, 2008; Gursoy et al., 2008).

The literature acknowledges the uniqueness of generations (Hu, Herrick, & Hodgin, 2004; McNeese-Smith & Crook, 2003) suggesting that the work climate considered adequate by a previous nursing generation may not be adequate for today's generation (Farag, Tullai-McGuinness, & Anthony, 2009; Widger et al., 2007; Wilson, Squires, Widger, Cranley, & Tourangeau, 2008). "Determining how different generations perceive the workplace is the first step in developing strategies to improve the quality of work life for all workers" (Leiter,

Jackson et al., 2009, p. 102). Each cohort stands apart in relation to attributes, values, priorities, attitudes, and consequently, work expectations (Hu et al., 2004; Kupperschmidt, 2000; Lavoie-Tremblay, Leclerc, Marchionni, & Drevniok, 2010). Thus, it is important for organizations to understand each generation and to create structures that support each cohort within the workplace.

Therefore, this study investigated the influence of age (aggregated by generation) on the relationship between organizational structures common to Magnet designation and engagement. This research is intended to contribute to what is known about generational differences in RNs and what facilitates and inhibits the organizational process of engagement. This knowledge can serve as a foundation to influence organizational structures and processes to promote high quality care outcomes and nursing satisfaction.

Engagement and Gender Effects

According to the National Sample Survey of RNs conducted in 2008, male nurses are growing in representation and comprise 9.6% of the estimated three million licensed RNs living in the United States as of March 2008 and licensed since the year 2000 (U.S. Department of Health and Human Services Health Resources and Services Administration, 2010). As the RN workforce reflects many social and institutional demographic differences, "expanded knowledge of gender influences will help nurses become more able leaders and group members in the various work settings of the profession and pave the way for the leadership of the future" (Rudan, 2003, p. 185).

Gender-bias and mixed-gender effects on nursing have been studied repeatedly. As gender-related differences exist in characteristics such as leadership style, socialization, and communication (Rudan, 2003), it was imperative to explore whether gender influenced the relationship between Magnet designation and engagement. An intention of this study was to gain understanding about the influence of gender on organizational structure in relation to what facilitates and inhibits engagement in a progressively gender-diverse nurse workforce.

Engagement and Nursing Education Effects

The role of nursing education was a vital component to explore in this study. Different levels of education can influence a nurse's practice, perception of the work environment (Atkinson, Turkel, & Casby, 2008; Strickland & O'Leary-Kelley, 2009), attitude (Koehn & Lehman, 2008), values, and priorities. Consequently, these differences may facilitate or inhibit engagement of RNs. Because the nurse's attainment of a bachelor's degree and higher degrees have been associated with improved patient outcomes (Aiken, Clarke, Cheung, Sloane, & Silber, 2003), it is important to contribute to what is known about nursing education and the process of engagement in an educationally diverse RN workforce.

A small pilot study completed by Wonder (2009) in a Magnet hospital, found significant higher levels of RN engagement (total engagement, vigor, dedication, and absorption) in baccalaureate degree nurses when compared to associate degree nurses. An additional intention of the current study was to

determine whether statistical significance could be repeated with a larger Magnet sample. Additional evidence with a larger study would contribute more support for formal education to favorably influence the relationship between Magnet designation and RN engagement.

Engagement and Experiential Effects

Experiential effects such as years of RN experience in any clinical setting and years of RN experience in the current clinical setting (unit longevity) also may influence and reflect individual values. Furthermore, the type of nursing unit also may influence levels of nursing engagement because different units may have different leadership and may experience different structural priorities. A small pilot study conducted by Wonder (2009) found that greater experience and unit longevity correlated with greater levels of engagement. Although the findings did show a positive trend, the results were not statistically significant. For that reason this study explored this trend with a larger Magnet sample.

Because many stereotypes exist in relation to experiential effects and engagement versus burnout, it was imperative to include these variables in the study. It was the intention of this research to contribute empirical knowledge on the influence of experiential effects on the relationship between Magnet designation and engagement. Gaining knowledge on the influence of experiential effects will contribute to what is known about organizational structure and what facilitates and inhibits engagement. This is vital as the nurse workforce prepares for the anticipated retirement of experienced nurses.

Engagement and Work Time Effects

Hours scheduled per week, hours worked per week, and assigned shift are individually and collectively important to consider in relation to levels of engagement. This is especially important because both Magnet forces (ANCC, 2010) and the younger nurse workforce represented by Generations X and Y value a work–life balance (Gursoy et al., 2008). Additionally, the older nurse workforce represented by Baby Boomer and Veteran Generations may experience more physical difficulties with extended or rotational shift hours as they age and remain in the workforce. As a result, this study explored the influence of work time effects on the relationship between Magnet designation and engagement.

Engagement and Nursing Role

Nursing roles are reflective of job responsibilities, priorities, and resources such as time to implement research (Atkinson et al., 2008; Koehn & Lehman, 2008; Melnyk et al., 2004) and authority to initiate changes (Atkinson et al., 2008; Strickland & O'Leary-Kelley, 2009). Nursing role often corresponds with level of education and the RN's knowledge of research (Koehn & Lehman, 2008; Strickland & O'Leary-Kelley, 2009) or access to others with knowledge of research (Koehn & Lehman, 2008).

Different RN roles commonly reflect dissimilarity in job responsibilities and the percentage of time in direct patient care activities. This difference may affect how much time is available for engagement in activities that promote professional practice, which may contribute, in turn, to a difference in how barriers and

facilitators are experienced or perceived (Flynn & McCarthy, 2008; Strickland & O'Leary-Kelley, 2009). Thus, it was important for this study to examine the influence of nursing role (measured as percentage of time in direct patient care activities) on the relationship between Magnet designation and engagement.

Engagement and Shared Governance

Consistent with Donabedian's quality assessment framework (1988) and the ANCC Magnet model (2008), organizational structures pertinent to quality and performance positively influence processes such as engagement and promote good outcomes (Upenieks & Abelew, 2006). Organizational structures commonly associated with the Magnet model (2008) such as shared decision-making and professional development (ANCC, 2008) are intended to facilitate empowerment of RNs. Shared governance councils are one way to empower RNs and to promote engagement in practice decisions; therefore, it was important for this study to identify the influence of shared governance council participation on the relationship between Magnet designation and RN engagement.

Engagement and Nurse Perceptions of Organizational Support for Work

The structures of the ANCC (2008) Magnet model reflect the importance of professional practice as well as the cultural transformation necessary to attain and sustain this level of practice. Healthcare administrators may feel supportive of professional nursing practice and perceive the work environment as having adequate resources to support and empower nurses to effectively perform the

job. Nurses, however, may have a different perception of the availability of support in the work environment.

Jenaro, Flores, Orgaz, and Cruz (2010) found perception of support in the workplace to be a significant predictor of engagement in nurses. Healthcare administrators often are responsible for decisions that influence care environments, resources, and the support needed to foster engagement. Thus, it is important to have an accurate assessment of how RNs perceive the care environment and the resources that are in place to empower, support, and promote professional practice.

The final intention of this study was to determine the influence of the RN perception of organizational support for work on the relationship between Magnet designation and engagement. Within this study, organizational support for work is characterized as administration supporting EBP, the work environment supporting professional practice, and empowerment based on resource availability to perform the job. As hospitals strive to promote work environments to support nursing, it is vital to determine nursing's perception of the structures that are in place in order to facilitate engagement, promote EBP, and improve patient outcomes and nursing satisfaction.

Statement of the Problem

It has been ten years since the Institute of Medicine of the National Academies' (IOM) Committee on Quality of Health Care in America published Crossing the Quality Chasm: A New Health System for the 21st Century (2001).

Yet, successful, seamless integration of EBP remains a challenge. The IOM

report identified a gap in practice (2001). The report described the gap as the difference between the level of care that patients could receive and that which they actually do receive, noting deficiencies throughout health care (IOM, 2001). The IOM's (2001) view of excellence reflects care decisions that are evidence-based. This is consistent with the ANCC Magnet model (2008) to facilitate structures such as professional development, staffing, and time to enable EBP models to exemplify excellence in practice.

The complexity and success of research utilization in practice is based on individual engagement of practitioners and the practice environment (Atkinson et al., 2008; Johansson, Fogelberg-Dahm, & Wadensten, 2010). Within the practice environment, nursing education and leadership are vital components in creating and influencing programs, policies, procedures, and cultures that foster nurses' engagement in quality care efforts. Organizational priorities impact the availability of resources provided for nurse engagement in evidence-based initiatives (Atkinson et al., 2008; Newhouse, 2007). Attention to the contextual factors of structure will facilitate engagement in practice changes (Carlson & Plonczynski, 2008; Strickland & O'Leary-Kelley, 2009) necessary to promoting optimal patient outcomes.

Nursing leadership committed to the implementation and use of EBP can influence the structures, processes, and deployment of resources to transform the care setting (ANCC, 2008; Newhouse, 2007). Such commitment is best facilitated by a shared vision with staff as stakeholders (Hockenberry et al., 2007; Kalisch et al., 2007). The vision is a unique and powerful catalyst for change that

enables the organization and individuals to work together to reach a common goal (Hockenberry et al., 2007; Kalisch et al., 2007; Newhouse, 2007). A vision can start small by facilitating unit-based initiatives (Kalisch et al., 2007) or serve as the "motivating image of desired changes that result in achievement of excellence in clinical practice throughout the healthcare organization" (Hockenberry et al., 2007, p. 222).

While the shared vision can serve as a catalyst, it is engagement of the staff and nursing leadership that supplies the energy necessary to actuate the change (Hockenberry et al., 2007). Therefore, leadership's attention to engagement strategies and techniques within facilities committed to creating a culture of EBP is an essential part of creating a culture of quality as defined by the IOM (2001) and champions of EBP. Organizations that aspire to achieve Magnet designation covet this culture.

Strategies to promote EBP are consistent with approaches that facilitate organizational change (Hockenberry et al., 2007; Upenieks & Abelew, 2006) by enhancing engagement individually and organizationally. Examples of strategies to facilitate engagement include creating a shared vision (Hockenberry et al., 2007; Newhouse, 2007), involving staff early in anticipated change (Gawlinski, 2008; Kalisch et al., 2007), and promoting *buy-in* by helping staff understand the reason or meaning behind the initiative (Moody & Pesut, 2006). Other examples of strategies include creating shared governance councils (Atkinson et al., 2008; Gokenbach, 2007), promoting education (Strickland & O'Leary-Kelley, 2009;

Wonder, 2009), and facilitating mentorships (Atkinson et al., 2008; Gokenbach, 2007).

It is through intentional strategies to strengthen organizational structures and processes that nurses can strive to sustain EBP and positively affect patient outcomes (Burritt, Wallace, Steckel, & Hunter, 2007). Organizational support of structure and process requires mobilizing job resources to enable engagement (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007); thus, facilitating the engagement of RNs will help close the gap between evidence and practice.

Context of the Study

This research study assessed levels of engagement in RNs in three acute care hospitals in a U.S. Midwestern state (two Magnet-designated and one non-Magnet designated). All consenting RNs working on a participating inpatient unit that provides 24-hour care (medical, post-surgical, obstetrics, pediatric, mental health, intensive care, emergency services, and rehabilitation) were included in the study. The study excluded participants only if they were working in any capacity at more than one participating study site.

Inclusion and exclusion criteria were intentional and designed to assist the researcher in evaluating each research question. A review of current literature and a previous pilot study by Wonder (2009) guided the process of determining both inclusion and exclusion criteria.

Research Questions

The study addressed the following research questions:

- 1. What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?
- What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?
- 3. Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?
- 4. Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement?

All significant data were subject to post-hoc analysis.

Purpose of the Study

Magnet-designated organizations are recognized for creating work environments that support professional practice (ANCC, 2008), which also has been found to promote engagement in nurses (Laschinger & Leiter, 2006). Therefore, the purpose of this descriptive, correlational study was to assess levels of engagement (total engagement, vigor, dedication, and absorption) in a sample of RNs working at Magnet and non-Magnet designated hospitals. It was

also the purpose of this study to analyze and evaluate the relationship between levels of engagement (total engagement, vigor, dedication, and absorption) in RNs and Magnet designation. As limited study has been done on social and institutional demographics in relation to RN engagement, another purpose was to determine if social and institutional demographic factors influence the relationship between Magnet designation and engagement in RNs. Finally, whereas limited study has been done on RN perceptions of organizational support for work in relation to RN engagement, the final purpose was to determine if this factor influences the relationship between Magnet designation and engagement in RNs.

The collective knowledge gained by this study is important in order to identify factors that facilitate and inhibit engagement among members of the RN workforce. Such knowledge and evidence can be used to justify the development of organizational structures, policies, and administrative practices to support the engagement of RNs in professional practice in hospital environments.

Additionally, such knowledge may have academic implications to facilitate engagement in the RN workforce.

Significance of the Study

Despite research to support the use of EBP, only a small percentage of nurses and interdisciplinary healthcare professionals consistently utilize this empirical approach to care (Pravikoff, Tanner, & Pierce, 2005; Shrestha-Ranjit & Manias, 2010). This is a concern because the IOM (2001) described the gap in practice as the difference between the level of care that patients could receive

and that which they actually do receive. As a consequence, patient outcomes are compromised and healthcare costs continue to rise.

The Joint Commission (2011), IOM (2001, 2008), and ANCC Magnet model (2008) recommend EBP as "an essential component for health care providers" (Smith & Donze, 2010, p. 61). In fact, the IOM projected that "by the year 2020, 90% of all clinical decisions will be supported by accurate, timely, and up-to-date clinical information that is supported by the best available evidence" (2008, p. 189). For this plan to be successful, EBP must be integrated into daily clinical practice (Hockenberry et al., 2007), which will require engagement of RNs to embrace the changes necessary to make this ideal a reality.

Although research informs the innovation, attention is needed to determine how to best accelerate the use of research in practice. Because change is necessary to reflect current best evidence in policies and daily practice, EBP requires a culture that embraces change. Engagement is a necessary requisite of change. The ANCC Magnet model (2008) transcends that level of expectation with required organizational structures intended to promote this desirable culture of engagement. The desired culture reflects a transformation from fixing existing problems to a state of anticipating necessary changes to avoid problems and as a result facilitating better outcomes (ANCC, 2008). Findings from this study will describe the relationship between levels of engagement in RNs and Magnet designation. Findings from this study also may influence whether acute care hospitals choose to integrate the Magnet model (ANCC, 2008).

Findings from this study also will describe social and institutional demographic factors that influence the relationship between Magnet designation and engagement. Study findings may influence future studies to determine additional or alternative organizational structures to support unique groups within the RN workforce. Findings also may justify structures to facilitate engagement for all RNs.

Generational findings may identify a need for additional study of nurse work schedules in relation to the work–life balance. A small pilot completed by Wonder (2009) found a significant difference in the sub-scale of vigor by generation. Post-hoc analysis broached significance (p = 0.059) and found that the Baby Boomer Generation possessed a greater level of vigor than Generation Y. These findings reflected the Baby Boomer Generation's "willingness to invest effort in one's work and persistence even in the face of difficulties" (Schaufeli & Salanova, 2007, p. 180). These findings were consistent with the belief that the Baby Boomer Generation "lives to work" (Gursoy et al., 2008, p. 451) and defines personal identity by occupation. Therefore, findings of this study may justify future studies of how to facilitate and sustain vigor in all generations of RNs.

Findings related to gender may have implications in a variety of settings. A growing presence of male nurses in the hospital setting and in a variety of roles (U.S. Department of Health and Human Services, 2010) reinforces the need to identify the influence of gender on the relationship between organizational

structures common to Magnet designation and engagement. Findings may have implications in clinical practice, leadership, and academics.

Findings also may have implications in nursing education. Wonder's pilot study (2009) found that baccalaureate degree nurses had significantly higher levels of engagement (total engagement, vigor, dedication, and absorption) when compared to associate degree nurses. Thus, findings of this study may contribute more evidence to support formal nursing education. Findings also may justify future studies of curriculum and pedagogy. The Magnet model component of Structural Empowerment reflects an emphasis on professional certification, career development, and formal education (Magnet Force 14; ANCC, 2008, 2010). Therefore, the findings of this study also may add support to the Magnet model's emphasis on professional development (ANCC, 2008, 2010).

The nursing profession is growing in social and institutional demographic differences including age, education, gender, and experience. These differences also are reflected within the academic institutions that educate nurses. Findings from this study may justify future studies to determine how to meet the needs of all nursing students, regardless of social and institutional demographic differences.

To promote optimal outcomes for patients it is imperative that healthcare facilities establish and sustain a culture of EBP, which requires providing nurses with the support and resources necessary for engagement (Atkinson et al., 2008; Koehn & Lehman, 2008; Strickland & O'Leary-Kelley, 2009). Thus, findings from this study may influence how administrators and nurse managers lead, support,

and educate the RN workforce. Findings also may influence future Magnet model revisions.

The support and resources necessary for engagement of RNs require careful assessment as a nurse's individual needs may be influenced by personal characteristics, education, experiences, and perceptions. "While it is logical to expect that empowering working conditions that foster engagement at work should be important for all nurses, regardless of their age and experience," limited studies have found empirical evidence to support this proposition (Laschinger et al., 2009, p. 637). Therefore, the findings may contribute evidence on factors that influence the relationship between a recognized model (ANCC Magnet model, 2008) and levels of engagement. Findings also may justify future studies on strategies to enhance engagement in the RN workforce.

Study Assumptions

It was assumed that the Magnet-designated hospitals that participated in this study had fully implemented and maintained the structures of the ANCC Magnet model (2008). On the contrary, it was assumed that the non-Magnet facility that participated in this study had not fully implemented or maintained the structures of the ANCC Magnet model (2008).

Organization of the Study

This research study is organized into five chapters. Chapter I began with an introduction and then presented a background of the study, conceptual framework, and construct of engagement. Chapter I also offered information on engagement and effects of social and institutional demographic differences and

RN perception related to organizational support of work. The chapter concluded with a statement of the problem, context of the study, research questions, purpose of the study, significance of the study, and study assumptions.

Chapter II is a comprehensive literature review that begins with the concept of engagement and unfolds to include the significance of structures that facilitate empowerment and engagement including administrative support, person-job fit, and contagion. The literature addresses engagement to offer perspective on the continuum with burnout. Engagement also is presented in relation to EBP and followed by the conceptual models including the ANCC Magnet model (2008) and Donabedian's quality assessment framework (1988). In relation to engagement, the literature review also addresses the significance of age, gender, nursing education, nursing experience, unit longevity, nursing unit, assigned shift, time commitment, nursing role, shared governance council participation, and RN perceptions of organizational support for work.

Chapter III is a presentation of methodology including information on study design, sample, study procedure, protection of human subjects, variables, and instrumentation. Chapter III also presents the research questions, null hypotheses, and associated data analysis. Chapter IV is a presentation of descriptive statistics and study findings. Chapter V is a summary of findings, implications, limitations, and suggestions for future study.

CHAPTER II. REVIEW OF THE LITERATURE

The following is an integrative review of literature that supports the current study. The review of literature begins with the concept of engagement then unfolds to include the significance of structures that facilitate empowerment and engagement including administrative support, person-job fit, and contagion. The literature addresses engagement to offer perspective on the continuum with burnout. The review presents engagement in relation to EBP, followed by the conceptual models including the ANCC Magnet model (2008) and Donabedian's quality assessment framework (1988). In relation to engagement, the literature review also addresses the significance of age, gender, nursing education, nursing experience, unit longevity, nursing unit, nursing role, shift, time commitment, shared governance council participation, and RN perceptions of organizational support for work.

Engagement

Engagement is highly visible in nursing in many different ways; however, the concept of engagement that this study focused on is related to nurse engagement as a requisite of making EBP a reality. The intention of this study was to identify factors that facilitate and inhibit engagement in RNs. Thus, this study focused on the relationship between levels of engagement (total engagement, vigor, dedication, and absorption) in RNs and Magnet designation.

Definitions: Engagement, Vigor, Dedication, and Absorption

A previous concept analysis by Wonder (2008) found consistency with the definitions of engagement and components of engagement by Schaufeli et al. (2002). Schaufeli et al. (2002) utilized confirmatory factor analysis to reveal a three-factor structure of engagement. Engagement was defined as "a positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74). Schaufeli et al. (2002) further defined the component concepts within the definition of engagement.

Schaufeli et al. (2002) described *vigor* as possessing "high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties" (p. 74); *dedication* as "a sense of significance, enthusiasm, inspiration, pride, and challenge" (p. 74). Schaufeli et al. (2002) further described dedication as "a particularly strong involvement" that transcends identification with one's work (p. 74). "In a qualitative sense, dedication has a wider scope by not only referring to a particular cognitive or belief state but also including the affective dimension" (Schaufeli et al., 2002, p. 74–75). Schaufeli et al. (2002) characterized *absorption* as being "fully concentrated and deeply engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work" (p. 75).

Schaufeli et al. defined *engagement* and the sub-concepts of vigor, dedication, and absorption in 2002. Research on engagement reflects consistent use of these definitions (Wonder, 2008). The following literature review presents

a growing body of evidence that has been established as a foundation of knowledge upon which to build.

Significance of Structures that Facilitate Empowerment and Engagement

Environments that promote nurse engagement are vital to patients, healthcare facilities, nurses, and colleagues. Empowerment is one way to cultivate an environment of engagement. This is not a new line of thought; Kanter's work from 1977 on empowerment theorized that structures in the work environment influence employee attitudes and behaviors (Kanter, 1977).

Kanter continued to develop the theory of empowerment and in 1979 recognized the importance of organizational structures that support employees, terming this as *power*. In relation to organizational structure, Kanter (1979) recognized the importance for an organization to have resources available to staff. When staff members have the structures or resources needed to perform, such as access to information, support, and resources, theoretically, the power is "on" and the staff members are able to perform effectively (Kanter, 1979, p. 66). When the power is "off," the staff members are unable to perform effectively at work (Kanter, 1979, p. 66).

Laschinger et al. (2009) studied the impact of empowering work conditions on work effectiveness and found work engagement to be a mediator through which empowerment influenced work effectiveness. Laschinger et al. (2009) found that "regardless of the amount of experience in the profession, empowerment has a strong effect on work engagement which subsequently affects work effectiveness" (p. 645). High levels of empowerment have been

found to affect work engagement by enabling greater feelings of control, or autonomy, (Laschinger & Finegan, 2005; Upenieks et al., 2008) and congruence between personal and organizational values (Laschinger & Finegan, 2005).

Laschinger and Finegan (2005) studied the relationships between structural empowerment, the six areas of work life that promote engagement, and the effect on staff nurses' health (mental and physical). Laschinger and Finegan (2005) found support that structural empowerment (specifically, access to opportunity, information, support, resources, and formal and informal power) had a direct positive effect on five of the six areas of work life. Those areas of work life involved the level of control over work, manageable workloads, reward for contributions to meeting organizational goals, working relationships, and fair procedures throughout the organization (Laschinger & Finegan, 2005). As a result, an indirect effect on work engagement also was observed (Laschinger & Finegan, 2005).

Bakker, Demerouti, and Euwema (2005) studied the job resources of social support, relationships with supervisors, autonomy, and performance feedback, finding job resources to be "the most important predictors of (dis)engagement" (p. 177). Job resources have been the focus of much study with findings supporting a positive influence on engagement specifically (Hakanen, Schaufeli, & Ahola, 2008; Schaufeli & Bakker, 2004b). These findings are consistent with Kanter's theory of empowerment (1979).

Schaufeli and Bakker (2004b) discovered "a motivation process" (p. 308) with engagement serving as a mediator between job resources and turnover

intention; yet other studies have found the relationship between engagement and job resources to be reciprocal in nature (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). This finding suggests the presence of a gain cycle of reinforcement purporting that when job resources increase, work engagement likely will increase, resulting in more job resources, and thus more engagement (Schaufeli, Bakker, & van Rhenen, 2009).

Xanthopoulou et al. (2009), consistent with the work of Bakker and Demerouti (2007), found evidence "that employees who experience autonomy at work, have supportive colleagues, receive proper coaching and high-quality feedback, and have opportunities for professional development possess the instrumental means and are intrinsically motivated to achieve their work goals" (p. 241). However, Bakker and Demerouti (2007) contend that job resources also can serve as extrinsic motivation to achieve work goals. "In either case, be it through the satisfaction of basic needs or through the achievement of work goals, the outcome is positive and engagement—a fulfilling, positive work-related state of mind—is likely to occur" (Schaufeli & Bakker, 2004b, p. 298).

Significance of Administrative Support to Engagement

Administrative support has been found to be a driving force in creating an environment of engagement (Draper, Felland, Liebhaber, & Melichar, 2008; Laschinger & Leiter, 2006). Administrative support can determine financial priorities (Draper et al., 2008) that can serve as either facilitators or barriers to work engagement. Some priorities that have been recognized as facilitators to engagement include effective nursing leadership that enables adequate staffing

resulting in collaborative relationships (Laschinger & Leiter, 2006) and professional development programs (Upenieks & Abelew, 2006).

In the same manner that administrative support can influence fiscal priorities, when priorities are not in line with what is needed the practice environment can reflect organizational barriers to engagement in EBP. Atkinson et al. (2008) found that nurses perceived the top barriers to research as a lack of authority to change patient care procedures and "lack of time" (p. 366), indicated by such comments as "no time to review research," "no time to talk about research findings," and "it takes time to access research journals" (p. 366).

Job resources commonly are equated with fiscal resources; Aiken and Poghosyan (2009) found, however, that the structures of Magnet could facilitate administrative support and practice change in countries challenged by fewer resources than the United States. Therefore, even with limited resources, the "same potential for transforming nursing practice" is possible (Aiken & Poghosyan, 2009, p. 166). Although smaller or rural hospitals may determine that Magnet is too costly to pursue, these findings raise awareness that those financially challenged organizations can make changes to enhance RN engagement to promote EBP and improve patient outcomes without formally applying for Magnet designation.

Another aspect of administrative support and engagement is in relation to organizational structure. Research has found evidence that staff nurses prefer to work in hospital settings where staff nurses have power to exercise judgment and execute changes without having to work through hierarchical approval (Upenieks

et al., 2008). In relation to having power to exercise judgment, the Robert Wood Johnson Foundation and the Institute for Healthcare Improvement created Transforming Care at the Bedside (TCAB) to improve safety and quality by promoting engagement and empowerment at all levels (Rutherford, Lee, & Greiner, 2004; Upenieks et al., 2008). Upenieks et al. (2008) tested the initiatives of TCAB on changes in nurse vitality to find relationships with empowerment, increased accountability, and ownership of the unit—allowing nurses the authority to try or discontinue practices without working through the ranks for approval (Upenieks et al., 2008).

Yet another aspect of administrative support is promoting job satisfaction. Simpson (2009) studied medical—surgical RNs to find the job satisfaction components of professional status, interaction, and thinking of quitting were significant predictors of engagement in RNs. This was consistent with Jenaro et al. (2010) who found that satisfaction with job position was the variable that helped to explain the engagement sub-concepts of vigor and dedication.

Schaufeli and Bakker (2004b) also studied engagement in relation to job satisfaction. Evidence was found that engagement is a mediator between job resources (specifically support from superiors, coaching, and feedback on performance) and the job satisfaction component of turnover intention (Schaufeli & Bakker, 2004b). Turnover is critical to consider since a growing shortage of nurses will impact workload, affecting the amount of time available for nurses to collaborate, develop and maintain relationships, pursue professional development, and provide quality care that reflects EBP. Because "those who are

less satisfied on the job may engage in cognitive withdrawal from their job and the organization" (Kalliath & Morris, 2002, p. 652), it is important for administration to consider strategies to promote job satisfaction as a means to promote engagement (Simpson, 2009).

Significance of Person-Job Fit to Engagement

Studies have found that work engagement results from a match between personal expectations of the work environment and actual work conditions that exist (Laschinger & Leiter, 2006; Laschinger et al., 2006). When nurses are empowered to participate in decision-making and have more control in practice, greater levels of work engagement are possible. Laschinger et al. (2006) found that empowering organizational structures play an important role in creating positive responses to work and enhancing person-job fit. "When managers create organizational structures that empower nurses to deliver optimal care, they promote a greater sense of fit between nurses' expectations of work life quality and organizational goals and processes, thereby creating greater work engagement and lower burnout" (Laschinger et al., 2006, p. 364).

Looking back, Kahn conceptualized work engagement as a connection between the members' "selves" and the work role (1990, p. 694). This is consistent with more recent work that indicates "vitality is energy nurses get when they are in contact with that which calls and pushes them onward" (Vinje & Mittelmark, 2008, p. 199). A profession where core values can be shared and lived is important to promoting zest for work (Vinje & Mittelmark, 2008). A greater degree of match or fit, between a job and person increases the likelihood for

engagement at work (Maslach & Leiter, 1997). Therefore, organizational commitments to structures that promote job engagement also demonstrate a commitment to the well-being of individuals.

The Significance of Contagion

Engagement at the team level has been found to reflect individual team members' level of engagement, suggesting that engagement is contagious (Bakker, van Emmerik, & Euwema, 2006; Bakker & Xanthopoulou, 2009).

Laschinger et al. (2009) indicated that

nurses who engage positively in their work through feelings of vigor, dedication, and absorption in their work can make a difference to the quality of nursing work life for others in hospital settings, by inspiring their colleagues and making work in this setting attractive to nurses within the system and newcomers to the profession. (p. 645)

Researchers also have utilized the foundations of social psychology to gain understanding about the social aspects of the work environment and how engagement (or conversely burnout) may be transmitted. Emotional contagion is one form of social transmission, which asserts "emotions can be caught" (Hatfield, Cacioppo, & Rapson, 1994, p. 7). One such means of transmission is the tendency for individuals to "mimic and synchronize their movements with the facial expressions, voices, postures, movements, and instrumental behaviors of others" (Hatfield et al., 1994, p. 10), making it possible for people to "catch others' emotions moment to moment" (Hatfield et al., 1994, p. 11).

Another way that engagement may be emotionally transmitted is by individuals imagining how the other individual feels and then sharing in the emotion (Bandura, 1969; Hatfield et al., 1994). This is of particular interest to

researchers because nurses often are recognized for showing empathy and consciously paying attention to the emotions of others, making it possible to "catch" the emotions of others (Hatfield et al., 1994, p. 10–11).

It is also of interest that nurses often work in teams or units, which may enhance the social influence on colleagues (Bakker et al., 2006). According to Laschinger and Finegan (2005), when nurses felt rewarded for work, a greater sense of community among nurse colleagues was experienced. Therefore, creating an environment that promotes engagement of the organization as a whole also may facilitate or sustain engagement of individuals.

Engagement versus Burnout

As noted by Schaufeli et al. (2002) engagement is characterized by vigor, dedication, and absorption. Over the years many studies have examined engagement as the antithesis of burnout (Gonzales-Roma, Schaufeli, Bakker, & Lloret, 2006; Schaufeli, Taris, van Rhenen, 2008). Burnout and engagement were termed "antipodes" by Schaufeli et al. (2002, p. 87), while Maslach and Leiter (1997) described burnout as the erosion of work engagement.

To provide a comparison between engagement and burnout, empirical evidence has been found to support two of the three factors of engagement and burnout in relation to being polar opposites. Vigor (one dimension of engagement) and exhaustion (one dimension of burnout) are scalable at opposite ends of the bipolar continuum of energy (Gonzales-Roma et al., 2006). Dedication (another dimension of engagement) and cynicism (another dimension of burnout) are scalable at opposite ends of the bipolar continuum of

identification (Gonzales-Roma et al., 2006). A third dimension of burnout is a lack of professional efficacy; however, the role of efficacy may be more of a bipolar dimension with high levels of efficacy more likely to be observed in engagement (Schaufeli & Bakker, 2004b; Schaufeli et al., 2008).

The bipolar dimensions (exhaustion versus vigor and cynicism versus dedication) are influenced by the workplace factors of value congruence (Laschinger & Finegan, 2005; Leiter, Frank, & Matheson, 2009; Maslach & Leiter, 2008), community, fairness (Laschinger & Finegan, 2005; Maslach & Leiter, 2008), workload (Laschinger & Finegan, 2005; Leiter, Frank et al., 2009), and reward (Laschinger & Finegan, 2005). Therefore, it is important to consider the effect of organizational structures on promoting engagement and diminishing burnout. Identifying key organizational structures may enable hospitals to facilitate and sustain engagement.

Engagement in EBP

The IOM (2001) defined EBP as "the integration of best research evidence with clinical expertise and patient values" (p. 147). Newhouse (2007) addressed the connection between nursing and EBP by stating that "nursing is a science and a profession" (p. 22) and that by being a science it has "its own body of knowledge that guides decisions and practice...based on the best available evidence" (p. 22). Establishing an infrastructure to support EBP will facilitate nurse engagement in clinical decisions upon which to base practice to effect better outcomes for nurses and patients (Newhouse, 2007). When evidence is

applied to care and achieves positive outcomes for patients, the true intention of EBP is realized (Hockenberry et al., 2007).

It is important to transform daily practice, to reflect RNs' confidently questioning processes and seeking evidence-based knowledge upon which to guide decisions and practice (Newhouse, 2007; Pravikoff et al., 2005). This transformation is necessary to help close the gap between current nursing practice and EBP.

Pravikoff et al. (2005) conducted a descriptive, exploratory survey of RNs in the United States (*n* = 760). The average study participant was 40–49 years of age, white, female, hospital-based, with a diploma or an associate degree earned in 1984 or earlier (Pravikoff et al., 2005). When researchers asked participants how often the nurse needed to seek information to support everyday practice, 61% of the participants reported once per week to several times per week, and 67% of the participants indicated they "always or frequently" sought information from a colleague instead of written evidence (Pravikoff et al., 2005, p. 45). Furthermore, the findings noted that 58% of the participants reported not using research reports at all to support practice and 82% reported never using a hospital library (Pravikoff et al., 2005).

Thus, organizational structures that support EBP also are important to transform nursing practice. Organizational support of EBP can take the form of leadership. Leadership guides organizational policies, processes, and priorities. Administrative support of EBP recognizes the importance for resources that

promote education, research, and mentoring (Newhouse, 2007) to develop knowledge and skills that facilitate engagement in EBP.

Leadership also can guide fiscal priorities to initiate and develop structures that educate, support, and involve staff creatively in relation to research and EBP (Gawlinski, 2008). A mixed-method study by Atkinson et al. (2008) discovered one of the top barriers to research utilization was a lack of autonomy. An organization that supports nurses' engagement in EBP often enables a perception of autonomy (Kramer & Schmalenberg, 2004), which has been linked to enhancing empowerment (Upenieks et al., 2008), and empowerment has been found to positively impact engagement (Laschinger & Finegan, 2005). Hence, autonomy can be appreciated as both an antecedent and a consequence of engagement.

Another fiscal priority that can be perceived as a barrier to research utilization is time (Atkinson et al., 2008; Koehn & Lehman, 2008; Melnyk et al., 2004). Thus, it is imperative that time is available to facilitate engagement in research and EBP on a daily basis and not "only if time allows" (Atkinson et al., 2008, p. 367).

Education also can facilitate engagement in EBP. Student learning and understanding of engagement can impact the level of engagement upon entering practice. When a task is valued, it can contribute to the level of engagement (Vinje & Mittelmark, 2008). In an effort to prepare new nurses for engagement and EBP, universities are incorporating EBP into the curriculum (Newhouse, 2007). Learning about engagement and EBP in nursing school also may help

students value the importance of these concepts in practice. It is important to acknowledge also that a culture of sustained engagement has been linked to organizational structures that support continuing education and professional development (ANCC, 2010; Gawlinski, 2008; Upenieks & Abelew, 2006).

Although an abundance of examples exist on how research positively impacts patients and nurses, a gap exists in relation to consistent engagement in research utilization. The IOM established a goal that by the year 2020, 90% of all clinical decisions will be supported by best available evidence (2008). To reach this goal and close the gap on EBP, the IOM (2001) declared the need to redesign the infrastructure of healthcare systems to improve structural factors and reduce obstacles to EBP. To attain this goal, researchers need to focus attention on efforts that elevate the level of practice by preparing and supporting nurses for the rigors of EBP. To attain this level of practice, it is imperative to establish a team effort between institutions of learning, research, and health care to effectively prepare new nurses for engagement in EBP.

ANCC Magnet Model

The ANCC Magnet model (2008) recognizes the importance of organizational structures that support professional practice and exemplify excellence. The Magnet model (2008), consistent with the IOM report (2001), recognizes the importance of EBP as a component of what exemplifies excellence in health care. As the current state of the science reflects limited evidence on successful strategies for implementing improvements in patient care, it is important to identify "efforts based as much on evidence as the

practices they seek to implement" (Shojania & Grimshaw, 2005, p. 138).

Therefore, it is of interest to evaluate the impact of the ANCC Magnet model (2008) in relation to structures that facilitate and inhibit engagement of RNs.

Magnet was launched in 1983 in the midst of a U.S. nationwide nursing shortage, when some facilities created magnet cultures that attracted and retained staff (ANCC, 2010). In 1983, the American Academy of Nursing authorized a study of 41 acute care hospitals known to attract and retain RNs during the nursing shortages of the 1970s and 1980s (ANCC, 2010). The 1983 Magnet study discovered that these hospitals reflected unique organizational structures and cultural aspects in regard to administration, professional practice, and professional development (ANCC, 2010). The foundations discovered during the initial study have developed over the years with the intent to facilitate and sustain excellence in practice that reflects nursing research, EBP, and a guiding framework for nursing administration (ANCC, 2008, 2010).

Following the study, the American Nurses Association Commission on Assessment and Renewal recommended that the ANCC establish itself independently as a credentialing program (ANCC, 2010). The ANCC was incorporated in 1990 and the American Nurses Association approved the Magnet Hospital Recognition Program for Excellence in Nursing Services later in 1990 (ANCC, 2010). The University of Washington Medical Center in Seattle, Washington, became the first hospital to earn Magnet designation in 1994 (ANCC, 2010). According to the ANCC (2010), the number of facilities that have

achieved Magnet recognition status now stands at 383 and includes facilities in the United States (379), Singapore (1), Lebanon (1), and Australia (2).

The Magnet model utilizes a standard of 14 *Forces of Magnetism* to facilitate excellence and provide the basis for Magnet evaluation (ANCC, 2008). Although the model has developed over the years, it retained the 14 Forces of Magnetism (ANCC, 2008). The current model, however, has integrated the 14 Forces into 5 model components to put greater emphasis on outcomes and to simplify documentation (ANCC, 2008).

Transformational Leadership, a component within the current Magnet model, speaks to transforming organizations to embrace the future by moving Magnet organizations from stabilization to destabilization in order to identify fresh ideas and innovations (ANCC, 2008). This component is representative of two Forces of Magnetism (Forces 1 and 3) within the current model (ANCC, 2008).

Force 1 (Quality of Nursing Leadership) and Force 3 (Management Style) speak to the importance of Transformational Leadership (ANCC, 2008).

Transformational leaders are those individuals with "vision, influence, clinical knowledge, and a strong expertise relating to professional nursing practice" (ANCC, 2008, p. 4). Furthermore, the ANCC (2008) recognizes that such transformation may cause some uneasiness as leadership creates structures that challenge, influence, and support the organization in achieving a futuristic mission (ANCC, 2008).

Structural Empowerment is the second component of the current Magnet model. This component reflects five Magnet Forces including: Force 2,

Organizational Structure; Force 4, Personnel Policies and Programs; Force 10, Community and the Healthcare Organization; Force 12, Image of Nursing; and Force 14, Professional Development (ANCC, 2008). All Forces associated with Structural Empowerment focus on the structures and processes influenced by leadership to create an environment "where the mission, vision, and values come to life to achieve the outcomes believed to be important for the organization" (ANCC, 2008, p. 5).

Structural Empowerment requires the organization to establish strategic plans, policies, structures, and programs to empower and develop staff as a means to reaching the organization's desired goals and outcomes (ANCC, 2008). It is the significance of Structural Empowerment that is of interest to this study. Thus, this original research examined the relationship between the levels of engagement and structures commonly associated with Magnet designation.

Exemplary Professional Practice, the third component within the current Magnet model, is comprised of five Magnet Forces—5, 8, 9, 11, and 13 (ANCC, 2008). Force 5 (Professional Models of Care), Force 8 (Consultation and Resources), Force 9 (Autonomy), Force 11 (Nurses as Teachers), and Force 13 (Interdisciplinary Relationships) are each focused on "what professional practice can achieve" (ANCC, 2008, p. 5). This component advocates a complete understanding of the role of nursing and the application of new knowledge and evidence to care for patients, families, and communities (ANCC, 2008).

New Knowledge, Innovation, and Improvements comprise the fourth component within the current Magnet model (ANCC, 2008). This component,

based upon Magnet Force 7 (Quality Improvement), concentrates on the ethical and professional responsibilities that nurses have to patients, organizations, and the profession (ANCC, 2008). This component stresses the need to redesign systems with new models that apply evidence and contribute to the science of nursing (ANCC, 2008) as part of the ethical responsibilities to provide quality care.

Empirical Outcomes, the final component within the current Magnet model, is based upon Magnet Force 6, Quality of Care (ANCC, 2008). Consistent with Donabedian's quality assessment framework, the current Magnet Recognition Program places emphasis on structure and process, believing that good outcomes will occur (ANCC, 2008; Donabedian, 1988; Upenieks & Abelew, 2006). The intention of the current model is to put more emphasis on outcomes by establishing benchmarks for quality comparison (ANCC, 2008).

Achieving Magnet designation requires an organization to show evidence that demonstrates an environment of professional nursing practice (ANCC, 2008, 2010). Consistent with Donabedian's quality assessment framework (Donabedian, 1988), components of the ANCC Magnet model advocate structures (leadership, empowerment, professional development, research) that promote process (engagement, EBP) and as a result promote better outcomes for patients, nurses, and the organization (ANCC, 2008, 2010). It is through this model that Magnet looks beyond structure and process to analyze and celebrate outcomes as measures of "the difference" that has been made (ANCC, 2008, p. 6).

The Significance of Donabedian's Quality Assessment Framework

Donabedian's quality assessment framework asserts that good organizational structures promote good processes and accordingly, good outcomes (Donabedian, 1966, 1980, 1988). Donabedian's framework (Donabedian, 1966, 1980, 1988) is consistent with the Magnet model (ANCC, 2008) that organizational structures are pivotal to promoting desired processes and outcomes (Upenieks & Abelew, 2006) to enable a transformation in culture (ANCC, 2010; Upenieks & Abelew, 2006). As a result, the emerging culture reflects greater levels of nurse engagement in professional practice and activities that contribute to positive outcomes for patients, nurses, and others.

Upenieks and Abelew (2006) conducted a qualitative study of the Magnet designation process using Donabedian's quality assessment framework (Donabedian, 1966, 1980, 1988). The original research noted the transformation in culture from existing structures and processes to an emerging culture of Magnet structures and processes (Upenieks & Abelew, 2006). Nurses on the Magnet journey experiencing transformation described key organizational structures to include administrative support, adequate staffing and compensation, professional development (continuing education and clinical ladders), and access to resources including technology (Upenieks & Abelew, 2006).

Consistent with Donabedian's framework (Donabedian, 1966, 1980, 1988) and the Magnet model (ANCC, 2008), structures also have been identified as essential components of a healthy work environment (Kramer, Schmalenberg, & Maguire, 2010). A healthy work environment has been described to have quality

nurse leadership, opportunities for professional development, adequate staffing, decentralized organizational designs, and a system of meaningful recognition (Kramer et al., 2010). Other qualities of a healthy work environment include opportunities for continuing education, teamwork, collegial relationships and collaboration, supportive management, communication, and resources (Whitmer, Hurst, & Prins, 2009). Structural transformation has the ability, therefore, to enhance organizational processes such as engagement while at the same time positively impacting the work environment for individual nurses (Kramer et al., 2010; Upenieks & Abelew, 2006).

Organizational processes perceived as significant to nurses on the Magnet journey included collaborative teamwork, EBP models, mentorship programs, shared governance, and staff engagement (Upenieks & Abelew, 2006). While each of these processes was found to be important as the culture shifted, Upenieks and Abelew (2006) found staff nurse engagement was critical to successful integration of each of these processes. Nurse engagement is essential, and yet, it is the "greatest challenge of the magnet [sic] designation process" (Upenieks & Abelew, 2006, p. 249). Strategies are necessary to promote engagement. Some strategies to promote engagement include professional care models, interdisciplinary committees, identification of nurse champions, education, and early involvement of nurses to achieve desired standards (Upenieks & Abelew, 2006).

Havens and Johnston (2004) remarked that while Magnet-designated hospitals have demonstrated positive patient and staff outcomes and knowledge

about what works, a better understanding is necessary about how to reach it.

Thus, it was the intention of this study to determine the relationship between levels of RN engagement and Magnet designation. It was also the intention to determine whether social and institutional demographic variables influence the relationship between RN engagement and Magnet designation. The final intention of this study was to determine whether the variables of RN perception relating to organizational support for work influence the relationship between RN engagement and Magnet designation.

The Significance of Age

Multi-generational diversity is not a new concept. With four generations of RNs currently in the workforce (Carver & Candela, 2008; Leiter, Jackson et al., 2009; Sherman, 2006), it is important to assess the influence of age (aggregated by generation) in relation to engagement. An assessment of the current nursing profession reveals an aging RN workforce (U.S. Department of Health and Human Services, 2010). While limited research has focused on the impact of age on work performance, social stereotypes can be powerful influences within the work setting.

Within society as well as the workplace, age often is considered in terms of generation. Generations are groups of individuals who share birth years and common life experiences during formative years (Kupperschmidt, 2000; Stewart, 2006). Because of these shared experiences, generational cohorts often possess a "collective personality that may exhibit particular attitudes toward authority and organizations, work expectations, and professional aspirations" (Duchscher &

Cowin, 2004, p. 494). Although the generalizations are not accurate for all cohort members, as a group they provide a reference point (Jennings, 2000) to gain perspective on how life experience has affected individual core values, work ethics, and professional behaviors (Duchscher & Cowin, 2004).

The Veteran Generation (born 1925–1942; Carver & Candela, 2008), also commonly called the "GI generation, veterans, matures" (Duchscher & Cowin, 2004, p. 495), the "silent generation" (McNeese-Smith & Crook, 2003, p. 261), "Traditionalists" (Wieck, 2007, p. 366), and "the greatest generation" (Carver & Candela, 2008, p. 986), is composed of conservative individuals who value hard work, loyalty, and sacrifice (Carver & Candela, 2008; Hart, 2006; Weingarten, 2009).

Although many nurses of the Veteran Generation have retired, many continue to work (Sherman, 2006; U.S. Department of Health and Human Services, 2010). The Veteran Generation (Carver & Candela, 2008) is recognized as a respectful cohort which values organizational loyalty that is often reflected by 30 or more years of service, a strong respect for authority and organizational hierarchy, and a strong, disciplined work ethic (Wieck, 2007). These generation-specific values influence how cohort members communicate and interact in an intergenerational workforce. Veteran Generation (Carver & Candela, 2008) nurses that remain in the workforce have lived through numerous changes in health care and technology, which is reflected in their dedication, work ethic, and organizational loyalty.

The Baby Boomer Generation (born 1943–1960; Carver & Candela, 2008), also commonly called the "me generation, victory children, and weathervane generation" (Duchscher & Cowin, 2004, p. 495), is the largest generational cohort in percentage of today's nurse workforce (Sherman, 2008). This cohort is known for a willingness to work long hours. This age group is known to "live to work" (Gursoy et al., 2008, p. 451) because individuals from this era often define personal identity by occupation. Baby Boomer Generation nurses value loyalty, respect organizational authority and hierarchy, and appreciate recognition and reward for efforts (Gursoy et al., 2008).

The Baby Boomer Generation "perceive themselves as being much more committed to their jobs than the emerging workforce nurses (Generation X)" (Thompson, 2007, p. 583). The work ethic associated with the Baby Boomer Generation influences the personal and professional aspects of this age group, as these individuals often associate work with self-worth and fulfillment (Kupperschmidt, 2000; Thompson, 2007).

The Generation X (born 1961–1981; Carver & Candela, 2008), also commonly called "baby busters, nexters, latch key kids, MTV generation, Thirteeners (13th generation of Americans), slackers, and the lost generation" (Duchscher & Cowin, 2004, p. 495), has been described as pessimistic and money-oriented with a work ethic that reflects a balance between work and home (Gursoy et al., 2008; Kupperschmidt, 2000).

In contrast to the Baby Boomer Generation, Generation X (1961–1981; Carver & Candela, 2008) is known to "work to live" (Gursoy et al., 2008, p. 451–452), seek a work–life balance and enjoy independent work (Carver & Candela, 2008; Gursoy et al., 2008). Although Generation X is technologically savvy and open to change (Gursoy et al., 2008), the Baby Boomer Generation has described Generation X as "slackers" with "no work ethic," seeking promotion without putting in adequate time (Gursoy et al., 2008, p. 453) and commitment to the job (Thompson, 2007).

Generation X (Carver & Candela, 2008) nurses identify with "The Lone Ranger," often choosing to work alone (Gursoy et al., 2008, p. 452). This self-reliance is reflected by distrust in organizations, envisioning jobs as "stepping stones" to learn what is needed to gain promotion or a more desirable position (Gursoy et al., 2008, p. 452).

The Generation Y (born 1982–2003; Carver & Candela, 2008), also commonly called "echo boom, digital generation, bridgers, net generation, and 14th generation" (Duchscher & Cowin, 2004, p. 495), is second to the Baby Boomer Generation (Carver & Candela, 2008) in size and is anticipated to become the largest generation in nursing over time (Sherman, 2008). This age group values hard work that is recognized, a work–life balance, technology, collaborative teamwork, strong leadership, and mentors (Gursoy et al., 2008).

Generation Y nurses need to be challenged; however, this generation also requires stability, flexibility (with work schedule and shifts), professional development (training, coaching, and feedback), and adequate supervision

(Lavoie-Tremblay et al., 2010). Recognition (peer and monetary) is a key motivator to this generation of nurses that choose employers based on reputation, seeking a sense of belonging within the intergenerational nurse workforce (Lavoie-Tremblay et al., 2010).

In relation to generational characteristics that influence an individual's level of engagement, Generations X and Y place greater emphasis on a work–life balance and technology (Gursoy et al., 2008; Kupperschmidt, 2000), which contributes to a difference in how these generations communicate and process information.

Social support and a balance between effort and reward are both key components to retaining Generation X nurses (Lavoie-Tremblay, O'Brien-Pallas, Gelinas, Desforges, & Marchionni, 2008). Whereas engagement is considered to be the opposite of burnout, it is of interest that Generation X nurses "experience more symptoms of job burnout and are more inclined to change their jobs than their colleagues of the Baby Boomer generation" (Leiter, Jackson et al., 2009, p. 106). An inclination to change jobs is an imperative point to consider because "turnover cognition" has been correlated with decreased work engagement in medical-surgical RNs (Simpson, 2009, p. 55).

Simpson (2009) also revealed a weak positive correlation between work engagement and age. Simpson's (2009) findings are consistent with a small pilot study by Wonder (2009) that found a significant difference in vigor (a dimension of engagement) by generation. Post-hoc analysis broached significance (p = 0.059), finding the Baby Boomer Generation possessed a greater level of

vigor than Generation Y. Speculation only is possible for an explanation of why scores of vigor were different between Generation Y and Baby Boomer Generation RNs. Based upon generation-specific characteristics, a possible explanation could be that Baby Boomer Generation nurses reflected greater vigor because of a greater willingness to exert effort at work considering that this generation has been recognized to "live to work" (Gursoy et al., 2008, p. 451).

Another explanation could be that organizational structures often are put into place by experienced nurses, commonly the Baby Boomer Generation or older. Current organizational structures have created a culture that reflects the values of the Baby Boomer Generation to a greater degree than other generations currently in the workforce (Leiter, Jackson et al., 2009). As a result, the current organizational structures may not equally facilitate vigor for all generations of nurses.

Further examination of the impact of age on engagement is necessary because differences in generations can result in dissimilar value systems. This difference in values may create a "dissonance between our inner and outer world" (McNeese-Smith & Crook, 2003, p. 269). This disagreement may influence the level of nurse satisfaction (Widger et al., 2007; Wilson et al., 2008) and commitment, consequently impacting work attitudes and behaviors. Therefore, it is imperative to assess how each generation perceives the organizational structures intended to support all generations of nurses.

This study aims to determine whether age (aggregated by generation) influences the relationship between levels of RN engagement and Magnet

designation. An accurate assessment of the influence of age is needed to provide empirical evidence stronger than society's stereotype.

The Significance of Gender

Male nurses accounted for just over 7% of all employed RNs in the United States as of March 2008, with nearly 76% of all male nurses working in a hospital setting (U.S. Department of Health and Human Services, 2010). While male nurses account for only 7.1% of staff nurses, researchers noted a strong presence in advance practice and leadership roles. Those roles included administrator (7.3%), nurse anesthetist (41%), nurse practitioner (6%), instructor (3.8%), and patient coordinator (3.2%) roles (U.S. Department of Health and Human Services, 2010).

The effects of gender-bias and mixed-gender effects on nursing have been repeatedly studied. Rudan (2003), a male nurse, effectively noted that awareness of gender differences is essential to enable "all employees, male and female, to realize their full potential while maximizing institutional goals" (p. 179). This is consistent with Grossman (2008) who stated that the goal is not understanding one gender in particular, but is instead "understanding the uniqueness of people" (p. 27).

Although gender differences have been studied in a variety of contexts, "gender doesn't seem to affect the nurse's priority of professional values" (Alfred, Yarbrough, Martin, & Garcia, 2011, p. 36). With that in mind,

nursing administrators need to work on desensitizing themselves to the gender differences in the workplace and foster those individuals who are skilled at building and maintaining teams. A clear understanding of the needs, responses, and reactions of each sex is required. (Rudan, 2003, p. 185)

With the presence of male nurses growing in the hospital setting (U.S. Department of Health and Human Services, 2010), it is important to determine the influence of gender on engagement because limited evidence has been found (Balducci, Fraccaroli, & Schaufeli, 2010; Prins et al., 2010). Because the RN workforce is reflecting a greater number of male nurses in a variety of roles (U.S. Department of Health and Human Services, 2010), it is essential to establish any correlations that exist between gender and structure and engagement.

The Significance of Nursing Education

The effect of nursing degree on level of engagement is pivotal because engagement often reflects an individual's knowledge and skills. Knowledge and skills are acquired at different levels of nursing education. Education on research typically starts within the bachelor's degree curriculum and that level of knowledge may influence one's desire and ability to engage in research-related practices. Similar to research, critical thinking also is developed within the bachelor's degree curriculum and may influence how nurses at different educational levels process information in the clinical setting. Regardless of a nurse's educational preparation, EBP is an expectation of nurses. The professional expectation of EBP requires critical thinking skills and knowledge of research to enable engagement in that process.

Magnet, a strong proponent of evidence-based care, recognizes the importance of formal education for nurses beyond the level of associate degree

(ANCC, 2010). The preference for nurses beyond the level of associate degree has been attributed to content differences that exist between programs of study in relation to research, EBP, and critical thinking. Furthermore, the difference between nursing programs has been shown to influence a nurse's readiness for organizational change (Caldwell, Roby-Williams, Rush, & Ricke-Kiely, 2009), perception of barriers to EBP (Atkinson et al., 2008), and ability to improve patient outcomes (Aiken et al., 2003).

The nursing degree attained also helps determine which individuals are qualified for specific nursing roles. Nursing roles are reflective of job responsibilities and priorities. Consequently these role-specific responsibilities and priorities influence how work time is spent (Atkinson et al., 2008).

The role of staff nurse often is assigned to nurses holding associate's and bachelor's degrees. Nurses with advanced nursing degrees commonly work in non-staff nurse roles, however, may still be involved in work that impacts direct care. These two nurse roles may, therefore, experience or perceive barriers and facilitators differently (Atkinson et al., 2008; Flynn & McCarthy, 2008) consequently impacting levels of engagement. Therefore, it was also important to determine whether nurses in similar roles (based on time spent in direct patient care activities) faced with common barriers and facilitators, experienced significantly different levels of engagement.

Thus, this study focused on the influence of formal education as well as nursing role to determine if either variable influences the relationship between RN engagement and Magnet designation. It was important to study these factors

because findings may influence organizational structures to support formal nursing education and professional development within the RN workforce.

The Significance of Nursing Experience

Nursing experience has been studied in relation to empowerment, another requisite to a culture of EBP. Consistent with the Magnet model (ANCC, 2008), empowerment advances both individual and organizational goals by creating a shared vision that facilitates engagement in meaningful work. Further study is needed to determine whether a relationship exists between engagement and nursing experience.

Whereas limited studies have validated that experience is not needed to develop professional values (LeDuc & Kotzer, 2009; Thompson, 2007), additional evidence is needed to determine the effect of experience on engagement. Consistency was found between a study by Simpson (2009) and a small pilot study conducted in a Magnet facility by Wonder (2009), finding no significance in relation to years of experience (p = 0.22). Regression analysis, however, found that all slopes were positive, which indicated from the data that greater experience translated into higher levels of engagement. The findings did show a trend, however, were not statistically significant. This study explored the significance of RN experience on engagement with a larger Magnet sample.

The Significance of Unit Longevity

Limited study has explored the effect of unit longevity on levels of engagement. Wonder (2009) conducted a small pilot study in a Magnet-designated facility and found no significant relationships existed between

engagement and unit longevity. Regression analysis did specify, however, that all slopes were positive, which indicated from the data that greater unit longevity translated into higher levels of engagement. While the findings did show a positive trend, the results were not statistically significant. This study explored the influence of unit longevity on engagement with a larger Magnet sample.

The Significance of Nursing Unit

The effect of nursing unit on engagement may identify organizational or unit-specific trends requiring future study. Significantly high or low engagement scores may expose the need for future study of unit-specific factors such as span of control (Cathcart et al., 2004; Lucas, Laschinger, & Wong, 2008), work demands (Crawford, LePine, & Rich, 2010; Sonnentag, Binnewies, & Mojza, 2010), and resources (Crawford et al., 2010; Hakanen et al., 2008; Salanova & Schaufeli, 2008; Schaufeli & Bakker, 2004b). Other unit-specific factors may influence autonomy in relation to decisional latitude (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001; Hallberg, Johansson, & Schaufeli, 2007) and job satisfaction (Simpson, 2009). The structures common to Magnet designation address these unit-specific factors. Thus, it was of interest to explore the influence of unit as an institutional demographic to describe any correlations that exist between structure and engagement.

The Significance of Shift

Lack of evidence exists to support that specific shifts exhibit significantly different levels of engagement (Simpson, 2009). Therefore, this study explored the influence of shift on the relationship between levels of RN engagement and Magnet designation.

The Significance of Time Commitment

As the nursing shortage continues to grow, the values of younger generations must be considered. In order to retain quality nurses in the field and promote optimal levels of performance, it is imperative to identify significant relationships that exist between time commitment and levels of engagement.

Simpson (2009) found a weak but positive correlation between work engagement and hours worked per week; however, this study also noted the same weak but positive correlation with age.

Time commitment in relation to time spent with colleagues could be interpreted as periods of time in which nurses are exposed to the influences of colleagues. Bakker, Schaufeli, Demerouti, and Euwema (2007) found engagement contagious; the "frequency of exposure" was identified as a moderator that increased the "risk of infection" (p. 242–243). Therefore, hours worked per week may influence the potential for nurses to "catch" engagement or conversely burnout (Bakker et al., 2007, p. 242). Therefore, this study explored the influence of time commitment on the relationship between levels of RN engagement and Magnet designation.

The Significance of Shared Governance

The practice of EBP requires an infrastructure that reflects nurse engagement in the change process to integrate research into practice and to facilitate an environment focused on best care practices. Shared governance is an effective means to facilitate research (Atkinson et al., 2008) and to empower nurses to participate in policy decisions, to transform the organizational culture (Steinbinder, 2005; Upenieks & Abelew, 2006), and to effect better outcomes for patients through policy that reflects current best evidence.

Empowering nurses to possess control over practice by such measures as integrating shared governance is an essential step to achieving and sustaining EBP. Through shared governance councils, RNs identify and develop EBP initiatives to effect changes in practice. Shared governance council is also a forum for nurses to seek the guidance of colleagues and resident clinical experts, which has been found to be a preferred method to guiding the professional practice of RNs (Pravikoff et al., 2005). Thus, this study explored the influence of shared governance council participation on the relationship between RN engagement and Magnet designation.

The Significance of RN Perceptions of Organizational Support for Work

As organizational structures commonly are determined by administration, the assessment of adequacy of structures often is viewed from the top of the organizational chart. Limited literature reflected the influence of perception of organizational support for work on RN engagement, yet this is important as this study seeks to identify significant correlations. As noted within the literature,

organizational structures common to Magnet designation are recognized to facilitate engagement in RNs (Laschinger & Leiter, 2006; Laschinger et al., 2006). Therefore, it was imperative to explore the adequacy of structures from the perception of RNs to determine the influence that perception of organizational support for work has on the relationship between engagement and Magnet designation.

Summary

The focus of this study was RN engagement and its relationship with Magnet designation. It was also the focus to determine whether social and institutional demographic variables influenced the relationship between levels of RN engagement and Magnet designation. The final focus was to determine whether the RN perception relating to organizational support for work influenced the relationship between levels of RN engagement and Magnet designation. This study is important because RN engagement is a key element in facilitating organizational change that impacts clinical practice, which is consistent with the IOM's call for EBP (IOM, 2001).

Although engagement has been defined as "a positive, fulfilling, work related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74), key strategies to enhance work engagement in RNs remain unclear. As noted within the literature review, there are many approaches to enhance engagement such as empowerment, autonomy, leadership, resources, and professional development. Whereas the commonality that links these factors is organizational structure consistent with the ANCC

Magnet model (2008), it was of interest to study RN engagement in Magnet designated settings.

Throughout the literature review the importance of organizational structure is noted in a variety of ways to influence the presence and priority of resources to impact a variety of factors that facilitate and sustain the process of engagement (Donabedian, 1988; Hockenberry et al., 2007; Kanter, 1979; Laschinger & Finegan, 2005; Laschinger et al., 2009). The significance of organizational structures to promote engagement as a means to promoting good outcomes is consistent with Donabedian's quality assessment framework (Donabedian, 1966, 1980, 1988) and the ANCC Magnet model (2008).

The Magnet model has provided ongoing evidence that reflects the importance of organizational structure (ANCC, 2010) to facilitate a culture of engagement. As an already socially and institutionally demographically diverse nurse workforce prepares to provide care for an aging society while losing their most experienced colleagues, it is timely to consider the influence of these variables on the relationship between RN engagement and Magnet designation.

As presented in the literature review, there are four different generations of nurses currently in the workforce. As the anticipated nurse shortage approaches the impending retirement of the Veteran and Baby Boomer Generation nurses, it is important to determine if the current organizational structures commonly written by those with more experience (i.e., Veteran and Baby Boomer Generations) are perceived effective by all RNs and influence

engagement in the younger generations who value a work-life balance (Gursoy et al., 2008).

The RN workforce also is divided by gender, nursing degree, nursing role, nursing unit, years of nursing experience, years of unit longevity, assigned shift, hours scheduled and worked per week, and shared governance council participation. Individual nurse perceptions of the organization's support for work also contribute to differences in the workforce. Each of these factors individually and collectively can create the potential for engagement or the opposite of engagement, burnout (Laschinger et al., 2006; Maslach et al., 2001).

As presented in the literature, engagement is a pivotal process that will help nursing attain EBP and evolve to excellence. What is known about engagement is fragmented with mixed results scattered throughout the literature. Although the importance of structure is supported, limited comprehensive knowledge exists to help healthcare providers facilitate engagement in a socially and institutionally demographically diverse nurse workforce. Through the study of engagement of individual RNs and groups in this study, insights were gained about what facilitates and inhibits the process of RN engagement.

The next chapter (Chapter III) presents the methodology used in this study including information on study design, sample, study procedure, protection of human subjects, variables, and instrumentation. Chapter III also presents the research questions, null hypotheses, and associated data analysis. Chapter IV presents the study findings. Chapter V closes with a summary of findings, implications, limitations, and suggestions for future research.

CHAPTER III. METHODOLOGY

The purpose of this descriptive, correlational study was to analyze and evaluate the following research questions:

- 1. What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?
- What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?
- 3. Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?
- 4. Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement?

All significant data were subject to post-hoc analysis.

This study measured the variables with the Utrecht Work

Engagement Scale-17 (UWES-17; Schaufeli & Bakker, 2003; see Appendix D)

and a 15-item demographic survey (Appendix E) designed specifically for this
study. This chapter summarizes the methodology that this research utilized. The
study design, sample, social and institutional demographics, study procedure,

protection of human subjects, variables and instruments, research questions and null hypotheses, and data analysis methods also are presented.

Study Design

This study used a descriptive, correlational design to analyze and evaluate the research questions. The research assessed the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work in Magnet and non-Magnet designated hospitals. The study also analyzed and evaluated the influence of Magnet designation on levels of engagement (total engagement, vigor, dedication, and absorption). Data from Magnet-designated hospitals were compared with a non-Magnet designated hospital to evaluate the influence of Magnet designation. The research study included an evaluation of variables within the Magnet-designated sample to determine whether social and institutional demographics of the RN workforce influenced the relationship between Magnet designation and levels of engagement (total engagement, vigor, dedication, and absorption). Finally, the study concluded with an evaluation within the Magnet-designated sample to determine whether RN perception related to organizational support for work influenced the relationship between Magnet designation and levels of engagement (total engagement, vigor, dedication, and absorption).

Sample

The study drew a convenience sample of RNs from three participating acute care hospitals in a U.S. Midwestern state (two Magnet-designated and one non-Magnet designated), working within selected acute care hospitals, on

participating inpatient units that provide 24-hour care. Eligible hospital units included medical, post-surgical, obstetrics, pediatric, mental health, intensive care, emergency services, and rehabilitation. Eligible participants included RNs in staff and leadership roles, representing varying degrees of direct care responsibilities on participating units. The study only excluded participants who were employed in any capacity at multiple participating study sites.

The desired sample size was calculated a priori, utilizing Lipsey (1990) and confirmed using G-Power analysis (Faul, Erdfelder, Buchner, & Lang, 2009). The alpha was set at p = 0.05, beta at 0.20, and desired power at 80% to yield a medium effect. Guided by power analysis, each group needed 78 subjects; however, actual recruitment resulted in 150 non-Magnet participants, 119 Magnet Site A participants, and 101 Magnet Site B participants for a total of 370 study participants. While this lowered the overall effect size, it can still be considered within the medium effect size category (Lipsey, 1990).

The study investigator recruited subjects at unit meetings and on nursing units of one non-Magnet designated hospital and two Magnet-designated hospitals. The researcher made a total of 22 visits to participating sites during a variety of day and night shifts and attended a total of 32 unit meetings for recruitment purposes. This process attained a sufficient sample size in each arm of the study.

A total of 150 RNs from the non-Magnet designated hospital agreed to participate in the study, representing 59% of the total eligible nurses at that hospital (n = 254). Two Magnet-designated hospitals also participated in the

study. At Magnet Site A, a total of 119 RNs agreed to participate, representing 52% of the total eligible nurses at that site (n = 228) and 54% of the total Magnet sample. At Magnet Site B, a total of 101 RNs agreed to participate, representing 72% of the total eligible nurses at that site (n = 140) and 46% of the total Magnet sample. Together the sample of 220 represented 60% of the total eligible RNs (N = 368) at the Magnet-designated sites (Table 1).

Table 1
Study Participants

Site	Participants			Percentage		
	<u>Eligible</u>	<u>Actual</u>	Declined	<u>Ineligible</u>	<u>Site</u> ^a	<u>Total</u> ^b
Non-Magnet	254	150	2	0	59%	41%
Magnet A	228	119	1	0	52%	32%
Magnet B	140	101	0	0	72%	27%

^aSite participation by percentage. ^bPercentage of total sample.

The investigator analyzed normality with a variety of methods (Shapiro-Wilk, Kolmogorov-Smirnov tests, histogram, skewness, and kurtosis < 2; Tabachnick & Fidell, 2007). Based on collective results and complemented by a large sample size, normality was established. The investigator used parametric tests for all analysis.

Sample Social and Institutional Demographics

The total sample found 56.7% of the participating RNs were Generation X (30–50 years of age; n = 210), 22.2% were Baby Boomer Generation (51–68 years of age; n = 82), and 21.1% were Millennial Generation (18–29 years of age; n = 78).

Within the Magnet sample, 56.8% (n = 125) of the participating RNs were from Generation X, 20.9% (n = 46) from Millennial Generation, and 22.3%

(n = 49) from the Baby Boomer Generation. The non-Magnet sample was very similar with 56.7% (n = 85) from Generation X, 21.3% (n = 32) from Millennial Generation, and 22.0% (n = 33) from the Baby Boomer Generation. No participants reported being 69 years old or older, as part of the Veteran Generation (Table 2).

Table 2

Age (Generation)

Age Group	Free	quency	Relative Frequency		
	<u>Magnet</u>	Non-Magnet	Magnet	Non-Magnet	
Veteran Generation	0	0	0.0%	0.0%	
Baby Boomer Generation	49	33	22.3%	22.0%	
Generation X	125	85	56.8%	56.7%	
Generation Y	46	32	20.9%	21.3%	

For subject's gender, the total sample revealed 94.9% (n = 351) were female and 5.1% (n = 19) were male. Within the Magnet sample, 94.1% (n = 207) were female and 5.9% (n = 13) were male. In the non-Magnet sample, 96.0% (n = 144) were female and 4.0% (n = 6) were male (Table 3).

Table 3

Gender

Gender	Freq	Frequency		Relative Frequency	
	<u>Magnet</u>	Non-Magnet	<u>Magnet</u>	Non-Magnet	
Male	13	6	5.9%	4.0%	
Female	207	144	94.1%	96.0%	

The study also assessed the level of nursing education attained by RNs in the sample. In the total sample, 56.7% (n = 203) held an associate degree; 41.9% (n = 150) held a bachelor's degree; and 1.4% (n = 5) held a master's degree or higher. Within the Magnet sample, 52.4% (n = 110) held an associate's

degree; 46.2% (n = 97) held a bachelor's degree; and 1.4% (n = 3) held a master's degree or higher. Within the non-Magnet sample, 62.8% (n = 93) held an associate's degree; 35.9% (n = 53) held a bachelor's degree; and 1.3% (n = 2) held a master's degree or higher.

Nursing experience in any clinical setting was also a variable of interest. The total sample reported a Mean of 12.61 years (SD = 10.23). The Magnet sample reported a Mean of 12.24 years (SD = 9.97). The non-Magnet sample reported a Mean of 13.18 years (SD = 10.61).

For nursing experience within the current work setting (unit longevity), the total sample reported a Mean of 7.58 years (SD = 7.42). The Magnet sample reported a Mean of 7.24 years (SD = 7.24). The non-Magnet sample reported a Mean of 8.10 years (SD = 7.68).

The RN's scheduled shift can influence greatly the employment experience. The employer, unit, and even the patient population can determine variation in shifts. The total sample reported that 43.5% (n = 161) of the participants in the study worked a 12-hour day shift, 30.5% (n = 113) worked a 12-hour night shift, and 10.8% (n = 40) worked an 8-hour day shift. The Magnet sample reported that 49.5% (n = 109) of the participants worked a 12-hour day shift, 29.1% (n = 64) worked a 12-hour night shift, and 11.8% (n = 26) worked an 8-hour day shift. The non-Magnet sample reported 34.7% (n = 52) of the participants worked a 12-hour day shift, 32.7% (n = 49) worked a 12-hour night shift, and 9.3% (n = 14) worked an 8-hour day shift (Table 4).

Table 4
Shift

Shift	Freq	uency	Relative Frequency		
	Magnet	Non-Magnet	Magnet	Non-Magnet	
12-hour day	109	52	49.5%	34.7%	
12-hour night	64	49	29.1%	32.7%	
8-hour day	26	14	11.8%	9.3%	
8-hour evening	5	7	2.3%	4.7%	
8-hour night	2	1	0.9%	0.7%	
≤a4-hour day	0	0	0.0%	0.0%	
<a>a 4-hour evening	0	0	0.0%	0.0%	
<a>a 4-hour night	0	1	0.0%	0.7%	
Other	14	26	6.4%	17.3%	

^a< = less than or equal to

In addition to the assigned shift, another consideration is the number of hours worked in a week. This can vary between the hours scheduled and the hours actually worked due to patient acuity, vacancy rates, and staffing needs. For hours typically scheduled to work each week, the total sample reported a Mean of 34.28 hours (SD = 7.27). The Magnet sample reported a Mean of 34.88 hours (SD = 7.11). The non-Magnet sample reported a Mean of 33.38 hours (SD = 7.42). This was contrasted with hours typically worked each week with the total sample Mean of 36.09 hours (SD = 7.89). The Magnet sample reported a Mean of 36.80 hours (SD = 7.79). The non-Magnet sample reported a Mean of 35.06 hours (SD = 7.94).

In the acute care setting, nursing roles and responsibilities can vary considerably. Nursing roles often reflect a difference in the percentage of time spent in direct patient care activities. In this study, the total sample found that 58.4% of the participants in the study spend more than 80% of work time in direct patient care (n = 216), 22.1% spend 50-80% (n = 82), 11.1% spend 20-49%

(n=41), and 8.4% spend less than 20% (n=31). Within the Magnet sample it was reported that 63.2% spend more than 80% of work time in direct patient care (n=139), 19.5% spend 50–80% (n=43), 9.1% spend 20–49% (n=20), and 8.2% spend less than 20% (n=18). Within the non-Magnet sample it was reported that 51.3% spend more than 80% of work time in direct patient care (n=77), 26.0% spend 50–80% (n=39), 14.0% spend 20–49% (n=21), and 8.7% spend less than 20% (n=13).

For nursing unit worked, 23.0% of the RNs in the total sample reported providing care on a medical unit (n = 85), 18.4% on an obstetrics unit (n = 68), 13.5% on an intensive care unit (n = 50), and 12.4% on an emergency services unit (n = 46). Within the Magnet sample 22.7% of the RNs reported providing care on a medical unit (n = 50), 18.2% on an obstetrics unit (n = 40), 14.1% on an emergency services unit (n = 31), and 11.4% on a post-surgical unit (n = 25). Within the non-Magnet sample 23.3% of the RNs reported providing care on a medical unit (n = 35), 19.3% on an intensive care unit (n = 29), 18.7% on an obstetrics unit (n = 28), and 12.0% on a post-surgical unit (n = 18).

Shared governance is a critical component within the Magnet designation program, demonstrating decentralized decision-making (ANCC, 2010). Shared governance is consistent with the goals of supporting professional practice, promoting quality care, and diffusing best known practices (ANCC, 2010). Although shared governance is operationalized differently within organizations, many hospitals have developed a shared governance council. Because this is so

important to the Magnet model (2008), it is another important variable to consider in this study.

For participation in the shared governance council, the total sample found 20.9% of the RNs were current participants (n = 73), 16.9% were past participants (n = 59), 12.9% were both past and current participants (n = 45), and 49.3% never participated (n = 172). The Magnet sample found 24.5% of the RNs were current participants (n = 51), 20.2% were past participants (n = 42), 14.4% were both past and current participants (n = 30), and 40.9% never participated (n = 85). The non-Magnet sample found 15.6% of the RNs were current participants (n = 22), 12.1% were past participants (n = 17), 10.6% were both past and current participants (n = 15), and 61.7% never participated (n = 87).

Because the intent of this study was to evaluate the relationship between Magnet designation and levels of engagement, it was important also to measure the RN's perception of organizational support for work. Organizational structures often are put into place with the intent to promote professional practice and empower nurses. These structures often are viewed from the top of the organizational chart. Therefore, the following data provide the nurse's perception of current structures in Magnet-designated hospitals.

The 15-item demographic survey utilized a Likert-type scale to measure the RN's perception of hospital administration supporting EBP. Within the Magnet sample, 72.7% (n = 160) of the RNs perceived very much administrative support for EBP, 20.9% (n = 46) perceived somewhat support, and 4.5% (n = 10) were undecided. Within the Magnet sample, 0.9% (n = 2) perceived administration not

really supportive of EBP and 0.9% (n = 2) perceived administration not at all supportive.

The 15-item demographic survey utilized a Likert-type scale to measure the RN's perception of the work environment supporting professional practice. Within the Magnet sample, 65.9% (n = 145) perceived the work environment supported professional practice very much, 26.4% (n = 58) perceived somewhat support, and 4.5% (n = 10) were undecided. Within the Magnet sample, 2.3% (n = 5) perceived the work environment not really supportive of professional practice and 0.9% (n = 2) perceived the work environment not at all supportive.

The 15-item demographic survey utilized a Likert-type scale to measure the RN's perception of empowerment based on resources available to effectively perform the job. Within the Magnet sample, 53.4% (n = 117) of the participants perceived empowerment based on adequate resource availability almost always and 37.4% (n = 82) perceived empowerment based on adequate resources sometimes. Within the Magnet sample, 5.5% (n = 12) perceived empowerment based on adequate resources every once in a while, 3.7% (n = 8) perceived empowerment based on adequate resources rarely, and 0.0% (n = 0) perceived no empowerment based on never having adequate resources.

The social and institutional demographics and RN perceptions of organizational support for work reported by the RNs in the Magnet sample are a key component of this research. The data, explicated in Chapters III and IV, helped to determine whether differences within the RN workforce influenced the relationship between Magnet designation and engagement. Identifying significant

variables would justify future research priorities and help to determine what additional organizational structures are needed to facilitate and sustain engagement for all RNs.

Study Procedure

The researcher met with the nurse administrator, research chair, and/or designee in addition to the involved nursing directors at each participating hospital site. The researcher provided information about the study, ethical considerations, confidentiality, nurse eligibility, and the timeline for data collection. At each participating hospital, the research chair and/or involved nursing directors invited all eligible RNs to participate in the research study. The researcher, in coordination with all involved unit directors, facilitated data collection in a manner that was most effective for each setting.

Participating RNs completed two paper-and-pencil surveys that required approximately 10 minutes to complete. The engagement instrument (Appendix D) utilized a Likert-type scale to rate 17 items, while the 15-item demographic survey (Appendix E) utilized a Likert-type scale in addition to multiple choice and fill-in-the-blank questions. The study investigator recruited participants at unit meetings, during a break, or during unit downtime.

The nurse researcher informed eligible subjects about the study using an Indiana University Institutional Review Board (IRB) approved information sheet (Appendix F) and informed eligible nurses that participation implied consent. Following review of the information sheet, the researcher allowed time for questions prior to data collection. Data collection occurred in a conference room,

unit break-room, or private workspace occupied only by the participant(s).

Participants completed the UWES-17 by Schaufeli and Bakker (2003;

Appendix D) and a 15-item demographic survey (Appendix E) created for this study. The researcher secured the completed surveys.

Protection of Human Subjects

The study investigator and dissertation chair obtained approval from the Indiana University IRB (Appendix G) and the administrative boards at each participating research site after a review of the application, information sheet, and data collection instruments (Appendix H). The investigator maintained confidentiality for all study participants. No data collection materials utilized any names. Participation implied consent. The nurse researcher, available during the scheduled period of data collection, responded to organizational and individual needs as a means to facilitate the data collection process.

Variables and Instruments

This research study used a one-time survey (Appendix D) to assess the construct of engagement in RNs working in Magnet and non-Magnet designated hospitals. The research study also evaluated the influence of social and institutional demographics and RN perception of organizational support for work to determine whether specific variables influence the relationship between Magnet designation and levels of engagement. Thus, the investigator created a 15-item demographic survey for this study (Appendix E).

Instrument One: Demographic Survey

A demographic survey designed for this study assessed 15 unique social and institutional variables (Appendix E). The variables included age, gender, education, years of nursing experience and unit longevity, shift, hours scheduled and worked per week, nursing role, nursing unit, and shared governance council participation. The variables also included RN perceptions related to organizational support for work. Completing this survey required most participants about five minutes.

Each of these social and institutional demographic variables was important to consider as this study explored factors that facilitate and inhibit engagement. The investigator analyzed the variables to determine correlations that exist with engagement in the Magnet sample.

Instrument Two: UWES-17

After careful examination of the current literature and development of a concept analysis (Wonder, 2008), consistency was found with Schaufeli et al.'s (2002) model of engagement. The model of total engagement is collectively composed of vigor, dedication, and absorption (Schaufeli et al., 2002). Based on this model, Schaufeli and Bakker (2003) created the UWES-17, employee version (Appendix D). The 17-item instrument by Schaufeli and Bakker (2003) uses a 7-point visual analog scale with clearly defined parameters ranging from 0 (*never*) to 6 (*always*). During data collection, the nurse researcher noted that most participants required about five minutes completing this instrument.

The UWES-17, translated into 21 different languages, is available online at http://www.schaufeli.com for non-commercial educational and research purposes. The authors, Schaufeli and Bakker, stipulate that no one will be charged in any way for using the UWES-17 (Appendix D). In return for utilizing the UWES-17, the authors request that specific data be shared including raw test scores, age, gender, occupation (if available), and a brief narrative description of sample size, language, and country.

The UWES-17 identifies engagement as a three-dimensional model of vigor, dedication, and absorption. As noted in Appendix I, the UWES-17 measures vigor and absorption with six items each, while measuring dedication with five items. Together the dimensions of vigor, dedication, and absorption collectively measure total engagement in the UWES-17 (Schaufeli & Bakker, 2003; Schaufeli & Bakker, 2004a).

UWES-17: Factorial Validity and Inter-Correlations

Schaufeli et al. (2002) tested the UWES-17 for goodness of fit. Analysis of the three-factor model produced fit indices (Root Mean Square Error of Approximation 0.05; Comparative Fit Index 0.90; Goodness-of-Fit Index 0.89). Consequently, the researcher interpreted the three-factor model as a good fit (Schaufeli et al., 2002). Over time, confirmatory factor analysis has continued to find support for this three-factor model (vigor, dedication, absorption) to measure the construct of engagement (Seppala et al., 2009).

Although analysis of engagement and the UWES-17 have supported a model of three distinct factors (vigor, dedication, absorption), findings

consistently note that the three factors are highly correlated. Correlations between factors generally exceed 0.65 (Demerouti et al., 2001; Schaufeli & Bakker, 2004a; Schaufeli et al., 2002) and correlations between latent variables vary from 0.75 to 0.99 (Hallberg & Schaufeli, 2006; Schaufeli et al., 2002; Seppala et al., 2009).

Because the factors so strongly correlate, discussion continues as to whether engagement is composed of three distinct but highly correlated factors or is indeed a one-factor concept. Therefore, the researcher designed this study to measure total engagement and also the three sub-scale scores of vigor, dedication, and absorption.

UWES-17: Internal Consistency

Internal consistency is a measure of instrument stability over time (Netemeyer, Bearden, & Sharma, 2003). Alpha coefficients for the three factors of engagement produced a Cronbach's alpha coefficient of 0.79 for vigor, 0.89 for dedication, and 0.72 for absorption (Schaufeli et al., 2002). Since 2002, studies have found the UWES-17 to report measures of internal consistency with a Cronbach's alpha coefficient of 0.85 for vigor, 0.89 for dedication, and 0.76 for absorption (Hallberg & Schaufeli, 2006) and a Cronbach's alpha coefficient of 0.88 for vigor, 0.93 for dedication, and 0.80 for absorption (Schaufeli et al., 2008). Recently, Salanova, Llorens, and Schaufeli (2011) found the UWES-17 produced a Cronbach's alpha coefficient of 0.86 for vigor, 0.90 for dedication, and 0.82 for absorption. Reliability coefficients of 0.70 or higher indicate acceptable internal consistency (Netemeyer et al., 2003); thus, the UWES-17 has

provided ongoing evidence of acceptable reliability measures (Hallberg & Schaufeli, 2006; Salanova et al., 2011; Schaufeli et al., 2002; Schaufeli et al., 2008).

UWES-17: Selection of the 17-item Version

The investigator selected the UWES-17 for this study because limited analysis has been done on the 15- and 9-item versions (UWES-15 and UWES-9, respectively). This limited analysis of the UWES-15 and UWES-9 consequently would restrict the ability for comparative analysis. It is of interest that the UWES-15 and UWES-9 items are contained within the UWES-17. Utilizing the UWES-17 will enable comparative analysis between the English versions of the instrument in the future.

Research Questions and Null Hypotheses

This study focused on four research questions:

- 1. What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?
- What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?
- 3. Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?

4. Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement?

All significant data were subject to post-hoc analysis.

Question One

What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?

No null hypothesis is required, as question one required only descriptive statistics.

Question Two

What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?

Research question two analyzed the Magnet and non-Magnet samples to evaluate the influence of Magnet-designated organizational structures on engagement. Research question two has the following null hypotheses to evaluate the relationship between Magnet designation and engagement:

H²a: There will be no significant difference in total engagement between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital.

H²b: There will be no significant difference in vigor between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital.

H²c: There will be no significant difference in dedication between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital.

H²d: There will be no significant difference in absorption between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital.

Question Three

Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?

Research question three analyzed the Magnet sample to evaluate the influence of social and institutional demographics on the relationship between Magnet-designated organizational structures and engagement. The following null hypotheses are requisite to answering question three:

H³a: There will be no significant difference in engagement based on generational cohorts in the Magnet sample. Null hypothesis H³a is composed of the following sub-hypotheses:

H³a₁: There will be no significant difference in the level of total engagement based on generational cohorts in the Magnet sample.
 H³a₂: There will be no significant difference in the level of vigor based on generational cohorts in the Magnet sample.

H³a₃: There will be no significant difference in the level of dedication based on generational cohorts in the Magnet sample.
H³a₄: There will be no significant difference in the level of absorption based on generational cohorts in the Magnet sample.

H³b: There will be no significant difference in engagement based on gender in the Magnet sample. Null hypothesis H³b is composed of the following sub-hypotheses:

H³b₁: There will be no significant difference in the level of total engagement based on gender in the Magnet sample.

H³b₂: There will be no significant difference in the level of vigor based on gender in the Magnet sample.

H³b₃: There will be no significant difference in the level of dedication based on gender in the Magnet sample.

H³b₄: There will be no significant difference in the level of absorption based on gender in the Magnet sample.

H³c: There will be no significant difference in engagement based on nursing educational levels in the Magnet sample. Null hypothesis H³c is composed of the following sub-hypotheses:

H³c₁: There will be no significant difference in the level of total engagement based on nursing educational levels in the Magnet sample.

H³c₂: There will be no significant difference in the level of vigor based on nursing educational levels in the Magnet sample.

H³c₃: There will be no significant difference in the level of dedication based on nursing educational levels in the Magnet sample.

H³c₄: There will be no significant difference in the level of absorption based on nursing educational levels in the Magnet sample.

H³d: There will be no significant difference in engagement based on duration of nursing experience in any clinical setting in the Magnet sample. Null hypothesis H³d is composed of the following sub-hypotheses:

H³d₁: There will be no significant difference in the level of total engagement based on duration of nursing experience in any clinical setting in the Magnet sample.

H³d₂: There will be no significant difference in the level of vigor based on duration of nursing experience in any clinical setting in the Magnet sample.

H³d₃: There will be no significant difference in the level of dedication based on duration of nursing experience in any clinical setting in the Magnet sample.

H³d₄: There will be no significant difference in the level of absorption based on duration of nursing experience in any clinical setting in the Magnet sample.

H³e: There will be no significant difference in engagement based on duration of nursing experience in the current work setting in the Magnet sample. Null hypothesis H³e is composed of the following sub-hypotheses:

H³e₁: There will be no significant difference in the level of total engagement based on duration of nursing experience in the current work setting in the Magnet sample.

H³e₂: There will be no significant difference in the level of vigor based on duration of nursing experience in the current work setting in the Magnet sample.

H³e₃: There will be no significant difference in the level of dedication based on duration of nursing experience in the current work setting in the Magnet sample.

H³e₄: There will be no significant difference in the level of absorption based on duration of nursing experience in the current work setting in the Magnet sample.

H³f: There will be no significant difference in engagement based on shift in the Magnet sample. Null hypothesis H³f is composed of the following sub-hypotheses:

H³f₁: There will be no significant difference in the level of total engagement based on shift in the Magnet sample.

 H^3f_2 : There will be no significant difference in the level of vigor based on shift in the Magnet sample.

H³f₃: There will be no significant difference in the level of dedication based on shift in the Magnet sample.

H³f₄: There will be no significant difference in the level of absorption based on shift in the Magnet sample.

H³g: There will be no significant difference in engagement based on hours typically scheduled per week in the Magnet sample. Null hypothesis H³g is composed of the following sub-hypotheses:

H³g₁: There will be no significant difference in the level of total engagement based on hours typically scheduled per week in the Magnet sample.

H³g₂: There will be no significant difference in the level of vigor based on hours typically scheduled per week in the Magnet sample.

H³g₃: There will be no significant difference in the level of dedication based on hours typically scheduled per week in the Magnet sample.

 H^3g_4 : There will be no significant difference in the level of absorption based on hours typically scheduled per week in the Magnet sample.

H³h: There will be no significant difference in engagement based on hours typically worked per week in the Magnet sample. Null hypothesis H³h is composed of the following sub-hypotheses:

H³h₁: There will be no significant difference in the level of total engagement based on hours typically worked per week in the Magnet sample.

H³h₂: There will be no significant difference in the level of vigor based on hours typically worked per week in the Magnet sample.

H³h₃: There will be no significant difference in the level of dedication based on hours typically worked per week in the Magnet sample.

H³h₄: There will be no significant difference in the level of absorption based on hours typically worked per week in the Magnet sample.

H³i: There will be no significant difference in engagement based on percentage of time spent in direct patient care activities in the Magnet sample. Null hypothesis H³i is composed of the following sub-hypotheses:

H³i₁: There will be no significant difference in the level of total engagement based on percentage of time spent in direct patient care activities in the Magnet sample.

 H^3i_2 : There will be no significant difference in the level of vigor based on percentage of time spent in direct patient care activities in the Magnet sample.

 H^3i_3 : There will be no significant difference in the level of dedication based on percentage of time spent in direct patient care activities in the Magnet sample.

 $H^{3}i_{4}$: There will be no significant difference in the level of absorption based on percentage of time spent in direct patient care activities in the Magnet sample.

H³j: There will be no significant difference in engagement based on nursing unit in the Magnet sample. Null hypothesis H³j is composed of the following sub-hypotheses:

H³j₁: There will be no significant difference in the level of total engagement based on nursing unit in the Magnet sample.

 H^3j_2 : There will be no significant difference in the level of vigor based on nursing unit in the Magnet sample.

 H^3j_3 : There will be no significant difference in the level of dedication based on nursing unit in the Magnet sample.

H³j₄: There will be no significant difference in the level of absorption based on nursing unit in the Magnet sample.

H³k: There will be no significant difference in engagement based on shared governance council participation in the Magnet sample. Null hypothesis H³k is composed of the following sub-hypotheses:

H³k₁: There will be no significant difference in the level of total engagement based on shared governance council participation in the Magnet sample.

H³k₂: There will be no significant difference in the level of vigor based on shared governance council participation in the Magnet sample.

H³k₃: There will be no significant difference in the level of dedication based on shared governance council participation in the Magnet sample.

 H^3k_4 : There will be no significant difference in the level of absorption based on shared governance council participation in the Magnet sample.

Question Four

Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement?

Research question four analyzed the Magnet sample to evaluate the influence of RN perception related to organizational support for work on the relationship between Magnet-designated organizational structures and engagement. The following null hypotheses are requisite to answering question four:

H⁴a: There will be no significant difference in engagement based on perceptions of administration supporting EBP in the Magnet sample. Null hypothesis H⁴a is composed of the following sub-hypotheses:

H⁴a₁: There will be no significant difference in the level of total engagement based on perceptions of administration supporting EBP in the Magnet sample.

H⁴a₂: There will be no significant difference in the level of vigor based on perceptions of administration supporting EBP in the Magnet sample.

H⁴a₃: There will be no significant difference in the level of dedication based on perceptions of administration supporting EBP in the Magnet sample.

H⁴a₄: There will be no significant difference in the level of absorption based on perceptions of administration supporting EBP in the Magnet sample.

H⁴b: There will be no significant difference in engagement based on perceptions of the work environment supporting professional practice in the Magnet sample. Null hypothesis H⁴b is composed of the following sub-hypotheses:

H⁴b₁: There will be no significant difference in the level of total engagement based on perceptions of the work environment supporting professional practice in the Magnet sample.

H⁴b₂: There will be no significant difference in the level of vigor based on perceptions of the work environment supporting professional practice in the Magnet sample.

H⁴b₃: There will be no significant difference in the level of dedication based on perceptions of the work environment supporting professional practice in the Magnet sample.

H⁴b₄: There will be no significant difference in the level of absorption based on perceptions of the work environment supporting professional practice in the Magnet sample.

H⁴c: There will be no significant difference in engagement based on perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample. Null hypothesis H⁴c is composed of the following sub-hypotheses:

H⁴c₁: There will be no significant difference in the level of total engagement based on perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample.

H⁴c₂: There will be no significant difference in the level of vigor based on perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample.

H⁴c₃: There will be no significant difference in the level of dedication based on perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample.

H⁴c₄: There will be no significant difference in the level of absorption based on perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample.

Data Analysis for Research Questions

The study needed a variety of statistical analysis methods to test the research questions because the instruments for this study varied in scale of measurement. The UWES-17 (Schaufeli & Bakker, 2003) utilized a visual analog scale with clearly defined parameters, including an absolute zero. Ratio data allowed the researcher to determine the Mean level of total engagement, vigor, dedication, and absorption (Schaufeli & Bakker, 2003; Schaufeli & Bakker, 2004a).

The custom 15-item demographic survey yielded nominal and ratio data. Nominal data included Magnet/non-Magnet, age (generation), gender, nursing degree, shift, nursing role, nursing unit, shared governance council participation, and RN perception of organizational support for work. Ratio data included years of nursing experience in any setting, years of nursing experience in the current work setting, hours scheduled per week, and hours worked per week.

The investigator entered data into an Excel spreadsheet and later downloaded data into PAWS 18 (SPSS) for data analysis. The determination of normality resulted in the use of parametric statistical analysis to address research questions two and three.

Research question one required analysis of the levels of engagement (total engagement, vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals. The researcher utilized data from the UWES-17. To analyze engagement, the researcher completed descriptive statistics (Table 5).

Research question two and corresponding null hypotheses evaluated the relationship between Magnet designation and levels of RN engagement (total engagement, vigor, dedication, and absorption). The researcher utilized data from the UWES-17. To test null hypotheses, the researcher employed paired *t*-tests (Table 5).

Research question three and the corresponding null hypotheses evaluated the influence of RN social and institutional demographics on the relationship between Magnet designation and levels of engagement (total engagement, vigor,

dedication, and absorption). The researcher utilized data from the UWES-17 and the 15-item demographic survey and employed a variety of parametric methods such as paired *t*-test, analysis of variance (ANOVA), and regression analysis to test null hypotheses. The researcher utilized scatter plots, Student-Newman-Keuls, Scheffe, and Hochberg for post-hoc analysis of all significant results (Table 5).

Research question four and the corresponding null hypotheses evaluated the influence of RN perception of organizational support for work on the relationship between Magnet designation and levels of engagement (total engagement, vigor, dedication, and absorption). The researcher utilized data from the UWES-17 and the 15-item demographic survey and employed ANOVA to test the corresponding null hypotheses. The researcher utilized Student-Newman-Keuls, Scheffe, and Hochberg for post-hoc analysis of all significant results (Table 5).

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Table 5

Relationship between Research Question, Null Hypothesis, Instrumentation, and Analysis Method

Research Question	Null Hypo.	Instruments	Considerations	Stat. Analysis Method
1. What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?	Not Applicable	UWES-17	Magnet Sample Non-Magnet Sample	Descriptive Statistics (<i>M</i> , <i>SD</i>)
2. What is the relationship between levels of engagement (total engagement and subscales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?	H ² a, H ² b, H ² c, H ² d	UWES-17	Magnet Sample Non-Magnet Sample	Paired t-test
3. Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?	$H^{3}a_{1-4}, H^{3}c_{1-4}, \\ H^{3}f_{1-4}, H^{3}i_{1-4}, \\ H^{3}j_{1-4}, H^{3}k_{1-4},$	UWES-17 Survey ^a	Magnet Sample	ANOVA, Student-Newman-Keuls, Scheffe, Hochberg
	H^3b_{1-4}	UWES-17 Survey ^a	Magnet Sample	Paired <i>t</i> -test, Student-Newman-Keuls, Scheffe, Hochberg
	H ³ d ₁₋₄ , H ³ e ₁₋₄ , H ³ g ₁₋₄ , H ³ h ₁₋₄	UWES-17 Survey ^a	Magnet Sample	Regression Analysis, Scatter Plots

relationship between Magnet designation and engagement? Scheffe, Hochberg		H ⁴ a ₁₋₄ , H ⁴ b ₁₋₄ , H ⁴ c ₁₋₄	UWES-17 Survey ^a	Magnet Sample	ANOVA, Student-Newman-Keuls, Scheffe, Hochberg
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^a15-item Demographic Survey.

Summary

This chapter presented the methodology used in this research. The chapter provided the description of participant recruitment and the data collection process. The study investigator utilized the UWES-17 by Schaufeli and Bakker (2003) and a 15-item demographic survey created specifically for this study for data collection. The chapter described these instruments in detail, including validity and internal consistency for the UWES-17. To close, the chapter presented the data analysis methods in relation to the research questions and corresponding null hypotheses.

The results of this study are discussed in the next chapter. Chapter IV will describe significant findings about Magnet-designated structures and the organizational process of engagement. The chapter also will describe the influence of social and institutional demographic variables on the relationship between Magnet designation and engagement. Finally, the chapter will describe the influence of RN perception of organizational support for work on the relationship between Magnet designation and engagement.

CHAPTER IV. FINDINGS

The ANCC Magnet Model (2008) is consistent with Donabedian's quality assessment framework (1988), which emphasizes the importance of structure to promote process and, as a result, quality outcomes. As RN engagement is a key component in professional practice, it is imperative to determine what can be done to facilitate and sustain it.

The purpose of this study was to analyze and evaluate the correlation between the organizational structures of Magnet designation and the organizational process of engagement. This study also assessed the relationship between social and institutional demographics of the RN workforce, Magnet designation, and engagement. Finally, the study assessed the relationship between RN perception of organizational support for work, Magnet designation, and engagement. The investigator measured the variables of engagement (total engagement, vigor, dedication, and absorption) with the UWES-17 (Schaufeli & Bakker, 2003). The investigator collected the social and institutional demographic data with a 15-item survey created specifically for this study. This chapter will describe the findings of this study.

Testing the Research Questions

This study tested four research questions. The study employed descriptive and inferential statistical methods to evaluate the null hypotheses associated with each research question. The first question required descriptive statistical methods to yield Mean measures of total engagement, vigor, dedication, and absorption for the Magnet and non-Magnet samples.

The second research question utilized paired *t*-tests to analyze differences between Magnet and non-Magnet samples. The investigator completed comparative analysis for total engagement, vigor, dedication, and absorption.

These statistical methods analyzed data to enable evaluation of four null hypotheses associated with research question two.

The third research question required a variety of analysis methods. Within the Magnet sample, descriptive statistics produced Mean measures of total engagement, vigor, dedication, and absorption in relation to each social and institutional demographic variable. The researcher used ANOVA to analyze nominal data including age (generation), nursing education, shift, percentage of time in direct patient care, nursing unit, and shared governance council participation. The researcher analyzed gender, a dichotomous variable, with a paired t-test and utilized regression analysis for ratio data including nursing experience in any setting, nursing experience in the current work setting (unit longevity), hours scheduled and hours worked per week. Significant nominal tests (ANOVA, paired t-test) required post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg. Significant ratio tests (regression analysis) required the use of scatter plots for post-hoc evaluation. Together, these statistical methods analyzed data to enable evaluation of eleven null hypotheses associated with research question three.

The fourth research question utilized data from the UWES-17 and 15-item survey to determine whether RN perception of organizational support for work influenced the relationship between Magnet designation and engagement. The

researcher utilized ANOVA and significant tests required

Student-Newman-Keuls, Scheffe, and Hochberg for post-hoc evaluation.

Together these statistical methods analyzed data to enable evaluation of three null hypotheses associated with research question four.

Research Question One

What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals?

For question one, descriptive statistics analyzed data from the UWES-17 for Magnet and non-Magnet samples (Table 6). Magnet sample results showed total engagement (N = 220, M = 73.3, SD = 12.7) and the sub-scales of vigor (N = 220, M = 25.3, SD = 4.8), dedication (N = 220, M = 24.1, SD = 4.2), and absorption (N = 220, M = 23.9, SD = 5.1). Non-Magnet sample results showed total engagement (N = 150, M = 72.3, SD = 12.6) and the sub-scales of vigor (N = 150, M = 24.8, SD = 4.8), dedication (N = 150, M = 23.7, SD = 3.9), and absorption (N = 150, M = 23.8, SD = 5.5).

Table 6

Levels of Engagement

Level of Engagement	Magnet ^a		Non-M	lagnet ^b
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Total engagement	73.3	12.7	72.3	12.6
Vigor	25.3	4.8	24.8	4.8
Dedication	24.1	4.2	23.7	3.9
Absorption	23.9	5.1	23.8	5.5

^aMagnet: n = 220. ^bNon-Magnet: n = 150.

Research Question Two

What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital?

For question two, the investigator analyzed data from the UWES-17 for both Magnet and non-Magnet samples (Table 6). Comparative analysis by paired *t*-test was completed for total engagement, vigor, dedication, and absorption to enable evaluation of the four null hypotheses associated with this research question.

The investigator performed statistical analysis via paired t-test between Magnet and non-Magnet samples for total engagement, vigor, dedication, and absorption (Table 7). Paired t-test found no significant difference between the Magnet and non-Magnet samples for total engagement (p > 0.05). Analysis also found no significant difference between Magnet and non-Magnet samples for the engagement sub-scales of vigor, dedication, or absorption (p > 0.05).

Table 7

Comparative Analysis of Levels of Engagement

Level of Engagement	<i>t</i> -test	df	Significance	SD
Total Engagement	0.743	320.451	0.458	1.3400
Vigor	0.978	319.674	0.329	0.5092
Dedication	0.853	333.784	0.394	0.4242
Absorption	0.238	303.347	0.812	0.5682

Research Question Three

Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement?

For question three, the investigator utilized data from the UWES-17 and the 15-item demographic survey. The researcher conducted analysis within the Magnet sample for each social and institutional demographic variable in relation to total engagement, vigor, dedication, and absorption and analyzed parametric statistical methods (ANOVA, paired *t*-test, regression analysis) to enable evaluation of eleven null hypotheses associated with research question three. Significant nominal tests (ANOVA, paired *t*-test) required post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg. Significant ratio tests (regression analysis) required scatter plots for post-hoc evaluation.

The investigator conducted statistical analysis of age (aggregated by generation) in relation to total engagement, vigor, dedication, and absorption using ANOVA (Table 8). Analysis between generations of the Magnet sample found that age (generation) did significantly influence the relationship between Magnet designation and total engagement (F(2, 217) = 3.354, p = 0.037). Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg were not significant (p > 0.05) for total engagement.

Analysis between generations of the Magnet sample found that age (generation) did not correlate with vigor or dedication (p > 0.05). Analysis between generations of the Magnet sample found that age (generation) did significantly influence the relationship between Magnet designation and

absorption (F(2, 217) = 5.386, p = 0.005). Post-hoc analysis of Student-Newman-Keuls was significant (0.054).

Table 8

Age (Generation) on the Relationship between Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				3.354	0.037
Between Groups	1052.464	2	526.232		
Within Groups	34047.331	217	156.900		
Vigor				2.443	0.089
Between Groups	111.182	2	55.591		
Within Groups	4938.545	217	22.758		
Dedication				0.878	0.417
Between Groups	30.459	2	15.229		
Within Groups	3766.068	217	17.355		
Absorption				5.386	0.005
Between Groups	271.121	2	135.561		
Within Groups	5461.474	217	25.168		
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^aSig = Significance.

The study investigator conducted statistical analysis of gender in relation to total engagement, vigor, dedication, and absorption with paired t-tests (Table 9). Paired t-test between male and female RNs in the Magnet sample found no significant difference in total engagement (p > 0.05). Analysis also found no significant difference in vigor, dedication, or absorption based on gender in the Magnet sample (p > 0.05).

Table 9.

Gender on the Relationship between Magnet Designation and Engagement

Level of Engagement	<i>t</i> -Test	df	Sig ^a
Total Engagement	-1.431	13.189	0.176
Vigor	-0.509	13.748	0.619
Dedication	-1.737	12.707	0.107
Absorption	-1.368	13.163	0.194

^aSig = Significance.

The researcher conducted statistical analysis of level of nursing education in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 10). Analysis between levels of education in the Magnet sample found no significant difference in total engagement (p > 0.05). Analysis also found no significant difference in vigor, dedication, or absorption based on level of nursing education in the Magnet sample (p > 0.05).

Table 10

Nursing Education on the Relationship between Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement					
Between Groups	16.618	3	5.539	0.034	0.992
Within Groups	35083.178	216	162.422		
Vigor					
Between Groups	17.027	3	5.676	0.244	0.866
Within Groups	5032.701	216	23.300		
Dedication					
Between Groups	9.155	3	3.052	0.174	0.914
Within Groups	3787.373	216	17.534		
Absorption					
Between Groups	50.542	3	16.847	0.640	0.590
Within Groups	5682.053	216	26.306		

^aSig = Significance.

The researcher conducted statistical analysis of nursing experience in any clinical setting in relation to total engagement, vigor, dedication, and absorption with regression analysis (Table 11). Analysis found that nursing experience did influence the relationship between Magnet designation and total engagement $(r^2 = 0.044, p = 0.002)$. Analysis also found that nursing experience in any clinical setting correlated with vigor $(r^2 = 0.034, p = 0.007)$, dedication $(r^2 = 0.019, p = 0.041)$, and absorption $(r^2 = 0.055, p = 0.001)$. Scatter plots associated with each test reflected a positive slope.

Table 11

Nursing Experience in any Clinical Setting on the Relationship between Magnet

Designation and Engagement

Level of Engagement	r ²	SS	df	MS	F	Sig ^a
Total Engagement	0.044				9.918	0.002
Regression		1540.508	1	1540.508		
Residual		33551.423	216	155.331		
Vigor	0.034				7.535	0.007
Regression		170.056	1	170.056		
Residual		4875.105	216	22.570		
Dedication	0.019				4.228	0.041
Regression		72.584	1	72.584		
Residual		3708.517	216	17.169		
Absorption	0.055				12.473	0.001
Regression		312.905	1	312.905		
Residual		5418.875	216	25.087		
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^aSig = Significance.

The study investigator conducted statistical analysis of nursing experience in the current work setting (unit longevity) in relation to total engagement, vigor, dedication, and absorption with regression analysis (Table 12). Analysis found that unit longevity correlated with total engagement ($r^2 = 0.029$, p = 0.012).

Analysis also found that nursing experience in the current work setting correlated with vigor ($r^2 = 0.024$, p = 0.021).

Analysis found that unit longevity did not correlate with dedication (p > 0.05). Analysis found however that nursing experience in the current work setting did correlate with absorption $(r^2 = 0.029, p = 0.011)$ in the Magnet sample. Scatter plots associated with the significant tests of total engagement, vigor, and absorption reflected positive slopes.

Table 12

Nursing Experience in the Current Work Setting on the Relationship between

Magnet Designation and Engagement

Level of Engagement	r ²	SS	df	MS	F	Sig ^a
Total Engagement	0.029				6.402	0.012
Regression		1001.296	1	1001.296		
Residual		34098.499	218	156.415		
Vigor	0.024				5.372	0.021
Regression		121.436	1	121.436		
Residual		4928.292	218	22.607		
Dedication	0.016				3.436	0.065
Regression		58.902	1	58.902		
Residual		3737.625	218	17.145		
Absorption	0.029				6.568	0.011
Regression		167.669	1	167.669		
Residual		5564.926	218	25.527		
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^aSig = Significance.

The researcher conducted statistical analysis of shift in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 13). Analysis of the Magnet sample found that shift does influence the relationship between Magnet designation and total engagement (F(4, 215) = 5.768, p = 0.000), vigor (F(4, 215) = 4.782, p = 0.001), dedication (F(4, 215) = 3.325, p = 0.011), and

absorption (F (4, 215) = 6.534, p = 0.000). Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg were not significant (p > 0.05). Table 13

Shift on the Relationship between Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				5.768	0.000
Between Groups	3401.555	4	850.389		
Within Groups	31698.240	215	147.434		
Vigor				4.782	0.001
Between Groups	412.524	4	103.131		
Within Groups	4637.203	215	21.568		
Dedication				3.325	0.011
Between Groups	221.184	4	55.296		
Within Groups	3575.343	215	16.630		
Absorption				6.534	0.000
Between Groups	621.325	4	155.331		
Within Groups	5111.271	215	23.773		
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^aSig = Significance.

The researcher conducted statistical analysis of hours typically scheduled to work each week in relation to total engagement, vigor, dedication, and absorption with regression analysis (Table 14). Analysis of the Magnet sample found that hours typically scheduled to work each week did not influence the relationship between Magnet designation and total engagement (p > 0.05). Regression analysis also found that hours typically scheduled to work each week did not correlate with vigor, dedication, or absorption in the Magnet sample (p > 0.05).

Table 14

Hours Scheduled to Work Each Week on the Relationship between Magnet

Designation and Engagement

Level of Engagement	r ²	SS	df	MS	F	Sig ^a
Total Engagement	0.001				0.290	0.591
Regression		46.647	1	46.647		
Residual		35053.148	218	160.794		
Vigor	0.002				0.447	0.504
Regression		10.340	1	10.340		
Residual		5039.387	218	23.116		
Dedication	0.001				0.116	0.734
Regression		2.013	1	2.013		
Residual		3794.514	218	17.406		
Absorption	0.004				0.968	0.326
Regression		25.333	1	25.333		
Residual		5707.263	218	26.180		
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^aSig = Significance.

The study investigator conducted statistical analysis of hours typically worked each week in relation to total engagement, vigor, dedication, and absorption with regression analysis (Table 15). Analysis within the Magnet sample found that hours typically worked each week did not influence the relationship between Magnet designation and total engagement (p > 0.05). Regression analysis also found that hours typically worked each week did not correlate with vigor, dedication, or absorption (p > 0.05).

Table 15

Hours Worked Each Week on the Relationship between Magnet Designation and Engagement

Level of Engagement	r ²	SS	df	MS	F	Sig ^a
Total Engagement	0.005				0.993	0.320
Regression		159.089	1	159.089		
Residual		34940.707	218	160.278		
Vigor	0.010				2.235	0.136
Regression		51.236	1	51.236		
Residual		4998.491	218	22.929		
Dedication	0.000				0.001	0.970
Regression		0.024	1	0.024		
Residual		3796.503	218	17.415		
Absorption	0.005				1.203	0.274
Regression		31.468	1	31.468		
Residual		5701.127	218	26.152		

^aSig = Significance.

The nurse researcher conducted statistical analysis of percentage of time in direct patient care activities in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 16). Analysis within the Magnet sample found that percentage of time in direct patient care activities did not correlate with total engagement (p > 0.05). Analysis also found that percentage of time in direct patient care activities did not correlate with vigor, dedication, or absorption in the Magnet sample (p > 0.05).

Table 16

Percentage of Time in Direct Patient Care Activities on the Relationship between

Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				2.085	0.103
Between Groups	987.987	3	329.329		
Within Groups	34111.808	216	157.925		
Vigor				1.967	0.120
Between Groups	134.312	3	44.771		
Within Groups	4915.415	216	22.757		
Dedication				1.609	0.188
Between Groups	82.995	3	27.665		
Within Groups	3713.532	216	17.192		
Absorption				1.840	0.141
Between Groups	142.822	3	47.607		
Within Groups	5589.774	216	25.879		
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^aSig = Significance.

The study investigator conducted statistical analysis of nursing unit in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 17). Analysis within the Magnet sample found that nursing unit did influence the relationship between Magnet designation and total engagement (F(8, 211) = 2.356, p = 0.019). Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg were not significant for total engagement (p > 0.05).

Analysis within the Magnet sample found that nursing unit did not influence the relationship between Magnet designation and vigor (p > 0.05). Statistical analysis within the Magnet sample did find, however, that nursing unit influenced the relationship between Magnet designation and dedication (F(8, 211) = 4.784, p = 0.000). Post-hoc analysis of Student-Newman-Keuls found significance in relation to dedication (p = 0.05). Finally, the analysis found

that nursing unit did not influence the relationship between Magnet designation and absorption in the Magnet sample (p > 0.05).

Table 17

Nursing Unit on the Relationship between Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				2.356	0.019
Between Groups	2877.754	8	359.719		
Within Groups	32222.041	211	152.711		
Vigor				1.635	0.117
Between Groups	294.707	8	36.838		
Within Groups	4755.020	211	22.536		
Dedication				4.784	0.000
Between Groups	582.916	8	72.865		
Within Groups	3213.611	211	15.230		
Absorption				1.851	0.069
Between Groups	375.882	8	46.985		
Within Groups	5356.713	211	25.387		
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^aSig = Significance.

The researcher conducted statistical analysis of shared governance council participation in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 18). Analysis within the Magnet sample found that shared governance council participation did not correlate with total engagement (p > 0.05). Analysis also found that shared governance council participation did not correlate with vigor, dedication, or absorption in the Magnet sample (p > 0.05).

Table 18

Shared Governance Council Participation on the Relationship between Magnet

Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				0.684	0.563
Between Groups	342.183	3	108.061		
Within Groups	32251.125	204	158.094		
Vigor				0.660	0.578
Between Groups	46.405	3	15.468		
Within Groups	4784.360	204	23.453		
Dedication				1.573	0.197
Between Groups	77.371	3	25.790		
Within Groups	3343.706	204	16.391		
Absorption				0.855	0.466
Between Groups	65.790	3	21.930		
Within Groups	5234.628	204	25.660		
90.					

^aSig = Significance.

Research Question Four

Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement?

For question four, the investigator utilized data from the UWES-17 and the 15-item demographic survey. The researcher conducted analysis within the Magnet sample for RN perception related to organizational support for work in relation to total engagement, vigor, dedication, and absorption and analyzed parametric statistical methods (ANOVA) to enable evaluation of three null hypotheses associated with research question four. Significant tests required post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg.

The study investigator conducted statistical analysis of the RN perception of hospital administration supporting EBP in relation to total engagement, vigor,

dedication, and absorption with ANOVA (Table 19). Analysis within the Magnet sample found that the RN perception of hospital administration supporting EBP did influence the relationship between Magnet designation and total engagement (F(3, 216) = 9.433, p = 0.000). Analysis also found that the RN perception of hospital administration supporting EBP correlated with vigor (F(3, 216) = 5.591, p = 0.001), dedication (F(3, 216) = 11.957, p = 0.000), and absorption (F(3, 216) = 7.102, p = 0.000) in the Magnet sample.

The investigator conducted post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg for total engagement, vigor, dedication, and absorption. Post-hoc analysis of Student-Newman-Keuls found significance in relation to total engagement (p = 0.052). Post-hoc analysis of Hochberg found significance in relation to vigor (p = 0.054). Post-hoc analysis for dedication and absorption were not significant (p > 0.05).

Table 19

RN Perception of Administration Supporting EBP on the Relationship between

Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				9.433	0.000
Between Groups	4065.773	3	1355.258		
Within Groups	31034.022	216	143.676		
Vigor				5.591	0.001
Between Groups	363.876	3	121.292		
Within Groups	4685.851	216	21.694		
Dedication				11.957	0.000
Between Groups	540.694	3	180.231		
Within Groups	3255.834	216	15.073		
Absorption				7.102	0.000
Between Groups	514.700	3	171.567		
Within Groups	5217.896	216	24.157		
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^aSig = Significance.

The researcher conducted statistical analysis of the RN perception of work environment supporting professional practice in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 20). Analysis within the Magnet sample found that the RN perception of work environment supporting professional practice did positively influence the relationship between Magnet designation and total engagement (F (3, 216) = 13.415, p = 0.000). Analysis also found that the RN perception of work environment supporting professional practice correlated with vigor (F (3, 216) = 5.881; p = 0.001), dedication (F (3, 216) = 19.568, p = 0.000), and absorption (F (3, 216) = 11.974, p = 0.000) in the Magnet sample. Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg found no significance for total engagement, vigor, dedication, or absorption (p > 0.05).

Table 20

RN Perception of Work Environment Supporting Professional Practice on the Relationship between Magnet Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				13.415	0.000
Between Groups	5512.809	3	1837.603		
Within Groups	29586.987	216	136.977		
Vigor				5.881	0.001
Between Groups	381.322	3	127.107		
Within Groups	4668.405	216	21.613		
Dedication				19.568	0.000
Between Groups	811.316	3	270.439		
Within Groups	2985.211	216	13.820		
Absorption				11.974	0.000
Between Groups	817.404	3	272.468		
Within Groups	4915.192	216	22.756		
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^aSig = Significance.

The researcher conducted statistical analysis of the RN perception of empowerment based on resource availability to perform the job in relation to total engagement, vigor, dedication, and absorption with ANOVA (Table 21). Analysis within the Magnet sample found that the RN perception of empowerment based on resource availability to perform the job did influence the relationship between Magnet designation and total engagement (F(3, 215) = 17.760, p = 0.000), vigor (F(3, 215) = 12.652, p = 0.000), dedication (F(3, 215) = 26.643, p = 0.000), and absorption (F(3, 215) = 8.456, p = 0.000). Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg found no significance for total engagement, vigor, or dedication (p > 0.05). Post-hoc analysis of Student-Newman-Keuls found significance in relation to absorption (p = 0.051).

Table 21

RN Perception of Empowerment on the Relationship between Magnet

Designation and Engagement

Level of Engagement	SS	df	MS	F	Sig ^a
Total Engagement				17.760	0.000
Between Groups	6708.021	3	2236.007		
Within Groups	27068.399	215	125.900		
Vigor				12.652	0.000
Between Groups	751.675	3	250.558		
Within Groups	4257.950	215	19.804		
Dedication				26.643	0.000
Between Groups	974.904	3	324.968		
Within Groups	2622.421	215	12.197		
Absorption				8.456	0.000
Between Groups	578.216	3	192.739		
Within Groups	4900.560	215	22.793		
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^aSig = Significance.

Post-hoc Analysis for Significant Social and Institutional Demographics

Consistent with the definition of engagement by Schaufeli et al. (2002), all levels of engagement (total engagement, vigor, dedication, and absorption) must be significant in order to reject the associated null hypotheses. Significant variables that influenced the relationship between Magnet designation and all levels of engagement were nursing experience, shift, RN perception of administration supporting EBP, RN perception of work environment supporting professional practice, and RN perception of empowerment. After establishing significant variables, the researcher conducted post-hoc analysis (Table 22).

The study investigator analyzed scatter plots for the variable of nursing experience. Scatter plots for nursing experience associated with total engagement, vigor, dedication, and absorption reflected a positive slope. The

positive slope suggests that with greater nursing experience in any clinical setting, engagement is greater at all levels (total engagement, vigor, dedication, and absorption).

The researcher conducted Student-Newman-Keuls, Scheffe, and Hochberg analysis for the variables of shift and RN perception related to organizational support for work. All post-hoc analysis associated with shift were non-significant. Post-hoc analysis of RN perception related to organizational support for work found mixed results. The variable of RN perception of administration supporting EBP found post-hoc significance via Student-Newman-Keuls for total engagement (p = 0.05) and Hochberg for vigor (p = 0.05). Post-hoc analysis on the variable of RN perception of the work environment supporting professional practice found no significant results with Student-Newman-Keuls, Scheffe, or Hochberg (p > 0.05). The final variable of RN perception of empowerment found significance via Student-Newman-Keuls analysis for absorption (p = 0.05). Collectively these variables found significance in relation to total engagement, vigor, and absorption.

Table 22

Post-hoc Analysis for Significant Social and Institutional Demographics that

Influence the Relationship between Magnet Designation and all Levels of

Engagement

Variable	Total	Vigor	Dedication	Absorption
Nursing Experience	Engagement + Slope ^a	+ Slope ^a	+ Slope ^a	+ Slope ^a
Nursing Expendice	+ Slope	+ Slope	+ Slope	+ Slope
Shift	<i>p</i> > 0.05	<i>p</i> > 0.05	p > 0.05	<i>p</i> > 0.05
RN Perception of Administration Supporting EBP	$p = 0.05^{b}$	$p = 0.05^{c}$	<i>p</i> > 0.05	<i>p</i> > 0.05
RN Perception of Work Environment Supporting Professional Practice	p > 0.05	p > 0.05	p > 0.05	p > 0.05
RN Perception of	,	,	,	•
Empowerment	p > 0.05	<i>p</i> > 0.05	<i>p</i> > 0.05	$p = 0.05^{b}$

^aScatter plot positive slope. ^bStudent-Newman-Keuls. ^cHochberg.

Summary

Chapter IV presented the research findings. The chapter addressed each research question in relation to sample, statistical analysis method, and results. The chapter described findings to enable evaluation of the null hypotheses associated with each research question. The results of research question one required descriptive statistics. The researcher analyzed data from the UWES-17 for both Magnet and non-Magnet samples in relation to total engagement, vigor, dedication, and absorption. These results enabled analysis of research question two.

Research question two required paired *t*-tests to evaluate the data from the UWES-17 from both Magnet and non-Magnet samples. The data found no

significant difference between the Magnet and non-Magnet samples in relation to total engagement. Additionally, the data found no significant difference between the Magnet and non-Magnet samples in relation to vigor, dedication, or absorption.

The results of research question three required a variety of statistical methods including paired *t*-test, ANOVA, regression analysis, scatter plots, Student-Newman-Keuls, Scheffe, and Hochberg. Analysis explored whether social and institutional demographics influenced the relationship between Magnet designation and the levels of engagement (total engagement, vigor, dedication, and absorption). The findings demonstrated that shift and nursing experience in any clinical setting did influence the relationship between Magnet designation and all levels of RN engagement (total engagement, vigor, dedication, and absorption). Post-hoc analysis of shift and nursing experience found mixed results.

On a smaller scale, some social and institutional demographic variables significantly correlated with particular aspects of engagement (total engagement, vigor, dedication, or absorption). The variables of age (aggregated by generation), nursing unit, and nursing experience in the current work setting were found to significantly influence the relationship between Magnet designation and total engagement. The variables of age (generation) and nursing experience in the current work setting also were found to significantly influence the relationship between Magnet designation and absorption. Overall, the analysis for research question three found mixed results.

The results of research question four required the use of ANOVA,

Student-Newman-Keuls, Scheffe, and Hochberg. Analysis explored whether RN

perceptions related to organizational support for work influenced the relationship

between Magnet designation and the levels of RN engagement (total

engagement, vigor, dedication, and absorption). The findings demonstrated that

RN perception of administration supporting EBP, RN perception of the work

environment supporting professional practice, and RN perception of

empowerment significantly influenced the relationship between Magnet

designation and all levels of RN engagement (total engagement, vigor,

dedication, and absorption). Post-hoc analysis found mixed results.

The next chapter (Chapter V) will summarize the findings of this study.

Clinical and academic implications will be discussed. Limitations of the study will be presented along with suggestions for future research.

CHAPTER V. SUMMARY, DISCUSSION, AND CONCLUSIONS

Chapter V is a summary and discussion of the findings in the study. The chapter presents implications for health systems and clinical practice as well as an overview of limitations. Finally, the chapter describes recommendations for future research. This chapter explains the findings of this research and relates the results to the literature and a previous pilot by Wonder (2009) for comparison and evaluation.

Summary of the Study

The purpose of this study was to analyze and evaluate the relationship between levels of RN engagement (total engagement, vigor, dedication, and absorption) and Magnet designation. The study also explored social and institutional demographic variables within the Magnet RN workforce to determine whether these factors have significant influence on the relationship between RN engagement and Magnet designation. Finally, the study explored RN perception of organizational support for work to determine whether these factors have significant influence on the relationship between RN engagement and Magnet designation.

Magnet designation is considered by many as the *gold standard* of organizational structure to promote professional nursing practice and optimal patient outcomes (Kooker & Kamikawa, 2011; Parsons & Cornett, 2011).

Magnet-designated hospitals aspire to empower RNs (ANCC, 2008) and, as a result, create cultures of engagement. This is consistent with the quality assessment framework by Donabedian (1988) in that good structure promotes

good process and as a result achieves good outcomes. Thus, the intention of this study was to determine if correlations exist between a Magnet-designated hospital and levels of RN engagement by comparing the findings to a non-Magnet designated hospital.

This descriptive, correlational study was conducted in two Magnet-designated hospitals combined into one sample and compared with one non-Magnet designated hospital in a U.S. Midwestern state. A total of 370 RNs at Magnet (n = 220) and non-Magnet designated (n = 150) hospitals participated in the study. Participants completed a one-time survey composed of two paper-and-pencil instruments including a 15-item demographic survey and the UWES-17 by Schaufeli and Bakker (2003) that required about 10 minutes to complete. Together, the instruments provided the necessary data to determine whether significant relationships exist between Magnet-designated organizational structures and the levels of RN engagement.

This research study addressed four research questions. Research question one asked: What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals? The researcher conducted descriptive statistical analysis on both Magnet and non-Magnet samples in relation to total engagement, vigor, dedication, and absorption. The non-Magnet sample provided a baseline for evaluation between Magnet and non-Magnet designated structures in relation to all levels of RN engagement.

The Magnet sample results showed total engagement (N = 220, M = 73.3, SD = 12.7) and the sub-scales of vigor (N = 220, M = 25.3, SD = 4.8), dedication (N = 220, M = 24.1, SD = 4.2), and absorption (N = 220, M = 23.9, SD = 5.1). The non-Magnet sample results showed total engagement (N = 150, M = 72.3, SD = 12.6) and the sub-scales of vigor (N = 150, M = 24.8, SD = 4.8), dedication (N = 150, M = 23.7, SD = 3.9), and absorption (N = 150, M = 23.8, SD = 5.5). The findings of the Magnet and non-Magnet samples were very similar in relation to all levels of engagement (total engagement, vigor, dedication, and absorption).

Research question two asked: What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital? The investigator analyzed Magnet and non-Magnet samples in relation to total engagement, vigor, dedication, and absorption. Comparisons between Magnet and non-Magnet samples found no significant difference in relation to the levels of total engagement, vigor, dedication, and absorption (p > 0.05).

Social and institutional demographics contribute to the vast differences that exist in the RN workforce. Thus, research question three asked: Do the social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement? Analysis and evaluation of the Magnet sample found mixed results.

For significant results, the data indicated that the institutional demographic variable of shift significantly influenced the relationship between Magnet

designation and total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.011), and absorption (p = 0.000). The data also indicated that RN experience in any clinical setting significantly influenced the relationship between Magnet designation and total engagement (p = 0.002), vigor (p = 0.007), dedication (p = 0.041), and absorption (p = 0.001).

Although the following social and institutional demographics were not significant, results were note-worthy in relation to the literature. Age (aggregated by generation), was not significant, although many stereotypes exist on generational values influencing work behaviors (p > 0.05). Nursing education was not significant (p > 0.05), yet formal education has been correlated with improved patient outcomes (Aiken et al., 2003), which involves engagement in professional practice. Unit longevity was not significant (p > 0.05), although stereotypes exist in the clinical setting about unit longevity and burnout, which has been described as the opposite of engagement (Gonzales-Roma et al., 2006; Schaufeli et al., 2008). Hours scheduled and worked per week were not significant (p > 0.05) though the literature asserts that engagement is transmittable (Hatfield et al., 1994) and, therefore, those who work more time might be exposed more often to engagement. Nursing unit and percentage of time in direct patient care activities were not significant (p > 0.05), even though the literature contends that variations in resources have been associated with empowerment and engagement (Laschinger & Leiter, 2006; Laschinger et al., 2006). Finally, shared governance council participation was not significant (p > 0.05); however, structures that promote autonomy and empowerment have been associated with engagement

(Laschinger et al., 2006) and are a premise of the Magnet model (ANCC, 2008). Therefore, both the significant and non-significant but note-worthy data may help disprove stereotypes and assumptions in the clinical setting by contributing empirical evidence.

Finally, research question four asked: Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement? These data demonstrated that the variable of RN perception of administration supporting EBP influenced the relationship between Magnet designation and total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.000), and absorption (p = 0.000). The data also demonstrated that the variable of RN perception of work environment supporting professional practice influenced the relationship between Magnet designation and total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.000), and absorption (p = 0.000). Additionally, the data demonstrated that the variable of RN perception of empowerment based on resource availability to effectively perform the job influenced the relationship between Magnet designation and total engagement (p = 0.000), vigor (p = 0.000), dedication (p = 0.000), and absorption (p = 0.000).

Discussion of Findings

Engagement is a vital aspect of sustaining a culture of professional practice. To guide professional practice and exemplify excellence, EBP is recommended as an essential component (ANCC, 2008; IOM, 2001, 2008; JCAHO, 2011). As many challenges to sustaining EBP exist, it is important to

determine what can be done to facilitate RN engagement in an effort to close the gap between current and ideal care practices. Uncovering effective means to facilitate a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002, p. 74) will help create a culture desired by hospitals to promote optimal outcomes for patients.

Research question one asked: What are the levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) in a sample of RNs who work at Magnet and non-Magnet designated hospitals? Although no null hypothesis was associated with this question, these measures were an essential part of the study. The descriptive findings of the non-Magnet sample provided a baseline for comparison with the Magnet sample. The study also compared the Magnet sample findings with a previous small pilot (N = 48) conducted in a Magnet-designated facility by Wonder (2009).

In relation to total engagement, the current study demonstrated a score of 73.3 for the Magnet sample and 72.3 for the non-Magnet sample. The pilot's total engagement score was higher at 77.2 (Wonder, 2009). For the concept of vigor, the current study demonstrated a score of 25.3 for the Magnet sample and 24.8 for the non-Magnet sample. The pilot's vigor score was higher at 26.5 (Wonder, 2009). In the current study, dedication demonstrated a score of 24.1 for the Magnet sample and 23.7 for the non-Magnet sample. The pilot's dedication score was higher at 25.6 (Wonder, 2009). Finally, absorption in the current study demonstrated a score of 23.9 for the Magnet sample and 23.8 for the

non-Magnet sample. The pilot's absorption score was higher at 25.2 (Wonder, 2009).

Therefore, the results of the pilot study (Wonder, 2009) demonstrated consistently higher measures of RN engagement at all levels (total engagement, vigor, dedication, and absorption) than what was found in the current study. There are several possible explanations for this discrepancy. First, the pilot utilized a much smaller sample from only medical and/or post-surgical nursing units. Because a limited number of units participated, findings of the pilot may reflect a few highly engaged nursing units, which may not be representative of all nursing units. Second, Wonder (2009) conducted the pilot in a hospital that recently achieved Magnet designation versus the current study of well-established Magnet-designated hospitals. Finally, since each hospital organization has a unique culture in spite of Magnet, the findings in either study may have been skewed based on this dynamic. Nonetheless, both of these studies contribute to a growing body of knowledge on levels of engagement in RNs and fluctuations that are possible. Hence, it is important that continued study is focused on the relationship between RN engagement and Magnet designation.

The UWES-17 by Schaufeli and Bakker (2003) is scored on a 7-point Likert-type scale, with a span of values from zero (*participant never experiences the scale item*) to 6 (*participant always experiences the scale item*). The calculation of Mean sub-scale scores (total engagement, vigor, dedication, and absorption) is done to provide another dimension of comparison between the

current findings, the pilot, and literature to provide a frame of reference for evaluation.

Using Mean sub-scale scores as a second measure of comparison, the current study compared findings to a previous cross-national study by Schaufeli et al. (2006) that constructed a sample from 27 studies carried out between 1999 and 2003 in 10 different countries. The sample represented the occupational groups of blue-collar, educators, healthcare, management, police, social work, and white-collar. Within Schaufeli et al.'s study (2006), educators demonstrated the highest level of vigor (M = 4.41), while healthcare workers scored among the lowest (M = 3.94). The pilot result (M = 4.41) matched the highest score in the cross-national study (Schaufeli et al., 2006) and exceeded the findings in the current study for Magnet (M = 4.22), and non-Magnet (M = 4.13) samples.

Schaufeli et al. (2006) found that police officers demonstrated the highest level of dedication (M = 4.55), while blue-collar workers scored the lowest level (M = 3.40) within the cross-national study. The Magnet sample RNs in the current study demonstrated a higher level of dedication (M = 4.82) than the occupational groups in the cross-national study (Schaufeli et al., 2006) and the non-Magnet sample (M = 4.74). Wonder's pilot study (2009), however, exceeded all comparative findings for dedication (M = 5.11).

Police officers, within the study by Schaufeli et al. (2006), also were found to have the highest level of absorption (M = 4.05) while healthcare workers demonstrated one of the lower scores (M = 3.55) in the study. Wonder's pilot (2009) result (M = 4.20) marginally exceeded the study by Schaufeli et al. (2006),

while the current study demonstrated lower comparative scores for Magnet (M = 3.98) and non-Magnet samples (M = 3.97).

Additionally, the researcher compared the results of the Magnet sample in this study with group norms for occupations in general. The group norms utilized for comparison were based on a compilation of findings from the UWES-17 (Schaufeli & Bakker, 2004a). The results of the Magnet sample for total engagement (M = 4.31) were in the average category (M = 3.07 - 4.66) that indicated a score between the 25th and 75th percentiles (Schaufeli & Bakker, 2004a). The results of the Magnet sample for vigor (M = 4.22) were in the average category (M = 3.21-4.80) that indicated a score between the 25th and 75th percentiles (Schaufeli & Bakker, 2004a, pp. 39-40). The results of the Magnet sample for dedication (M = 4.82) were in the average category (M = 3.01-4.90) that indicated a score between the 25th and 75th percentiles (Schaufeli & Bakker, 2004a). Finally, the results of the Magnet sample for absorption (M = 3.98) were in the average category (M = 2.76 - 4.40) that indicated a score between the 25th and 75th percentiles (Schaufeli & Bakker, 2004a).

The comparison of findings promotes understanding of how the levels of RN engagement compare with other occupational groups regardless of Magnet designation. Engagement of RNs as well as other employees remains a complex concept to measure and results can vary for many reasons. As a result, further study of this question is warranted.

Research question two asked: What is the relationship between levels of engagement (total engagement and sub-scales of vigor, dedication, and absorption) and RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital? All four null hypotheses (H^2a , H^2b , H^2c , H^2d) associated with research question two were accepted as there was no significant difference in total engagement, vigor, dedication, or absorption (p > 0.05) between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital. Although the results were not significant, the findings are note-worthy as an evaluation of the relationship between Magnet designation and RN engagement. The results warrant future study to determine if a larger sample size would influence whether a relationship is found between the levels of RN engagement and Magnet designation.

Although there was no significant difference in engagement (total engagement, vigor, dedication, or absorption) between RNs working at a Magnet-designated hospital when compared to RNs working at a non-Magnet designated hospital, the findings are important. As hospitals continue to search for cost-effective ways to facilitate RN engagement, it is imperative to assess all kinds of organizational structures. Many resources are required for full implementation of the organizational structures common to Magnet designation. Therefore, it is important to determine the relationship between Magnet designation and RN engagement. Within the current small study, the levels of RN engagement in both Magnet and non-Magnet designated hospitals were quite

close. The close proximity of scores is not consistent with the ideals of a Magnet culture that is intended to stand apart from the others in relation to RN practice qualities that exemplify excellence.

Because social and institutional demographic characteristics of RNs may contribute to levels of engagement, these were important variables to carefully consider. Research question three asked: Do social and institutional demographics of the RN workforce influence the relationship between Magnet designation and engagement? Eleven null hypotheses, each with four sub-hypotheses (H³a¹-4, H³b¹-4, H³c¹-4, H³d¹-4, H³d¹-4, H³d¹-4, H³d¹-4, H³d¹-4, H³d¹-4, H³d¹-4, H³l¹-4, H³l

Age

Null hypothesis H³a was accepted as there was no significant difference in engagement based on age (aggregated by generational cohorts) in the Magnet sample. Analysis found mixed results in relation to total engagement (p = 0.037), vigor (p > 0.05), dedication (p > 0.05), and absorption (p = 0.005). This weak correlation with age is consistent with the literature (Schaufeli & Bakker, 2004a; Schaufeli et al., 2006), however, different than the results of Wonder's pilot study (2009), which showed significance in relation to vigor only (p = 0.044).

Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg was not significant for total engagement (p > 0.05). Although non-significant, post-hoc findings indicated the greatest level of total engagement was found in the Baby Boomer Generation and the lowest level of total engagement was found within Generation Y. Post-hoc analysis of Student-Newman-Keuls was significant for absorption (p = 0.054), indicating that the Baby Boomer Generation had a significantly greater level of absorption than Generation X. Although non-significant, post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg showed greater levels of absorption in Generation X than in Generation Y (p > 0.05).

Although the variable of age (generation) was not significant, the findings are important. As many stereotypes exist about the influence of generational values on work ethic and performance, empirical evidence provided an accurate measure of the influence of age (generation) on the levels of RN engagement in a Magnet-designated hospital. Because there are four generations of RNs currently in the workforce it is imperative to fully explore this variable in the future with a larger sample in an effort to dispel stereotypes and to facilitate engagement of all RN generations.

The generational variable is important to consider in relation to the full spectrum of RN roles. As those in leadership positions commonly initiate organizational structures or models that reflect their own values, other RN roles are subject to following organizational structures that may or may not reflect their own values. This can create a fulfilling or a challenging work environment,

depending on whether the RN's values match those of leadership. This reinforces the importance for continued study of age to determine the effect of generational values on the relationship between the levels of RN engagement and organizational structures including those structures common to Magnet designation.

Gender

The null hypothesis H^3b was accepted as there was no significant difference in engagement based on gender in the Magnet sample. The results for the variable of gender found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). The literature reported an inconsistent weak correlation with gender (Schaufeli & Bakker, 2004a; Schaufeli et al., 2006). Although the results of this study were not significant, the findings are note-worthy because male nurses are growing in number and work in a variety of clinical and leadership roles; hence, it is imperative to include this variable in larger studies in the future to facilitate a more accurate evaluation of the influence of gender on the levels of engagement in Magnet-designated hospitals.

Nursing Education

Null hypothesis H^3c was accepted as there was no significant difference in engagement based on nursing educational levels in the Magnet sample. The results for the variable of nursing education found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). These findings are different than the results of Wonder's pilot study (2009), which showed baccalaureate degree nurses had significantly greater levels of total engagement

(p = 0.01), vigor (p = 0.01), dedication (p = 0.03), and absorption (p = 0.02) than associate degree nurses. Although the results of the current study were not significant, the findings are of interest because the Magnet program advocates the importance of professional development and formal education (ANCC, 2010). Thus, it is of interest to explore this in the future with a larger sample to more accurately determine the influence of formal nursing education on levels of RN engagement in the Magnet-designated hospital.

Nursing Experience

The null hypothesis H^3 d was rejected as there was a significant difference in engagement based on duration of nursing experience in any clinical setting in the Magnet sample. The results for nursing experience in any clinical setting found significance in relation to total engagement (p = 0.002), vigor (p = 0.007), dedication (p = 0.041), and absorption (p = 0.001). The variable of nursing experience in any clinical setting found significance in relation to all levels of engagement with scatter plots for each test showing a positive slope. The findings suggest that with a greater duration of RN experience, there are greater levels of engagement (total engagement, vigor, dedication, and absorption). Wonder's small pilot study (2009) found that RN experience in any setting broached significance and produced scatter plots similar to the current study. Hence, the current study produced significant results with a larger sample.

The significant findings on nursing experience in any clinical setting are also timely as the nursing workforce prepares for the progressive retirement of the Baby Boomer Generation. This anticipated phase of retirement within the

next 5–15 years will impact the Mean years of RN experience in the workforce which may, as suggested by these findings, influence the levels of RN engagement. This variable needs to be included in future studies as a means to learn about the influence of RN experience in any clinical setting on the relationship between levels of engagement and Magnet-designated hospitals.

Unit Longevity

The null hypothesis H³e was accepted as there was no significant difference in engagement based on duration of nursing experience in the current work setting within the Magnet sample. The results for nursing experience in the current setting (unit longevity) found mixed results for total engagement (p = 0.012), vigor (p = 0.021), dedication (p > 0.05), and absorption (p = 0.011). Although the overall result was not significant, it is note-worthy that total engagement, vigor, and absorption each produced a scatter plot showing a positive slope. Similar to the findings for RN experience in any clinical setting, the findings for unit longevity suggest that with a greater duration of unit longevity there is greater total engagement, vigor, and absorption. Wonder's small pilot study (2009) found that unit longevity broached significance and produced scatter plots similar to the current study. As the current study found mixed results with a larger sample, this variable should be studied again with an even larger sample to accurately determine the influence of unit longevity on levels of RN engagement in the Magnet-designated hospital. Also, because mixed results were found in this study, a future study could explore whether dimensions of engagement such as dedication peak then decline over time.

Shift

The null hypothesis H^3f was rejected as there was a significant difference in engagement based on shift in the Magnet sample. Results for the variable of shift found a significant difference in total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.011), and absorption (p = 0.000) in the Magnet sample. Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg were not significant (p > 0.05); however, results for total engagement, vigor, dedication, and absorption consistently indicated greater levels of engagement in 8-hour shifts. Although non-significant, the greatest level of total engagement, vigor, dedication, and absorption was found in 8-hour day shift and the lowest level in 12-hour night shift.

The significant findings on shift are important to consider from the perspective of organizational structure. Although this analysis reflects the findings within a Magnet-designated hospital, it is not uncommon for shifts to experience organizational structures differently. Organizational structures such as leadership, support, and resources may facilitate or inhibit other factors associated with engagement such as time for collaboration, professional relationships, and a work–life balance. Although only speculation is possible at this time, the difference in how organizational structures are experienced by shifts may contribute to the difference in RN engagement scores.

Hours Typically Scheduled to Work Each Week

Null hypothesis H³g was accepted as there was no significant difference in engagement based on hours typically scheduled per week in the Magnet sample.

The results for hours typically scheduled to work each week found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). The study explored this variable to determine if greater hours scheduled would yield higher levels of engagement based on the literature suggesting that engagement is transmittable (Hatfield et al., 1994) since working more time would increase the individual's exposure to engagement. On the contrary, the current study also focused on this variable due to the presumption that younger generations have a greater desire for a work–life balance (Carver & Candela, 2008). A future study may explore this variable again with a larger sample to verify non-significance.

Hours Typically Worked Each Week

The null hypothesis H^3h was accepted as there was no significant difference in RN engagement based on hours typically worked per week in the Magnet sample. Results for hours typically worked each week found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). Similar to the variable for hours scheduled per week, this variable reflects time commitment. Some literature suggests that engagement is transmittable (Hatfield et al., 1994) and working more hours per week might increase the individual's exposure to engagement, whereas other literature focuses on the belief that younger generations prefer a work–life balance (Carver & Candela, 2008). These conflicting viewpoints were the impetus to explore this variable. Although the findings were not significant in this study, a

future study may explore this variable again with a larger sample to verify non-significance.

Percentage of Time in Direct Patient Care

The null hypothesis H³i was accepted as there was no significant difference in engagement based on percentage of time spent in direct patient care activities in the Magnet sample. Results for the variable of percentage of time in direct patient care activities, as an indication of nurse role, found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). The study explored this variable to determine if a greater percentage of time in direct patient care would negatively influence levels of RN engagement because the literature suggested that those working in bedside roles have less access to resources, such as time to enable engagement in activities that facilitate practice change (Flynn & McCarthy, 2008; Strickland & O'Leary-Kelley, 2009). It was imperative to explore any difference that existed by percentage of time in direct patient care because supporting engagement at the point of care is critical to sustaining best care practices. Although no significance was found, it is important to explore this variable again with a larger sample to verify non-significance.

Nursing Unit

The null hypothesis H³j was accepted as there was no significant difference in engagement based on nursing unit in the Magnet sample. Results for the variable of nursing unit found mixed results with total engagement (p = 0.019), vigor (p > 0.05), dedication (p = 0.000), and absorption (p > 0.05).

Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg was not significant for total engagement (p > 0.05). Although non-significant, the study found the greatest level of total engagement in the mental health unit and the lowest level in the emergency services unit. Post-hoc analysis of Student-Newman-Keuls was significant for dedication (p = 0.05). The study found the greatest level of dedication in the pediatric unit and the lowest level in the emergency services unit.

Nursing unit was of interest for this study because of differences that exist between units in relation to organizational structures such as leadership and resources. Unit-based differences may have an effect on supporting RN engagement at the point of care, which could impact the ability for RNs to sustain best care practices and outcomes. Additionally, it could be argued that RN social demographics also influence which unit nurses choose to work. With that in mind, future study also may explore the possibility that engaged nurses gravitate to certain nursing units. Although this study found no significance in relation to unit, it is important to explore this variable again with a larger sample and a mixed-method design to verify non-significance.

Shared Governance Council Participation

Null hypothesis H^3k was accepted as there was no significant difference in engagement based on shared governance council participation in the Magnet sample. Results for shared governance council participation found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). Although the study found no significant difference, the ANCC Magnet

model (2008) supports the need for structures that enable autonomy, empowerment and, as a result, engagement. As participation in shared governance council is consistent with the Forces of Magnetism (ANCC, 2010), it may not be necessary for nurses to be involved in order to benefit. On the other hand, it may be argued that RNs who participate on a shared governance council are more engaged. Therefore, it is important to further explore this variable with a larger study to verify non-significance and dispel assumptions in the clinical setting by contributing empirical evidence.

Finally, research question four asked: Do RN perceptions related to organizational support for work influence the relationship between Magnet designation and engagement? Three null hypotheses, each with four sub-hypotheses (H⁴a₁₋₄, H⁴b₁₋₄, H⁴c₁₋₄, H⁴d₁₋₄), were associated with research question four. Since the definition of engagement for this study was based on a three-factor model of vigor, dedication, and absorption to collectively compose total engagement, the null hypothesis for each variable was accepted if any of the associated sub-hypotheses were not rejected. All significant data were subject to post-hoc analysis to illuminate the path of future study.

RN Perception of Administration Supporting EBP

Null hypothesis H⁴a was rejected as there was a significant difference in engagement based on RN perceptions of administration supporting EBP in the Magnet sample. Results for the variable of RN perception of administration supporting EBP found significance in relation to total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.000), and absorption (p = 0.000).

Post-hoc analysis of Student-Newman-Keuls was significant for total engagement (p = 0.05). Results indicated a greater level of total engagement in RNs who perceived administration as somewhat supportive of EBP and the lowest level of total engagement among RNs that perceived no support at all. Student-Newman-Keuls did not find a significant difference in total engagement between RNs that perceived administration supported EBP very much versus somewhat (p > 0.05), which may reflect a threshold concept. Hence, it is important to explore this concept further to determine if there is an optimal level of perceived support to facilitate RN engagement. The researcher completed additional post-hoc analysis.

Post-hoc analysis of Hochberg was significant for vigor (p = 0.05). Results indicated the greatest level of vigor in RNs that perceived administration supported EBP very much and the lowest level of vigor in RNs that perceived no support at all. Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg was not significant for dedication or absorption (p > 0.05). Although not significant, results of post-hoc analysis indicated the greatest levels of dedication and absorption in RNs that perceived very much support and the lowest levels in RNs that perceived no support at all.

The findings demonstrate the influence that RN perception of organizational support for work has on levels of RN engagement. Since nurses in administrative positions commonly put organizational structures into place, the assessment of adequacy is often made from the top of the organizational chart. These findings provide empirical evidence on the importance of assessing how

the RN perceives organizational structures and resources that are in place in order to provide the supports needed by RNs and, as a result, facilitate engagement.

RN Perception of Work Environment Supporting Professional Practice

Null hypothesis H^4 b was rejected as there was a significant difference in engagement based on RN perceptions of the work environment supporting professional practice in the Magnet sample. Results for the variable of RN perception of the work environment supporting professional practice found significance in relation to total engagement (p = 0.000), vigor (p = 0.001), dedication (p = 0.000), and absorption (p = 0.000). Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg found no significance in relation to total engagement, vigor, dedication, or absorption (p > 0.05). Although non-significant, all post-hoc analysis indicated that the greatest levels were found with RNs that perceived very much support and the lowest levels were found with RNs that perceived no support at all.

These findings contribute additional empirical evidence of the correlation that exists between RN perception related to organizational support for work and levels of RN engagement in the Magnet sample. Structures in the work environment often reflect organizational priorities and, as demonstrated in this study, contribute to the levels of RN engagement. As the influence of RN perception of organizational support for work on engagement has been the focus of limited study, this insight provides a new avenue to explore and develop. As healthcare facilities strive to promote best practice during a period of economic

challenge it is imperative to identify what structures are important and effective from the RN's perspective to maximize fiscal resources while promoting RN engagement. This variable factor needs to be developed in future studies with larger samples to establish consistent descriptive evidence about the correlation that exists between RN perception of the work environment and levels of engagement in the Magnet hospital.

RN Perception of Empowerment Based on Resource Availability

Null hypothesis H⁴c was rejected as there was a significant difference in engagement based on RN perceptions of empowerment by having adequate resources to effectively perform the job in the Magnet sample. Results for the variable of RN perception of empowerment found significance in relation to total engagement (p = 0.000), vigor (p = 0.000), dedication (p = 0.000), and absorption (p = 0.000). The researcher completed post-hoc analysis.

Post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg found no significance (p > 0.05) for total engagement, vigor, or dedication. Although non-significant, all results indicated the greatest levels of total engagement, vigor, and dedication in RNs that perceived empowerment almost always and the lowest levels in RNs that rarely or never perceived empowerment. Post-hoc analysis of Student-Newman-Keuls found a significant difference (p = 0.05) between the level of absorption in RNs that perceived empowerment every once in a while and RNs that rarely or never perceived empowerment. Although not significant (p > 0.05), additional post-hoc analysis of Student-Newman-Keuls, Scheffe, and Hochberg found the greatest levels of

absorption in RNs that perceived empowerment almost always and the lowest levels of empowerment in RNs that perceived empowerment rarely or never.

The significant findings of this study provide yet more empirical support for the importance of studying RN perceptions of empowerment based on adequacy of resources to facilitate engagement. Furthermore, the results demonstrate the connection between empowerment and engagement. Both of these findings are timely as health care continues to search for ways to facilitate RN engagement in professional practice to promote better patient outcomes. Therefore, the results of this study provide additional support for future study of the influence of RN perception of organizational support for work, on engagement as well as the influence of empowerment on engagement in Magnet-designated hospitals.

Overall, the results from research questions three and four yielded a mix of significant, non-significant, and note-worthy results. Significant results reflected the influence of shift, RN experience in any clinical setting, and RN perceptions of organizational support for work, on the relationship between Magnet designation and levels of engagement. The findings of this study illuminated a path for future research to promote engagement.

Limitations

This study provided findings based on two Magnet-designated hospitals in a single U.S. Midwestern state. It would be important to repeat this study in Magnet-designated hospitals across the U.S. prior to making generalizations about the relationship between levels of RN engagement and Magnet

designation in the U.S. Because this study had unequal sample sizes, it also would be desirable to recruit similar sample sizes in the future to equalize power.

Another limitation was instrumentation. Although the UWES-17 has endured repeated tests for reliability and consistency in a variety of occupations, it must be questioned as to whether this instrument is a good measure of engagement in the RN workforce. This inquiry is based on the discrepancy between results of this study, the pilot, and other research related to healthcare workers (Schaufeli & Bakker, 2004a; Schaufeli et al., 2006). Furthermore, the instrument needs clarification for interpretation with RNs specifically. How much engagement is enough? What score constitutes high, medium, and low levels of RN engagement? The creation of a national benchmark for RN engagement also could help promote consistent measures and encourage regular assessment.

Limitations also were identified during the data collection process in relation to the 15-item demographic survey. Participants were unclear at times about how to answer questions and required clarification of what was being asked. In addition, there may have been a limitation related to sample bias. The investigator recruited most of the participants at unit meetings. As a result, it could be argued that RNs who attend unit meetings are more engaged in their work and the results were skewed based on those who chose to participate.

Despite all of these limitations, the results of this study make a contribution to the literature regarding Magnet-designated hospitals and the experience of being an RN who is employed at those facilities. Further work in this area is certainly warranted.

Implications

Magnet designation is a highly sought-after credential for healthcare organizations because it implies a workforce of high quality and engaged RNs. The findings of this study are significant because they identify some factors that facilitate engagement in a Magnet-designated hospital. Social and institutional demographic differences within the RN workforce, as well as RN perceptions of organizational supports for work illuminate variables to consider in relation to organizational structures and levels of RN engagement.

Clinical implications exist for hospital leadership related to organizational structures that facilitate engagement. As suggested by the findings, levels of RN engagement are significantly different between shifts. Therefore, it is important for hospital leadership to assess whether current organizational structures support RNs differently on various shifts in an effort to facilitate engagement for all RNs. Post-hoc analysis suggests the need to investigate not only the support of structures at different times of the day or night but also the length of the RN shift as more engagement was noted with 8-hour shifts than with 12-hour shifts. The difference between 8- and 12-hour shifts also may reflect the needs of an aging RN workforce. The study of shift may benefit from gaining the RN's perspective on this issue, which also is consistent with the findings of this study. Working together to ensure organizational support is perceived by RNs, regardless of shift, may enhance engagement in all RNs.

Clinical implications for hospital leadership involve the need to actively listen to RNs to gain perspective on what organizational structures are needed.

Informal and formal methods need to be explored as optimal ways to assess what RNs need and as a result facilitate engagement by meeting those needs. Providing what RNs perceive as important to professional nursing practice may also promote RN empowerment and as a result indirectly facilitate engagement as well.

Clinical implications for hospital leadership and RNs may explore strategies such as an RN-driven taskforce to provide RNs with the necessary structures, resources, or supports for engagement. RNs may be less inhibited and offer more ideas, problems, and solutions to an RN peer. Based on the information collected, an RN taskforce may formulate a plan that reflects the needs of those RNs that the organization seeks to engage.

Although hospital leadership is pivotal in establishing the organizational structures necessary to facilitating engagement, implications also can be presented for RNs. Because the results demonstrate the importance of the RN's perception related to organizational support for work to influence engagement, RNs must effectively and professionally communicate their needs for support and professional practice. Working together, hospital leadership and RNs can create an environment that reflects intentional and effective organizational structures and resources to facilitate engagement in RNs.

Finally, hospital leadership may consider the potential benefits of educating RNs on organizational structures, intentions of structures, and ways to facilitate structure changes when needed. Heightening awareness on organizational structures and efforts to support RNs may help nurses recognize

what is being done and as a result positively influence levels of RN engagement as well.

There are also implications related to the finding that suggests greater lengths of RN experience in any clinical setting produced greater levels of engagement. Hospital leadership should consider this in relation to retaining quality RNs in the workforce. As the Baby Boomer Generation progressively phases into retirement, leadership should consider creative scheduling to accommodate the needs of these RNs in an effort to retain engagement in the workplace. Sustaining a maturing RN workforce may entail rethinking the hours worked per shift or work done during the shift by mature RNs as they also focus on mentoring younger nurses.

It is equally important for hospital leaders to consider what structures are in place to retain all quality RNs as a means of growing engagement within the RN workforce. Workplace satisfaction among younger RNs facilitates longevity within an organization and as a result more RN nursing experience in any clinical setting. Because a greater duration of RN nursing experience was found to favorably influence the levels of engagement, these strategies also can lead to high quality patient care. This becomes a *win-win* for organizations, employees, and patients.

Finally, there are implications related to the structures common to Magnet designation. Although this was a small study, the findings demonstrated that having Magnet designation does not always correlate with an RN workforce that demonstrates greater levels of engagement. While more evidence is needed

before making generalizations, these findings do indicate that engagement may fluctuate, even in the Magnet-designated hospital setting. Hospital leadership and their RN employees must be knowledgeable about engagement and recognize when additional supports or strategies are needed. Likewise, it is important for the ANCC, which operates the Magnet program, to identify structures and strategies to guide leaders in Magnet-designated organizations in supporting engagement during times when RNs experience diminished levels.

Recommendations for Future Research

The purpose of this study was to identify factors that facilitate and inhibit engagement in RNs. This study explored correlations between levels of RN engagement and Magnet designation. Based on the findings, there are many recommendations for future research. The next step would be to repeat this study with a larger, more geographically diverse sample. Findings from the follow-up study could validate those from this initial study and enhance generalizability.

The design of a follow-up research study also could include identification of the variables *time in Magnet designation* to represent the trajectory of the Magnet process within the organization and *involvement in Magnet designation* to represent the RN's role in attaining or sustaining it. The current study did not address these variables, yet they may be important to understanding the sustainability of engagement in relation to Magnet designation and the complexity of RN roles and responsibilities.

Although the UWES-17 was effective for this study, mixed methods also may be considered in order to complement quantitative results. A qualitative component could provide greater perspective on what organizational structures are important to RNs and the effectiveness associated with each structure. Purposive sampling also could provide more detailed information on the needs of different generational groups, shifts, and units. Insight also could be gained on the connection between empowerment and engagement and what structures are needed to promote empowerment as a means to facilitate engagement.

As empirical evidence evolves, it also may be necessary to design an engagement instrument that reflects the values and language of the RN profession. A consistent and reliable means of measuring RN engagement is vital since another recommendation for future research involves the development of a national benchmark for RN engagement. A national benchmark would allow hospitals to evaluate engagement to determine when additional supports are required.

As part of the mixed methods follow-up study, the 15-item demographic survey created for this research would be helpful. Revisions, based on the results from this study and experiences during data collection, would make this a stronger instrument. The 15-item demographic survey could be used for future quantitative study but also serve as a guide for qualitative study as well.

Another recommendation for future research involves the development of a qualitative study of values in RNs at all levels within the organizational framework of Magnet and non-Magnet designated hospitals. The current study

found a significant relationship between levels of engagement and duration of RN nursing experience in any clinical setting. Hence, it may be beneficial to study the values of those RNs who establish organizational structures or models such as the ANCC Magnet model (2008) since they typically possess more experience.

Additionally, a broader exploration of RNs at all levels of the clinical ladder may reveal insights on how values influence the perceptions of organizational structures. This knowledge may contribute to the understanding about priorities and needs of the RN workforce. Finally, an understanding of values also may help leaders facilitate a shared vision as a means to facilitate engagement.

Conclusion

The findings of this study are timely as healthcare organizations strive to create cultures that reflect RN engagement in professional practice. The current study contributes information and perspective on several factors influencing engagement, including the importance of assessing organizational structures from the viewpoint of RNs in order to provide what RNs need instead of what leaders perceive them to need. This finding has not been thoroughly addressed in the literature, and it presents an avenue to explore new ideas provided by the RNs that organizations actually seek to engage. Exploring the RN perception of organizational structures, resources, and supports may inform leaders about what is needed to facilitate and sustain professional practice that embodies EBP.

It is through the significant and non-significant but note-worthy findings of this study that the investigator gained several insights about organizational structures common to Magnet designation and engagement in the RN workforce. As a result of this study, leadership can better assess the needs of the RN workforce and strive to provide what is actually needed. To that end, it also is fiscally prudent for organizations to provide what RNs need in order to optimize patient outcomes and promote nursing satisfaction, empowerment, and engagement.

In conclusion, the findings of this study contribute to a promising foundation of evidence-based strategies that facilitate RN engagement to transform nursing to an empowered profession that consistently demonstrates EBP.

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Page 3 of 5

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IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be signed by duly authorized officers or representatives as of the date first above written.

American Nurses Credentialing Center

Individual

By

By:

Name: Shirley H. Morgan, MSN, RN, NEA-

BC

Title:Assistant Director, Magnet Recognition Program Name: Amy Wonder, PhD (c), MS, RN

Title: Graduate Student

Schedule A



Please Note:

The Magnet Model (2008) will be displayed as above within the PowerPoint for dissertation defense.

In coordination with the Indiana University graduate school requirements, the Magnet Model (2008) may be displayed in gray scale within the dissertation.

Page 5 of 5 Error! Unknown document properly name.

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Fee: \$0.00

Re: The Health Care manager

Spec Mat: HCM, 2006; 25(3):243-53, Fig. 2

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APPENDIX D. UTRECH WORK ENGAGEMENT SCALE (UWES-17)®

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the '0' (zero) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

Never	Almost	Rarely	Sometimes	Often	Very Often	Always
	Never					
0	1	2	3	4	5	6
	A few times	Once a	A few times	Once a	A few times	Every
	a	month				day
	year or less	or less	a month	week	a week	-

1	At my work, I feel bursting with energy
2	I find the work that I do full of meaning and purpose
3	Time flies when I'm working
4	At my job, I feel strong and vigorous
5	I am enthusiastic about my job
6	When I am working, I forget everything else around me
7	My job inspires me
8	When I get up in the morning, I feel like going to work
9	I feel happy when I am working intensely
10	I am proud on the work that I do
11	I am immersed in my work
12	I can continue working for very long periods at a time
13	To me, my job is challenging
14	I get carried away when I'm working
15	At my job, I am very resilient, mentally
16	It is difficult to detach myself from my job
17	At my work I always persevere, even when things do not go well

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APPENDIX E. DEMOGRAPHIC SURVEY

Directions: The following questions are intended to assess individual demographics to allow study of possible correlations that exist with levels of engagement. Please read each question carefully and answer honestly by circling the most appropriate response.

1	a) 69 years old or older b) 51-68 years old c) 30-50 years old d) 18-29 years old
2	Gender? a) male b) female
3	 Education (Complete all that apply): a) I am a Registered Nurse with an Associate Degree b) I am a Registered Nurse with a Bachelor Degree c) I am a Registered Nurse with a Masters Degree or higher d) I have also earned non-nursing degrees. List Degrees: e) I am currently enrolled in formal education to advance my nursing degree. List Program of Study (BSN, MS, NP):
4	How long have you worked full-time as a Registered Nurse, in any clinical setting? a)months b)years
5	How long have you worked full-time as a Registered Nurse, in your current work setting (unit)? a)months b)years
6	What shift are you usually scheduled to work? a) Day (12 hours) b) Night (12 hours) c) Day (8 hours) d) Evening (8 hours) e) Night (8 hours) f) Day (4 hours or less) g) Evening (4 hours or less) h) Night (4 hours or less) i) Other – Specify:
7	How many hours are you typically scheduled to work each week?
8	How many hours do you typically work each week?
9	What percentage of time, as a Registered Nurse, do you spend in direct patient care activities? a) Greater than 80% b) 50-80% c) 20-49%

d) Less than 20%

- 10 What type of nursing unit do you work on?
 - a) Medical
 - b) Post-Surgical
 - c) Obstetrics
 - d) Mental Health
 - e) Intensive Care
 - f) Emergency Services
 - g) Pediatrics
 - h) Rehabilitation
- 11 Circle all that apply.
 - a) I have participated on a Shared Governance Council in the past
 - b) I am currently participating on a Shared Governance Council
 - c) I have never participated on a Shared Governance Council

The following definition is intended to provide clarity for question 12.

Definition of evidence-based practice: Practice that reflects best available research, clinical expertise, and patient values (IOM, 2001, p. 71).

12 I believe that my hospital administration supports evidence-based practice? Circle your response.

Very Much	Somewhat	Undecided	Not Really	Not at All
5	4	3	2.	1

The following definition is intended to provide clarity for question 13.

Definition of Professional Practice: Practice that reflects autonomy, collaboration, resources, and professional models of care to support interdisciplinary relationships, the role of nurses as teachers, and the need to embrace change as a means to sustaining evidence-based practice (ANCC, 2010).

13 I believe that my work environment supports professional practice? Circle your response.

Very Much	Somewhat	Undecided	Not Really	Not at All
5	4	3	2	1

- 14 Please circle all that apply:
 - a) I worked at a Magnet hospital previously
 - b) I worked at a Non Magnet hospital previously
 - c) I have never worked at a Magnet hospital
 - d) I have never worked at a Non Magnet hospital
- 15 I feel my hospital empowers me by providing the resources I need to effectively perform my job. Circle your response.

		Every Once		
Almost	Sometimes	in a While	Rarely	Never
Always				
5	4	3	2	1

APPENDIX F. IRB INFORMATION SHEET

IRB STUDY #1101004641

INDIANA UNIVERSITY STUDY INFORMATION SHEET FOR

Factors that Facilitate and Inhibit Engagement of Registered Professional Nurses: An Analysis and Evaluation of Magnet versus Non Magnet Designated Hospitals

You are invited to participate in a research study on engagement. You were selected as a possible subject because you are an acute care Registered Nurse working on a participating nursing unit within a selected acute care hospital. Only nurses working in multiple study sites (hospitals) will be excluded from the study. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Mary Fisher, PhD, RN (Indiana University, Department of Nursing) and Amy Wonder, PhD(c), RN (Graduate Student at Indiana University).

STUDY PURPOSE

The purpose of this study is to identify relationships that exist between the construct of engagement and the demographic variables of age by generation, gender, nursing degree, years of nursing experience, years of unit longevity, assigned shift, hours scheduled and worked per week, nursing role, nursing unit, shared governance council participation, perception of administrative support of evidence-based practice, perception of the work environment to support professional practice, previous Magnet work experience, and the perception of the hospital to empower individuals by providing the necessary resources to effectively perform the job.

PROCEDURES FOR THE STUDY:

If you agree to be in the study, you will complete the following two assessments independently:

- A) 15-item assessment of demographics (age by generation, gender, nursing degree, years of nursing experience, years of unit longevity, assigned shift, hours scheduled and worked per week, nursing role, nursing unit, shared governance council participation, perception of administrative support of evidence-based practice, perception of the work environment to support professional practice, previous Magnet work experience, and the perception of the hospital to empower individuals by providing the necessary resources to effectively perform the job).
- B) 17-item assessment of personal engagement, for which a rating scale is used to reflect your agreement or disagreement with each item.

Prior to completing the two assessments, you will receive brief instructions on how to complete the assessments. The anticipated time to complete both assessments is less than 15 minutes. Participants will complete the one-time assessment prior to or following a unit meeting, during a break, or during unit downtime. Participation may occur in a conference room, unit break room, sitting area, or nurses' station.

You will be one of approximately 450 participants.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential (no names will be written on the Study Information Sheet or either assessment tool). We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published and databases in which results may be stored.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP), who may need to access your medical and/or research records.

Version Date (January 23, 2011) 1 v01,14.2

The authors of the Utrecht Work Engagement Scale request that in return for utilizing the assessment tool, that data is submitted to them to enable ongoing multi-specialty analysis of data generated with the tool. No participant names will be disclosed.

PAYMENT

You will not receive payment for taking part in this study.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study, contact the research Investigator Mary Fisher, PhD at 317-278-1846 or the Co-investigator Amy Wonder, PhD (c), RN at 812-630-2570.

For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research study, or to obtain information, or offer input, contact the IU Human Subjects Office at (812) 856-4242 or (800) 696-2949, or email at iub_hsc@indiana.edu.

VOLUNTARY NATURE OF STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with your employer.

Version Date (January 23, 2011)

v01.14.2

APPENDIX G. IRB APPROVAL



OFFICE OF RESEARCH ADMINISTRATION

MARY L. FISHER

ACADEMIC AFFAIRS

From: IU Human Subjects Office

Office of Research Administration - Indiana University

Date: February 15, 2011

To:

RE: EXEMPTION GRANTED

Factors that Facilitate and Inhibit Engagement of Registered Professional

Protocol Title: Nurses: An Analysis and Evaluation of Magnet versus Non Magnet

Designated Hospitals

Protocol #: 1101004641 |
Funding Agency/Sponsor: None
IRB: IRB-01. IRB00000220

Your study named above was accepted on February 15, 2011 as meeting the criteria of exempt research as described in the Federal regulations at 45 CFR 46.101(b), paragraph(s) (2). This approval does not replace any departmental or other approvals that may be required.

As the principal investigator (or faculty sponsor in the case of a student protocol) of this study, you assume the following responsibilities:

Amendments: Any proposed changes to the research study must be reported to the IRB prior to implementation. To request approval, please complete an Amendment form and submit it, along with any revised study documents, to irb01@iupui.edu. Only after approval has been granted by the IRB can these changes be implemented.

Completion: Although a continuing review is not required for an exempt study, you are required to notify the IRB when this project is completed. In some cases, you will receive a request for current project status from our office. If we are unsuccessful at in our attempts to confirm the status of the project, we will consider the project closed. It is your responsibility to inform us of any address changes to ensure our records are kept current.

Per federal regulations, there is no requirement for the use of an informed consent document or study information sheet for exempt research, although one may be used if it is felt to be appropriate for the research being conducted. As such, these documents are returned without an IRB-approval stamp. Please note that if your submission included an informed consent statement or a study information sheet, the IRB requires the investigational team to use these documents.

You should retain a copy of this letter and any associated approved study documents for your records. Please refer to the project title and number in future correspondence with our office. Additional information is available on our website at http://researchadmin.iu.edu/HumanSubjects/IUPUI/hs home.html.

If you have any questions, please contact our office at the below address.

Thank you.

1 | c/o IU Human Subjects Office | 530 E Kirkwood Avenue | Carmichael Rm 203 | Bloomington IN 47408 | (812) 856-4242 | irb01@impui.edu

APPENDIX H: INSTITUTIONAL APPROVALS

December 12, 2010

Dear Chief Nursing Officer,

I am a PhD student at the Indiana University School of Nursing. I am requesting permission to conduct my dissertation research study at your facility. The study will compare levels of engagement in Registered Nurses in Magnet and non-Magnet acute care hospitals. Furthermore, the study will reveal correlations that exist between specific demographic variables and levels of engagement.

A sample of Registered Nurses, working on participating inpatient units (medical, post-surgical, obstatrics, pediatrics, mental health, intensive care, emergency services, and rehabilitation) will represent the population. Professional Registered Nurses in staff and leadership roles will be invited to take part.

The sample will represent Registered Nurses (ADN, BSN, MSN or higher) working full-time, part-time, or PRN (as needed basis). Participants will be excluded only if working in any capacity at both participating study sites (Magnet and non-Magnet facilities). At least 150 participants will be recruited at each research site (Magnet and non-Magnet) to yield a medium effect size for correlation (0.33).

Participation will be recruited through distribution of an educational flyer posted on participating units and in hospital/unit newsletters. The educational flyer may also be emailed to eligible nurses.

Participation is voluntary and requires less than 15 minutes. Nurses that choose to participate will complete a demographic assessment and the Utrecht Work Engagement Scale (UWES) at a unit meeting, on break, or during unit downtime.

Attached you will find copies of the educational flyer, consent, research instruments (demographic assessment and UWES), and a proposal summary.

I hope you will agree to participate. If you agree to provide permission for this study, please sign and date the form below. Please return the completed form via fax (612-655-6966) or a scanned copy via Bmail (awonder@indiana.edu). Feel free to call or Bmail any questions or concerns regarding the study.

Sincerely,

Amy Wonder, PhD(c), MS, RN Indiana University School of Nursing (IUPUI), PhD graduate student (812) 630-2570 Email: awonder@indiana.edu

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Pending review and approval by the IUPUI IRB: I have no objections to the recruitment and participation of Registered Nurses employed at t Medical Center in the study, "Factors that Facilitate and Inhibit Engagement of Registered Professional Nurses: An Analysis and Evaluation of Magnet versus Non Magnet Designated Hospitals."

Name and Position

Name of Facility

MSN_PN_NE-BC_CSSBB

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Health Care Center	
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THE CONCENT	Date
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APPENDIX I: UWES-17 DIMENSIONS OF ENGAGEMENT

The UWES-17 reflects three dimensions that collectively compose engagement (vigor, dedication, and absorption). The following displays which questions are associated with each dimension of engagement (Schaufeli & Bakker, 2003; Schaufeli & Bakker, 2004a).

- A. Vigor, composed of the following six factors:
 - 1. When I get up in the morning, I feel like going to work.
 - 2. At my work, I feel bursting with energy.
 - 3. At my work, I always persevere, even when things do not go well.
 - 4. I can continue working for very long periods at a time.
 - 5. At my job, I am very resilient, mentally.
 - 6. At my job, I feel strong and vigorous.
- B. Dedication, composed of the following five factors:
 - 1. To me, my job is challenging.
 - 2. My job inspires me.
 - 3. I am enthusiastic about my job.
 - 4. I am proud on the work that I do.
 - 5. I find the work that I do full of meaning and purpose.
- C. Absorption, composed of the following six factors:
 - 1. When I am working, I forget everything else around me.
 - 2. Time flies when I am working.
 - 3. I get carried away when I am working.
 - 4. It is difficult to detach myself from my job.
 - 5. I am immersed in my work.
 - 6. I feel happy when I am working intensely.

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 Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235–244.

CURRICULUM VITAE

NAME: Amy C. Wonder

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	<u>Place</u>	Degree	<u>Awarded</u>
UNDERGRADUATE:	Indiana State University	A.S.N.	1991
	Terre Haute, IN	Nursing	
	Indiana State University	B.S.N.	1993
	Terre Haute, IN	Nursing	
GRADUATE:	Ball State University	M.S.	2003
	Muncie, IN	Nursing	
	Indiana University	Ph.D.	2011
	Indianapolis, IN	Nursing	
	ENTS:		

ACADEMIC APPOINTMENTS:

<u>Place</u> Indiana University, Bloomington, IN	<u>Title/Rank</u> Visiting Lecturer	<u>Dates</u> 2010–2011
Vincennes University Jasper, IN	Associate Professor	2009–2010
Indiana University Indianapolis, IN	Adjunct Professor	2008
Vincennes University Jasper, IN	Assistant Professor	2005–2009
Vincennes University Jasper, IN	Assistant Professor	1999

CLINICAL APPOINTMENTS:

CLINICAL APPOINTMENTS.		
Place Memorial Hospital and Health Care Center Jasper, IN	Title/Rank PRN Staff Nurse Inpatient/Outpatient Post-Surgical Settings	<u>Dates</u> 2005–2007
Memorial Hospital and Health Care Center Jasper, IN	Director Behavioral Health Services	2000–2005
Memorial Hospital and Health Care Center Jasper, IN	PRN House Supervisor	1998–2000
Integrated Health Systems (IHS Home Care) Evansville, IN	Care Coordinator and Field Nurse	1997–1998

Memorial Hospital and Health Care Center Jasper, IN	Care Coordinator Behavioral Health	1995–1997
Memorial Hospital and Health Care Center Jasper, IN	PRN Staff Nurse Behavioral Health	1995
Bloomington Hospital Bloomington, IN	Staff Nurse Medical/Post-Surgical	1994–1995
Memorial Hospital and Health Care Center Jasper, IN	PRN Staff Nurse Medical and Oncology Units	1992–1993

LICENSURE: Registered Nurse, Indiana, 1992–present

PROFESSIONAL SOCIETIES:

Sigma Theta Tau International	2002–	present
Indiana Organization of Nurse Executives (IONE) 2000-	present

HONORS:

Professional Nurse Traineeship Award	Indiana University	2009–2010
Professional Nurse Traineeship Award	Indiana University	2008–2009
William and Doris Rodie Scholarship	Indiana University	2011

TEACHING ASSIGNMENTS:

Indiana University, Bloomington, IN

Term	Course Identifier / Title	Enrol	lment
Spring 2011	BL NURS B231 Communication for Health Care Professionals	า	60
Spring 2011	BL NURS H352 Alt in Neuro-Psy: Practicu	ım	10
Spring 2011	BL NURS S484 Research Utilization Seminar/Capstone Clinical		10
Fall 2010	BL NURS H352 Alt in Neuro-Psy: Practicu	ım	10
Fall 2010	BL NURS S481 Nursing Management RN	-BSN	12
Fall 2008	B492 Transition 1		29

Vincennes University Jasper Campus, Jasper, IN

Term	Credits	Course Identifier / Title Enr	ollment
Spring 20 2010	09, 3	NURS360 Introduction to Nursing Research Didactic (BSN Program)	15
Spring 20 2010	09, 4	NURS490 Capstone Experience Didactic (BSN Program)	8

Spring 2008	22.5	NURP155 Geriatric Nursing Clinical (PN Program)	20
Fall 2008, 2009	4.5	NURS100 Fundamentals Lab (ADN Program)	20–30
Fall 2008, 2009	3	NURS475 Nursing Leadership and Management Clinical (BSN Program)	7
Fall 2008	3	NURS475 Nursing Leadership and Management Didactic (BSN Program)	8
2007, 2008, 2009, 2010		ADN Program and LPN to ADN Completion Program	
Spring 2007	2	NURP165 Personal and Vocational Issues Didactic (PN Program)	20
Fall 2007, 2008, 2009	3	NURS300 Professional Nursing: Theory and Contemporary Issues Didactic (BSN Program)	6–15
Fall 2005, 2006, 2007	6	NURP105 Fundamentals Clinical (PN Program)	20
Fall 2005, 2006, 2007	4.5	NURS100 Fundamentals Clinical (ADN Program)	20
Spring 1999	9	NURS130 Maternal Newborn Nursing Clinical (ADN Program and LPN to ADN Completion Program)	30
Spring 1999	4	NURS200 Medical Surgical Nursing II Didactic (ADN Program and LPN to ADN Completion Program)	30
Spring 1999	9	NURS200 Medical Surgical Nursing II Clinical (ADN Program and LPN to ADN Completion Program)	30
Summer 1999, 2006	4	NURP200 Psychosocial Nursing Didactic (PN Program)	20
Summer 1999, 2006	22.5	NURP200 Psychosocial Nursing Clinical (PN Program)	20
Fall 1999, Spring 2006	9	NURS240 Psychosocial Nursing Clinical	30–36
Fall 1999, Spring 2006	5	NURS240 Psychosocial Nursing Didactic	30–36

SERVICE: Community Service: School of Nursing Vincennes University Jasper Campus	
Provided education on mental illness and violence to local D Emergency Medical Technicians and Fire Fighters	ecember 2008
Faculty Advisor to the Student Nurse Organization (SNO) Through SNO:	2005–2010
Facilitated United States Flag installation and dedication for United States Veterans at a local nursing home	Spring 2007
Facilitated fundraiser to give back to the community (local nursing home residents, food bank, community mental health center, and nursing students in crisis)	2005–2010
Spring picnic for all nursing students	2005–2010
Christmas caroled at a local nursing home	2005-2007
Mentor for one to three masters students per semester	2004–2010
Community Service: Professional	
Evaluator for the CDC Pandemic Flu Exercise	July 2009
to generate policy that was distributed broad-scale to promote readiness throughout the United States	
University Committee Service: School of Nursing Vincennes University Jasper Campus	
Committees BSN Development	2005–2010
Curriculum	2005–2010
Media Resources Committee	2005–2010
Student Nursing Organization Chair	2005–2010
Course Development	
N240 Course and Clinical Development	2006–2010
N300 Course Development (new BSN program)	2006–2010
N360 Course Development (new BSN program)	2006–2010
N475 Course and Clinical Development (new BSN program) N490 Course Development (new BSN program)	2006–2010 2006–2010
	2000 2010
Advisement Advised students in PN, ADN, LPN to ADN Completion, and BSN programs.	2006–2010
Professional Service	
Crisis Prevention Institute (CPI) Certification Crisis Prevention Institute (CPI) Certification to Teach CPR	2000–2008 2000-2008 1990–present

PROFESSIONAL ACTIVITIES:

December, 2007: Institute for Healthcare Improvement (IHI) Conference in Orlando, Florida. Introduced and facilitated the needs of seven speakers. Financial support for this educational opportunity: Indiana University (conference tuition, room, board) and Vincennes University (airfare).