FACTORS FACILITATING PEER-REVIEWED PUBLICATION BY

CLINICAL NURSES IN MAGNET HOSPITALS

by

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Clinical nurses are in pivotal positions to generate best practices to influence health care reform and advance nursing science in hospital settings. It is critical that clinical nurses disseminate these best practices through scholarly publication in peer-reviewed journals. Yet, research into factors that facilitate publication by clinical nurses is limited and inconclusive. As a result, little is known about how to implement interventions in hospital settings that enhance the dissemination of knowledge related to best practices. The purpose of this study was to examine the cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals.

These factors were explored using a focused ethnographic, multiple-case study design. Bandura’s Social Cognitive Theory and the concept of “human agency” provided a framework and theoretical propositions to guide the study. Five cases within one Magnet hospital system was selected for study. Data were collected and triangulated from four sources of evidence: 1) physical artifacts, 2) case interviews, 3) direct observations, and 4) documentation. Multiple-case analysis occurred from cross-case synthesis of the five cases using pattern matching of empirically-found patterns with theoretical propositions. Analysis revealed two patterns of cognitive factors (Professional Perspective, Writing Knowledge, and Intrinsic Motivation),
behavioral factors (*Writing Behaviors* and *Taking Initiative*) and environmental factors (*Culture* and *Resources*).

Findings reveal an emphasis upon the use and generation of knowledge. Yet, minimal structures or strategies existed to support dissemination of that knowledge through peer-reviewed publication. Consequently, the cases credited cognitive and behavioral factors as most often contributing to writing for publication. Despite minimal structures or strategies to support peer-reviewed publication, the cases still chose to publish. As human agents, all five cases initiated behaviors to create an environment conducive for writing manuscripts. As a result of these behaviors, the cases produced peer-reviewed publications. Case descriptions emphasized the causation effect among all three factors confirming the interdependence and influence of cognitive, behavioral, and environmental factors. Findings also confirm that the cases were both products and producers of their environment responding to various influences that did and did not facilitate their efforts to write for publication. Findings provide both implications and recommendations for nursing practice, education, and research.
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DEDICATION

This dissertation is dedicated to my husband Mark who has supported me unconditionally throughout this journey. Your encouragement gave me the strength I needed to achieve this goal. Words cannot express how grateful I am for your love and support. In short, you are the best thing that ever happened to me. Thank you.
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Chapter 1: Introduction

In spite of the profound influence that the profession of nursing has on quality of care and patient outcomes (Institute of Medicine [IOM], 2010), the voice of nursing has been underrepresented in critical discussions about health care reform (Kirk, 2014; Thompson, 2014). Antiquated discourse and dated images often contribute to this underrepresentation of nursing’s voice which perpetuates the lack of understanding of what the profession has to offer. This out-of-date perspective frequently impedes progression by stifling the voice of nursing and their many contributions to improving patient care. Consequently, it is essential that the profession showcase nurse-led innovations by using “a ‘voice of agency’ that accurately describes nurses’ complex and critical work” (Buresh & Gordon, 2013, p. 75).

There have been recent efforts to provide a platform for the voice of nursing to be heard in discussions pertaining to health care reform in hospital settings. Recent efforts have included the Nursing Alliance for Quality Care, Raise the Voice campaign, and the Nurses on Boards Coalition (American Academy of Nursing [AAN], 2009; American Association of Colleges of Nurses [AACN], 2014; Kirk, 2014). Efforts such as these lead the way in giving nurses a voice by making them full partners in healthcare decisions (Mullinix, 2011).

Nursing has a social responsibility to voice concerns and share knowledge that have been shown to improve both patient safety and quality of care (American Nurses Association [ANA], 2010b). Sharing knowledge to influence both patient safety and quality of care in hospital settings can offer nursing a voice on a local level. However, nurses must also have their voices heard on national and international platforms. Sharing nursing knowledge through scholarly publication in peer-reviewed journals is one way that nurses can have their voices heard by a broader audience.
Statement of the Problem

Governing bodies and professional organizations recognize the value of scholarly publication as an element of standards of practice and professional conduct (AACN, 2006, 2008, 2010, 2011; ANA, 2010a). When nurses engage in the professional conduct of scholarly publication, they contribute to the dissemination of nursing knowledge related to best practices. In particular, clinical nurses are in pivotal positions to both share best practices to influence health care reform and to advance nursing science in hospital settings. Publications by nurses in hospital settings add to the body of knowledge that contribute to quality of care and improved patient outcomes (Glasper & Peate, 2013). Thus, it is essential that nurses in hospital settings publish to disseminate this knowledge (Oermann, 2012; Price, 2010).

Sharing nursing knowledge through publication can advance nursing practices through dissemination of innovative approaches. Many innovations that are needed to advance nursing practices are already occurring in the health care system (IOM, 2010). Unfortunately, successful and promising models of care are rarely disseminated beyond organizational levels as a result of barriers to writing for publication. Barriers to writing for publication by nurses have been clearly identified in the literature (Dowling, Savrin, & Graham, 2013; Luiselli, 2010; Oermann & Hays, 2015; Shah, Shah, & Pietrobon, 2009). To address these barriers, hospital settings have implemented organizational programs with curricular and mentoring components to support publications by clinical nurses (Batcheller, Kirksey, VanDyke, & Armstrong, 2012; Horstman & Theeke, 2012; Jackson, 2009; Richardson & Carrick-Sen, 2011; Salas-Lopez et al., 2011; Shatzer et al., 2010; Thomsen & Holge-Hazelton, 2014).

Servant leadership (Jackson, 2009), transformational leadership (Horstman & Theeke, 2012), self-efficacy (Shatzer et al., 2010) and action research (Thomsen & Holge-Hazelton,
2014) principles have been used in hospital settings to guide curricular design of programs to increase publication by clinical nurses. Outcomes of these efforts have focused on insight gained from the impact of organization-based programs that facilitate publication. However, this insight is from the organization’s perspective and additional factors which facilitate publication by clinical nurses have not been identified. To uncover these additional factors, the perspective of the individual nurse who publishes within these settings must be explored. The published nurse’s perspective offers an opportunity to discover factors which facilitate publication by clinical nurses in hospital settings.

**Background/Significance**

Historically, academicians in the nursing profession have established publication efforts as a criterion for maintaining job requirements, promotion, and tenure. However, recent attention has shifted toward encouraging nurses in hospital settings to publish for the purpose of disseminating knowledge of best practices (Oermann & Hays, 2015). Disseminating knowledge of programs, processes, and outcomes that are working in hospital settings spreads practice innovations through local, national, and international platforms. Disseminating best practices through publication provides a mechanism for clinical nurses to advance the art and science of the discipline (Bingham, 2014; Oermann, 2012; Oermann et al., 2008; Price, 2010; Tagney & Haines, 2009). While dissemination of best practices is of great importance to the profession, often the barriers to publishing experienced by clinical nurses thwart their efforts to share practice innovations.

Some nurses are not comfortable with writing due to a limited scholarly writing abilities, unfamiliarity with the publication process, and fear of having a manuscript rejected (Cone & Dover, 2012; Luiselli, 2010; Newton & Moore, 2010; Oermann & Hays, 2015). For others,
writing is an emotional process that triggers negative feelings such as insecurity, anxiety, and fear (Gazza, Shellenbarger, & Hunker, 2013; Shah, Shah, & Pietrobon, 2009; Shellenbarger, Hunker, & Gazza, 2015). The limited time clinical nurses may have to organize ideas into a paper submission magnify these challenges in writing for publication (Dowling et al., 2013). These are some of the many barriers which impede nurses from writing for publication.

**Pilot Study**

A pilot study was conducted to examine facilitators and obstacles for five clinical nurses who had successfully published in a peer-reviewed journal (Tyndall & Caswell, in press). Participants in this descriptive, qualitative study were employed at a large academic medical center in the southeastern United States. All participants were White and four of the five were female (80%). Participants were employed full-time and had an average of 28 years of nursing experience. Two participants were advanced practice registered nurses (APRN) and three participants were in leadership roles within the organization. All participants were educationally prepared at the master’s level of nursing, and two participants were enrolled in doctoral studies. Each participant had published 1-2 peer-reviewed articles during the years 2011-2014. Four of the participants had published as a first author. Out of the seven published articles, four (57%) were quality improvement articles, two (29%) were clinical articles related to standards of practice, and one (14%) was an opinion article.

Three main themes emerged through data analysis: Culture of “Nice to Do”, Personal Motivation, and Writing Experiences. The theme Culture of “Nice to Do” highlighted the realization that publication is not a priority in hospital settings, nor is it an expectation. The implication of organizational culture (environment) impacting publication resonated in each of the participant interviews. The theme of Personal Motivation represented the nurse’s inner drive
to overcome barriers and publish. Descriptions of personal motivation (cognitive) were evident in each participant’s unique experience with publishing in a peer-reviewed journal. Participants descriptions of Writing Experiences was a third major theme identified during data analysis. This theme contained descriptions of positive writing experiences (behaviors) and how these experiences influenced the participants’ publication efforts.

Findings from the pilot study suggested that there were cognitive, behavioral, and environmental factors that facilitated publication by clinical nurses. This dissertation study followed up on these preliminary findings. Determination in the pilot that cognitive, behavioral and environmental factors influence publication led to the decision to use Bandura’s Social Cognitive Theory as a guide since this theory also considers how these factors impact social behaviors.

Theoretical and Philosophical Perspective

Bandura’s (1986) Social Cognitive Theory and the concept of “human agency” provide a framework for studying clinical nurses who publish in peer-reviewed journals (Figure 1). Social Cognitive Theory embodies the premise that individuals function in response to cognitive, behavioral, and environmental factors. These factors are interdependent, with each factor influencing the other (Bandura, 1986). Individuals, as a human agent, have the capacity to respond within this relationship to intentionally make things happen (Bandura, 1991; 2001).

The concept of “human agency” is based on four core characteristics of individuals: 1) intentionality, 2) forethought, 3) self-reactiveness, and 4) self-reflectiveness (Bandura, 2001, p. 6). Individuals, as human agents, intentionally plan courses of action to bring about a desired outcome. Forethought is demonstrated when an individual sets personal goals and creates courses of action to meet those goals. Self-reactiveness links forethought to action when an
individual self-monitors cognitive, behavioral, and environmental conditions and reacts accordingly. Self-reflectiveness occurs when an individual reflects on their abilities and the adequacy of thoughts and actions.

The concept of “human agency” offers the view that clinical nurses who publish are not only a product, but also a producer of their environment. At the human agent level, the clinical nurse is responding to cognitive, behavioral, and environmental factors that may or may not influence their endeavors to write for publication. The responses are dependent upon contextual conditions impacting the relationships among the three factors. Thus, to better understand what supports clinical nurses who publish, we must consider the nurse’s perspective regarding the three factors and their relative influence on promoting or deterring publication.

**Figure 1: Theoretical Factors Facilitating Scholarly Publications**

![Theoretical Factors Facilitating Scholarly Publications](image)

Adapted from: Bandura’s 1986 Social Cognitive Theory Triadic Model

Research is scarce and inconclusive about factors that facilitate publication by clinical nurses. Thirteen articles were found in the nursing literature that discussed publication by nurses in the hospital setting. Two articles discussed findings based on research design (Richardson &
Carrick-Sen, 2011; Shatzer et al., 2010). The majority of articles were focused on evaluative measures of the programs that had been implemented within the hospital setting to increase publications. Additionally, little is known about the demographics of the nurses who are discussed in these articles. Of the articles reviewed, participant sample sizes ranged from 11 to 50, with only one article providing demographics of participants. However, of the 11 participants described in this article, it is not clear as to which of the participants submitted manuscripts nor is it reported if the manuscripts were accepted for publication (Shatzer et al., 2010). Consequently, our understanding of publication by clinical nurses is limited. The following sections will examine what research and evaluation has been done on environmental, cognitive, and behavioral factors that may facilitate publication.

**Environmental Factors**

Literature suggests that the environment in which a nurse is employed may influence whether or not they publish. For example, hospitals have offered education and mentoring programs aimed at promoting publication. However, programs offered in these settings have varied with regard to program completion and publication rates. Evaluators within these hospital settings report that some nurses did not complete the program in its entirety (Shatzer et al., 2010), and attrition rates for some programs was as high as 50% (Batcheller et al., 2012; Richardson & Carrick-Sen, 2011). For nurses who completed programs, rates of publication varied from 8% to 67% with evaluators reporting that many manuscripts were under review or revision (Batcheller et al., 2012; Horstman & Theeke, 2012; Jackson, 2009; Richardson & Carrick-Sen, 2011; Shatzer et al., 2010; Thomsen & Holge-Hazelton, 2014).

Outcomes of programs to enhance publication by clinical nurses suggested that some nurses are influenced to write for publication based upon environmental factors. However,
results from these program evaluations also suggested that the environment may not be the only factor necessary for successful publication by clinical nurses. Therefore, it is reasonable to conclude that programs sponsored by organizations may not have been enough to facilitate publication endeavors for nurses that failed to complete programs and/or did not publish. Likewise, it is reasonable to presume that there may be other factors that were not identified that prohibited publication by nurses who participated in organizational programs.

**Cognitive Factors**

There was discussion in the literature suggesting that cognitive factors (i.e. personal or inner traits) may influence an individual’s ability to write for publication. Some scholars discussed the dreaded ‘writer’s block’ that can hinder the writing process (Morton, 2013; Oermann, 2012). Shah et al. (2009) found that novice researchers discussed writing difficulties from anxiety, procrastination, and difficulty staying focused which contributed to a “cognitive burden” (p. 513). Additionally, nursing research describing processes to enhance scholarly writing for publication has focused on the graduate student population (Dowling et al., 2013; Gazza et al., 2013; Shellenbarger et al., 2015; Shirey, 2013), suggesting that educational preparation may be a cognitive factor influencing the ability to publish.

Cognitive factors may also be represented by an individual’s knowledge, confidence, and motivation to publish, all of which have been explored in nursing research as a possible link to publication activity. Wilson, Sharrad, Rasmussen, and Kernick (2013) found that publication workshops were successful in increasing knowledge, confidence, and motivation to publish in both nursing academicians and students. Yet, results from the study did not include whether participants followed through with publication. Shatzer et al. (2010) examined both knowledge and confidence by measuring self-efficacy and its application to publication by clinical nurses.
Increase in self-efficacy scores was statistically significant after publication workshops and showed an increase in both knowledge and confidence (Shatzer et al., 2010). Yet results from this study did not indicate whether or not manuscripts were accepted for publication.

**Behavioral Factors**

Behavioral factors are another influence on writing for publication found in current literature. Several scholars discussed the importance of making time to write (Luiselli, 2010; Morton, 2013), setting due dates, and writing during prime times when one is most creative (Oermann & Hays, 2015). Luiselli (2010) elaborated on the importance of setting writing objectives and developing writing tactics to be successful with publication. Driscoll & Aquilina (2011) described six-step approach that included behaviors such as selecting a journal and making contact with the editor. While these behaviors have been suggested for successful publication, no research to confirm their effectiveness was found.

Dowling et al. (2013) found that graduate students identified behaviors such as meeting with faculty and collaborating with colleagues as being helpful in writing for publication. However, of the 135 students surveyed in this study, only 28 had a manuscript published. Therefore, the majority of participants in this study were providing feedback based upon perceptions rather than first-hand knowledge of behavioral factors facilitating publication.

**Purpose of Study**

Research into factors that facilitate publication by clinical nurses is limited and inconclusive. Attempts to examine environmental factors which facilitate publication in hospital settings have lacked the rigor of research design required for scientific inquiry. In addition, cognitive and behavioral factors which may contribute to publication have not been thoroughly explored. As a result, little is known about how to implement interventions in hospital settings
that would enhance the dissemination of knowledge related to best practices. Dissemination of knowledge related to best practices is critical to health care reform and advancing nursing science in hospital settings.

An ethnographic, multiple-case study design was used to explore the perspective of the nurse. A focused ethnographic approach was used to analyze the experience of these nurses within the social context of their practice (i.e. environmental factors) since nurses within one Magnet hospital setting were recruited to share their experiences with writing for publication. Multiple-case study methodology, as described by Yin (2014), was selected to explore unique cases of clinical nurses who have published often in their practice. In this study, clinical nurses who have multiple publications in peer-reviewed journals were interviewed to examine cognitive, behavioral, and environmental factors that facilitate publication. Strategies, such as the triangulation of multiple data sources, were used to enhance the rigor and credibility of the multiple-case study (Yin, 2014).

**Research Question**

The purpose of this study was to examine the cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals. The research question was: *What cognitive, behavioral, and environmental factors facilitate peer-reviewed publication by clinical nurses in Magnet hospitals?*

**Theoretical Propositions**

Social Cognitive Theory and the concept of “human agency” provided theoretical propositions for studying clinical nurses in Magnet hospitals who publish (Figure 1). The following theoretical propositions were posited:
1. clinical nurses within Magnet hospitals publish in response to cognitive, behavioral, and environmental factors;

2. these three factors are interdependent and influence one another;

3. clinical nurses (as human agents) are not only a product of, but also a producer of their environment; and

4. within this human agent level, the clinical nurse is responding to various influences that may or may not facilitate their endeavors to write for publication.

Definitions

For the purpose of this study, the following definitions were used:

**Clinical Nurse.** A registered nurse practicing in a Magnet hospital who directly or indirectly influences patient care and clinical outcomes (i.e. bedside nurses, advanced practice nurses, nurse leaders). For the purpose of this study, clinical nurses were viewed as “human agents” with characteristics including intentionality, forethought, self-reactiveness, and self-reflectiveness as described by Bandura (2001).

**Magnet Hospital.** A hospital or medical center with Magnet® designation. Magnet® designation through the American Nurses Credentialing Center (ANCC) symbolizes nursing excellence and innovations in nursing practice (2016b).

**Publication.** Scholarly publication in a peer-reviewed, professional journal; minimum of two publications between the years of 2010-2015.

**Cognitive Factors.** Bandura (1986) describes cognitive, or other personal factors, as “indexed by self-beliefs of efficacy, personal goal setting, and quality of analytic thinking” (p. 267). For the purpose of this study, “cognitive factors” were defined as inner or personal characteristics that facilitate a clinical nurse’s success in publishing in a peer-reviewed journal.
Examples included but were not limited to the following: knowledge, confidence, motivation, and beliefs.

**Behavioral Factors.** Bandura (1986) describes behavioral factors as “managerial choices that are actually executed” (p. 267). For the purpose of this study, “behavioral factors” were defined as strategies or actions employed that facilitate a clinical nurse’s success in publishing in a peer-reviewed journal. Examples included but were not limited to the following: writing behaviors such as setting due dates and scheduling time to write.

**Environmental Factors.** Bandura (1986) describes environmental factors as “organizational environment, the level of challenge it prescribes, and its responsiveness to managerial interventions” (p. 267). For the purpose of this study, “environmental factors” were defined as the surroundings, conditions, or human relationships that facilitate a clinical nurse’s success in publishing in a peer-reviewed journal. Examples to included but were not limited to the following: education workshops offered by the organization, mentors, and enrollment in higher education.

**Conclusion**

It is essential that nurses in hospital settings promote their voice and the voice of nursing through publication. Publishing best practices adds to the body of knowledge which contributes to quality of care and improved patient outcomes. Hospital settings have implemented strategies to increase publications by clinical nurses. However, the body of knowledge is limited and has emphasized environmental influences. Both Social Cognitive Theory and the concept of “human agency” afford a framework for studying clinical nurses in hospital settings who publish. Both case study and ethnographic methodology offer a mode of inquiry to explore unique cases of clinical nurses within the context of their practice. This study aimed to examine factors that
facilitate publication in clinical nurses which could have implications for both nursing education and practice.
Chapter 2: Review of the Literature

The purpose of this study was to examine the cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals. Consistent with the aims of this study, the review of literature was as follows: (a) literature that described the characteristics of Magnet hospitals and how clinical scholarship and writing for publication is supported within these institutions; (b) literature that discussed the characteristics of nurses who author publications in hospital settings; and (c) environmental, cognitive, and behavioral factors that influenced clinical nurses who disseminate their work through publication.

A review of scholarly and research articles was conducted using CINAHL®, MEDLINE® (PubMed), and ProQuest Nursing & Allied Health Source databases. Key search terms included: writing for publication, publication, scholarly writing, knowledge dissemination, scientific writing, manuscripts, nursing, and nurses. All database sources covered a 20 year time frame, ranging from 1995-2015. Articles in the English language that met the criteria described in this section were considered.

Magnet Designated Hospitals

The ANCC has two accreditation programs for health care organizations that demonstrate nursing excellence: the Pathway to Excellence® and the Magnet Recognition Program®. Both programs focus upon improving the practice environment; however, the Magnet Recognition Program® recognizes efforts to improve quality of patient care through innovations in nursing practice (ANCC, 2016b). There are over 400 hospitals in the United States (US) that have achieved Magnet recognition (ANCC, 2016b). Magnet hospitals have demonstrated better patient outcomes related to mortality measures when compared to non-Magnet hospitals (Friese, Xia, Ghaferi, Birkmeyer, & Banerjee, 2015; McHugh et al., 2013). Research has suggested that
better work environments and a more highly educated workforce can be linked to improved patient outcomes associated with Magnet hospitals (Kelly, McHugh, & Aiken, 2011).

A Magnet program receives the highest and most prestigious recognition because of its rigorous requirements. One example of these rigorous requirements included providing evidence of new nursing knowledge (ANCC, 2016b). Providing evidence of new knowledge requires participation in nursing research. This requirement has led to organizations building infrastructures necessary to support nursing research to be successful in achieving Magnet status (Latimer & Kimbell, 2010). Organizations which have infrastructures to support nursing research can offer opportunities for both generating and disseminating new knowledge.

The Magnet Model contains five components which provide a framework for nursing practice: 1) transformational leadership, 2) structural empowerment, 3) exemplary professional practice, 4) new knowledge, innovation, and improvements, and 5) empirical quality results (ANCC, 2016b). In particular, components four and five address both generating new knowledge and improving outcomes as it relates to best practices. Publication in a peer-reviewed journal is a mechanism for nurses in hospital settings to share these best practices.

Clinical Nurses Who Publish

In a review of 13 articles describing organizational programs aimed to increase publication by clinical nurses, 46% of programs were initiated in Magnet hospitals. In six programs, nurses were employed in US Magnet hospitals (Batcheller et al., 2012; Hortsman & Theeke, 2012; Rees, Payne, & Houlanban, 2015; Salas-Lopez et al., 2011; Shatzer et al., 2010; Taylor, Lyon, & Harris, 2005) and in three programs nurses were employed in US non-Magnet hospitals (Henninger & Nolan, 1998; Lannon, 2007; Lawrence & Folcik, 1996). Notably, two of the US non-Magnet hospitals described in the articles included in the literature review have
achieved Magnet designation since publication (ANCC, 2016a). In four programs, nurses were employed in hospitals located in the United Kingdom (Richardson & Carrick-Sen, 2011; Taylor et al., 2005), Australia (Jackson, 2009), and Denmark (Thomsen & Holge-Hazelton, 2014). Three programs teaching nurses how to publish were identified by hospital bed capacity which ranged from 176 to 566 (Rees et al., 2015; Shatzer et al., 2010; Winslow, Mullaly, & Blankenship, 2008).

The review of the literature to date has revealed that demographic characteristics for nurses in hospital settings who publish are not widely described. In a review of the programs discussed in the 13 articles selected for the literature review, none of the authors provided characteristics specifically for nurses who successfully published after completing their organizational programs. However, the authors described characteristics of the group of nurses as a whole who participated in organizational programs aimed at increasing publications.

One article was found that identified the gender and race of the participants in a program to increase publications. In this study, 17 (94%) of participants were female and 14 (77%) were Caucasian (Henniger & Nolan, 1998). Three articles were found that discussed the educational level of the nurse participants. Thomsen and Holge-Hazelton (2014) simply stated that 8 (42%) of the 19 participants had an “academic degree” (p. 35). Twenty-nine participants had educational levels that consisted of six MSN (21%), fourteen BSNs (48%), and nine (31%) Associate/Diploma/Other degrees (Henninger & Nolan, 1998; Shatzer et al., 2010).

A variety of job positions and experience levels of nurses who participated in programs to increase publication were discussed in the literature. In general, participants were in non-administration positions averaging 16.5 years of nursing experience (Shatzer et al., 2010) and some participants had administrative experience and/or podium presentation experience.
(Batcheller et al., 2012). One organization with 49 nurse participants included 35 (71%) from clinical positions and 14 (29%) from primary research positions (Richardson & Carrick-Sen, 2011). Another organization included 13 (72%) nurses who were in clinical positions, four (22%) in management positions, and one (5%) described as other (Henniger & Nolan, 1998). Notably, the Chief Nursing Officer at one organization specifically requested that a ratio of one staff position to one leader attend their program (Hortsman & Theeke, 2012).

Organizations used various strategies to recruit nurses into their programs. For example, nurses were recruited who were involved in clinical advancement programs (Shatzer et al., 2010) or projects at the unit-level (Batcheller et al., 2012; Hortsman & Theeke, 2012; Taylor et al., 2005). One program asked writing mentors within the organization to recommend participants that they would agree to mentor as novice authors. These writing mentors recommended individuals that had previous working relationships through student projects or clinical teams (Jackson, 2009).

**Factors Facilitating Publication by Clinical Nurses**

The following sections highlight the literature that identified and/or suggested factors that facilitate publication by clinical nurses. Further critique involved narrowing the review of literature to include only articles that identified and/or suggested environmental, cognitive, and behavioral factors facilitating publication by clinical nurses.

**Environmental Factors**

For the purpose of the study, “environmental factors” were defined as the surroundings, conditions, or human relationships that facilitate a clinical nurse’s ability to publish in a peer-reviewed journal. Scholarly articles were selected for review if they identified organizational programs (environment) aimed at increasing publication by clinical nurses. Thirteen articles...
were selected for review. Articles were selected that described and evaluated organizational programs implemented to increase publication by clinical nurses.

In general, the review of the literature revealed that organizations evaluated their programs based on two main outcomes: 1) successful publication and 2) participant evaluation of the program. Successful publication was measured quantitatively by manuscript submissions, acceptances, and publications (Batcheller et al., 2012; Hortsman & Theeke, 2012; Jackson, 2009; Richardson & Carrick-Sen, 2011; Rees et al., 2015; Shatzer et al., 2010). Participant evaluation was measured using quantitative and/or qualitative data in regards to program effectiveness (Batcheller et al., 2012; Hortsman & Theeke, 2012; Jackson, 2009; Richardson & Carrick-Sen, 2011; Shatzer et al., 2010).

**Education and mentoring.** Of the thirteen organizational programs reported in the reviewed literature, each included both an education and mentoring component aimed at increasing publication by clinical nurses. Winslow et al. (2008) described a 1-hour workshop followed by a social networking hour for novice writers and experienced authors. In this program, experienced authors mentored novice writers for a period of six months where attendees actively wrote for publication. In another program, Lannon (2007) described a continuing education (CE) workshop on writing for publication designed explicitly for bedside nurses. Mentoring was provided by the CE coordinator which resulted in three publications by nurses within the organization. Similarly, Shatzer et al. (2010) discussed an educational and mentoring program that included 11 clinical nurses from two community hospitals. The program included two 4-hour workshops that consisted of three 1:1 mentoring sessions over a 10-week time frame. Eight of the 11 nurses completed all components of the program. At the end of the project, four (35%) participants had submitted manuscripts for publication.
Other programs found success with increasing publications by offering educational and mentoring programs over several months. Lawrence and Folcik (1996) found that a 1-day workshop resulted in three (4%) of 71 participants successfully publishing. However, changing the format to include a series of five sessions over several months increased publication rates to 22% \((n = 18)\). Batcheller et al. (2012) also saw positive outcomes from their program that spanned a 5-month time frame, including nine (43%) of 21 nurses having manuscripts accepted for publication. Taylor et al. (2005) reported that 11 (65%) of 17 nurses successfully published as a result of their 7-month program, while Richardson and Carrick-Sen (2011) found that ongoing mentoring for a year after implementing an eight-month program led to 12 (24%) participants submitting a manuscript and four (8%) publishing.

Thomsen and Holge-Hazelton (2014) reported that a tailored writing course based on lessons learned increased publications by clinical nurses. They used lessons learned from a single course to enhance development of future courses. Sessions were increased from six three-hour sessions to six full-day sessions supplemented by additional writing days based on participant requests. In addition, the program was tailored to strengthen writing content as opposed to focusing on format. They opened up the workshops to other disciplines and found that this enhanced the writing environment for all participants. Nineteen nurses completed the writing course. The authors reported that two thirds of the 18 writing projects have been accepted for publication or published.

In contrast, Henninger and Nolan (1998) did not find a long-term writing program to differ much in outcome when compared to a short-term writing program. Nurses \((N = 8)\) who participated in a 3-month program had a 25% publication rate as compared to nurses \((N = 10)\) in a 12-month program with a 30% publication rate. Success rates were calculated based on
participants who had manuscripts submitted, accepted, or published. They concluded that both types of programs were equally effective, but posited that other factors, such as clarity of topic and a unit culture supportive of publication efforts, may be more influential.

**Writing retreats and writing groups.** Three programs identified writing retreats or writing groups as components to successful publication to increase publications by clinical nurses. Jackson (2009) evaluated a three-day offsite writing retreat with activities designed to discover steps of success. Novice nurses were paired with mentors to enhance peer-learning relationships and peer feedback sessions. Novice authors submitted drafts before the retreat and then worked on them extensively during the three days. The intensive nature of the retreat helped with the barrier of writing avoidance. Outcomes were reported for 39 nurses who attended three retreats. At the end of the project, twenty manuscripts were under review or revision, and 19 manuscripts had been published.

Horstman & Theeke (2012) described a one-day offsite retreat consisting of 10 writing groups (4-8 participants in each group). Writing groups were determined based upon clinical topics of interests and/or existing practice projects. At the completion of the retreat, writing groups left with an outline and timeline for their manuscript. Support through mentoring and additional education was available after the retreat. Twelve months after the retreat, nine articles were submitted, with four reaching publication status.

In contrast, Salas-Lopez et al. (2011) discovered that interdisciplinary writing groups were helpful in increasing publication. Informal education combined with mentoring within a group dynamic allowed for expertise to be shared with less experienced writers. Publication from one writing group sparked excitement and interest within the organization to form other
writing groups. These interdisciplinary groups, which were comprised of at least one nurse
author, were successful in publishing six manuscripts with two manuscripts under review.

**Comprehensive model.** Rees et al. (2015) found that using a comprehensive plan to
create a culture for publication resulted in positive outcomes. The organization, described by the
authors, hired a director of nursing research and created a publication program. Using the *Kotter
Change Model* as a guiding framework, the program consisted of five strategies: 1) education, 2)
mentoring, 3) role modeling, 4) resources, and 5) celebration/recognition (Reis et al., 2015).
Since the program began in 2012, the organization has disseminated 69 nursing publications.
They concluded that using multiple strategies was essential in increasing publication by clinical
nurses.

In summary, there was a wide variation in program completion and publication rates
reported in the articles selected for review. Some authors did not report the number of
participants who attended educational programs offered (Lannon, 2007; Winslow et al., 2008).
Others reported attrition rates as high as 50% (Batcheller et al., 2012; Richardson & Carrick-Sen,
2011). For nurses who completed programs, rates of publication varied from 8% to 67% with
evaluators reporting that many manuscripts were under review or revision (Batcheller et al.,
2012; Horstman & Theeke, 2012; Jackson, 2009; Richardson & Carrick-Sen, 2011; Shatzer et
al., 2010; Taylor et al., 2005; Thomsen & Holge-Hazelton, 2014).

**Cognitive Factors**

In this study, “cognitive factors” were defined as inner or personal characteristics that
facilitate a clinical nurse’s ability to publish in a peer-reviewed journal. Fifteen articles and one
text in the health sciences literature that identified and/or suggested cognitive factors that
facilitate publication were selected for review. Articles selected were sorted into the following
categories: non-research based informative articles (8), research studies (3), clinical (2), and nursing education (2).

Knowledge, confidence, and motivation have all been explored in nursing research as a possible link to publication activity in nurses. Shatzer et al. (2010) examined knowledge and confidence as demonstrated by self-efficacy in nursing-specific writing tasks in a study in 11 clinical nurses. The authors measured self-efficacy using a 15-item scale that included items they determined to be related to nursing-specific writing tasks. One item asked about scholarly publication for a nursing journal. The scores ranged from zero (no chance of completion) to 100 (complete certainty of completion). The authors found that education pertaining to writing for publication combined with 1:1 mentoring had a significant impact ($p < .05$) on self-efficacy related to publication.

Stone, Levett-Jones, Harris, and Sinclair (2010) found that writers’ workshops positively influenced confidence and motivation in nurse clinicians. Nineteen workshop participants responded to questions about confidence and motivation on a Likert-type scale ranging from strongly disagree (1) to strongly agree (5). The mean score for confidence was 4.3 and the mean score for motivation was 4.5. In another study, Wilson et al. (2013) examined the effect of professional development workshops on publication knowledge, confidence, and motivation in a group of 17 participants comprised of nursing academicians (7), students (6), research staff (2) and one nursing clinician. The authors found that 93% of participants either strongly agreed or agreed that their knowledge about publication and motivation to publish had increased. Sixty-seven percent felt that their confidence had increased.

There was additional dialogue in the literature that suggested cognitive factors may influence an individual’s ability to write for publication. Some scholars discussed the
phenomenon of ‘writer’s block’ that hinders an individual from moving forward in the writing process (Morton, 2013; Oermann & Hays, 2015). This inability to move forward has been associated with negative emotions such as anxiety, procrastination, and difficulty staying focused, which some researchers have characterized as a “cognitive burden” (Shah et al., 2009, p. 513). Luiselli (2010) argued that a lack of understanding about preparing and submitting a manuscript is a barrier to publishing. The proliferation of articles directed at instructing nurses how to write for publication suggests nurses need a better understanding of the publication process (Carlson, Masters, & Pfadt, 2008; Driscoll, & Aquilina, 2011; Glasper & Peate, 2013; Happell, 2012; Oermann & Hays, 2015; Oermann, Turner, & Carman, 2014; Moos, 2011).

Nursing research of methods to enhance scholarly writing necessary for publication has often focused on the graduate student population suggesting that educational preparation may be a cognitive factor influencing the desire and ability to publish. In one study of 141 graduate nursing students, “knowing what to write about” and “getting started” were identified as 2 of the 3 highest ranked barriers to writing (Dowling et al., 2013, p. 373). Shellenbarger et al. (2015) interviewed six Doctor of Nursing Practice (DNP) students about their experiences developing as a scholarly writer. The researchers found that students who shared positive feelings associated with writing experiences conveyed self-confidence and desire to write. In contrast, students who described negative feelings associated with writing experiences conveyed less confidence and decreased desire to write. In another study with DNP students, Shirey (2013) evaluated courses implemented over a two-semester time frame aimed at enhancing scholarly writing. The author found that various methods aimed at building scholarly writing capacity, such as enhancing evaluation and feedback, were beneficial to students. In addition, qualitative data collected from students’ course evaluations revealed that emphasizing scholarly writing is formative, which can
enhance critical thinking in student writing. Three group publications were identified as another favorable outcome from the courses.

**Behavioral Factors**

In this study, “behavioral factors” were defined as the actions or reactions that facilitate a clinical nurse’s ability to publish in a peer-reviewed journal. Nine articles and one text in the health sciences literature that identified and/or suggested cognitive factors that facilitate publication were selected for review. The categories of articles and numbers selected for each were: non-research based informative articles (7), research studies (1), and literature review (1).

In the reviewed articles, writing behaviors were often described within the process of preparing a manuscript. Driscoll and Aquilina (2011) identified that one of the first steps in preparing a manuscript is to “read to write” (p. 43). They explained the benefits of reading various journals to find a suitable match for an individual’s writing preferences. Other cited behaviors for preparing a manuscript included deciding on the content, selecting a journal, and using author guidelines (Glasper & Peate, 2013; Happell, 2012). Making contact with the journal editor was another behavior cited in the literature that was beneficial to authors to determine interest in the proposed manuscript, avoid submitting an article that is similar to one already proposed or under review, and reduce the likelihood of rejection (Driscoll and Aquilina, 2011). Additionally, advice for authors was found in the literature regarding how to structure manuscripts targeted for journals focused on specific topics, such as quality improvement, research, or evidence-based practice (Oermann et al., 2014).

A few authors offered suggestions about behaviors and strategies that may be conducive to productive writing. Several scholars discussed the importance of scheduling time to write, setting due dates, and writing during prime times when one is most creative (Derouin et al.,
One experienced author identified the importance of developing specific tactics such as writing objectives, stimulus control to minimize distractions, and positive reinforcement to reward productive writing behaviors to enhance success in writing for publication (Luiselli, 2010). Moos (2011) identified strategies such as selecting an experienced author as a mentor and attending writers’ workshops to facilitate writing for publication. Although the behaviors identified by the authors have been suggested for successful publication, the effectiveness of these strategies was not well known.

A recent study conducted by Dowling et al. (2013) of both graduate nursing students and nursing faculty examined each group’s opinion of facilitators of students’ success in writing for publication. The top three facilitators ranked by students were work with faculty, regular meetings with faculty, and dedicated time to write. In comparison, faculty ranked the top three facilitators for student success as dedicated time to write, regular meetings with faculty, and specific deadlines. Although, the perceptions between students and faculty were slightly different, all of the top facilitators ranked by the participants are behaviors or actions aimed at writing for publication. Notably, 28 (20%) of the 141 students surveyed in this study had a manuscript published (Dowling et al., 2013). Therefore, the majority of participants in this study were providing feedback based on perceptions rather than first-hand knowledge of behavioral factors facilitating publication.

**Implications for Nursing Research**

Dissemination of knowledge through peer-reviewed publication by clinical nurses in hospital settings is critical to advancing nursing practice. However, research was found to be limited and inconclusive regarding factors that facilitate publication by clinical nurses in these settings. Little is known about the demographics of the nurses who are discussed in these
articles. Programs offered in settings in which clinical nurses were employed varied in program completion and publication rates. Reported outcomes often included either participants as “actively writing” or having had manuscripts “submitted” for publication. The reported outcomes for the most part did not include longitudinal data pertaining to nurses achieving publication of their manuscripts that were generated in these programs. In addition, the types of articles submitted and/or published were not described.

There were gaps in available literature pertaining to factors that may facilitate publication among nurses in hospital settings. Attempts to examine environmental factors which facilitate publication in hospital settings have lacked the rigor of research design required for scientific inquiry. The majority of articles consisted of program evaluations of strategies implemented within the hospital setting to increase publications. Insight on environmental factors was for the most part obtained from the organization’s perspective and did not include the perspective of the individual nurses who publish. In addition, cognitive and behavioral factors that may contribute to publication have not been thoroughly explored. As a result, understanding of this topic from a nursing perspective was limited and minimizes our ability to implement effective interventions in hospital settings aimed at disseminating knowledge related to best practices. Future research should examine the environmental, cognitive, and behavioral factors that facilitate publication by clinical nurses which includes the perspective of the nurse.
Chapter 3: Methodology

The purpose of this study was to examine the cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals. The research question was: What cognitive, behavioral, and environmental factors facilitate peer-reviewed publication by clinical nurses in Magnet hospitals? A focused ethnographic, multiple-case study design was used to explore the research question. This chapter provides an overview of the study methodology with a particular emphasis on case study design as described by Robert K. Yin (2014).

**Focused Ethnographic Approach**

Focused ethnography is a distinct, sociological ethnography which allows inquiry of a concentrated aspect of a particular field. Focused ethnography is a relevant methodology to study clinical nurses who publish in Magnet hospitals because its approach supports exploration in an authentic setting. Exploration in an authentic setting allows the researcher to specifically target the phenomenon of interest during fieldwork. In contrast to traditional ethnography, focused ethnography supports the researcher having background knowledge, or “alterity”, versus unfamiliarity with the situation (Knoblauch, 2005, p. 4).

Focused ethnography also offers a feasible methodology to study nursing cultures in specific settings (Cruz & Higginbottom, 2013). Unlike traditional ethnography, focused ethnography is characterized by short-term field visits that are concentrated on a specific area of study. The approach includes both intense data collection and analysis to enhance the short-term field visits (Knoblauch, 2005; Cruz & Higginbottom, 2013; Wall, 2015). Using a focused ethnographic approach enhanced the design of the multiple-case study.
Multiple-Case Study Design

Case study is a methodological approach that investigates a contemporary phenomenon within a real-world context when the boundaries between the phenomenon and context are not clearly defined (Yin, 2014). This methodology was selected because of unclear boundaries between publication by clinical nurses and the social context in which writing for publication occurs. Therefore, the publication experiences which occurred within their clinical practice setting for these nurses must be considered. Generally, case study methodology is used to answer “how” and “why” questions where the social context is not clear (Yin, 2014). In this particular study, the inquiry was to determine “how” clinical nurses publish within the context of their practice setting. More specifically, the inquiry aimed to answer the research question: *What are the cognitive, behavioral, and environmental factors which facilitate peer-reviewed publication by clinical nurses in Magnet hospitals?*

Multiple-case study design is a case study structured around two or more cases of the phenomenon of interest. Specifically, evidence found from single-case studies informs cross-case synthesis and analysis. Multiple-case study design lends itself to either predict similar results, or “replication”, or contrasting results which can be used for theoretical development (Yin, 2014, p. 57). Multiple-case study design has been used in nursing research to evaluate educational interventions and models of health care across various settings (Bergdahl, Benzein, Ternestedt, Elmberger, & Andershed, 2013; Green, Johansson, Rosser, Tengnah, & Segrott, 2008; Procter, Wilson, Brooks, & Kendall, 2013; Shiu, Lee, & Chau, 2012; Toles et al., 2012). Case study design, with the use of *pattern matching*, is a desirable method to link data to theoretical propositions (Yin, 2014).
Theoretical Propositions

Social Cognitive Theory and the concept of “human agency” provided theoretical propositions for studying clinical nurses in Magnet hospitals who publish (Figure 1). The following theoretical propositions were posited:

1. Clinical nurses within Magnet hospitals publish in response to cognitive, behavioral, and environmental factors;
2. These three factors are interdependent and influence one another;
3. Clinical nurses (as human agents) are not only a product of, but also a producer of their environment; and
4. Within this human agent level, the clinical nurse is responding to various influences that may or may not facilitate their endeavors to write for publication.

Procedure for Selecting Setting

To facilitate a study that supports the characteristics of focused ethnography, one Magnet® hospital, from a specific geographical area in the United States (US), was selected for the study setting. Since the researcher was situated in the southeastern US, seven southeastern states were reviewed to determine a potential sample of Magnet® hospitals. A list of Magnet® hospitals for each of these seven states was obtained from the American Nurses Credentialing Center’s (ANCC) website (http://nursecredentialing.org/FindaMagnetHospital.aspx). The state of North Carolina (N.C.) was selected as the geographical area to represent the southeastern US for the following reasons: 1) the state with the greatest number of Magnet® hospitals in the southeast (Table 1), and 2) the student researcher resides within the state and has ease of access to these facilities.
To further narrow the selection to one setting, hospitals were selected based on inclusion and exclusion criteria outlined in Table 2.

Table 2: *Inclusion and Exclusion Criteria for Selecting Setting*

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnet® designation for a minimum of five years</td>
<td>Magnet® designation of &lt; five years</td>
</tr>
<tr>
<td>Hospital or medical center with a minimum 250 licensed beds</td>
<td>Long-term or Outpatient setting; Hospital or medical center with &lt; 250 licensed beds</td>
</tr>
<tr>
<td>Promotes scholarly publication as a component to demonstrate nursing scholarship and excellence</td>
<td>Minimally promotes scholarly publication as a component of nursing scholarship and excellence</td>
</tr>
<tr>
<td>Personnel includes clinical nurses who have published in a peer-reviewed journal at least 2 or more times during 2010-2015</td>
<td>Personnel includes clinical nurses who have not published or published in a peer-reviewed journal less than 2 times during 2010-2015</td>
</tr>
</tbody>
</table>

Hospitals with a minimum of five years of Magnet® designation were considered to have demonstrated a sustained commitment to nursing excellence. At the time of the selection process, 18 of the 23 N.C. hospitals had met the inclusion criterion of a minimum of five years of Magnet® designation (ANCC, 2016a). For the purpose of selecting a setting which could offer...
the greatest number of best cases to study, hospitals with a minimum of 250 licensed beds were targeted. Of the 18 hospitals, ten reported a licensed bed capacity of 250 or more on their organizations’ webpages. Thus, there were 10 hospitals that were considered in the selection process.

To determine the feasibility of the study, the Principal Investigator (PI) examined the number of potential cases at the 10 Magnet® designated hospitals. Each director of the Magnet® program at the ten hospitals were emailed and/or telephoned to inquire about the number of clinical nurses who had published 2 or more times during the years 2010-present. Directors responded from eight (80%) of the 10 hospitals. Two directors did not respond after multiple attempts to contact them through email and/or telephone.

Reported data revealed that potential cases of study ranged from zero to 22 cases at the eight hospitals (\(m=7\)). Initially, the hospital that offered the highest number of potential cases (22 cases) was solicited for a student research contract. During preliminary work to obtain the hospital’s IRB approval, organizational constraints were discovered which limited achievement of the student’s research goals. Consequently, an alternative hospital setting was selected with 11 potential cases and a student research contract was obtained to conduct the study in this facility. An approval letter was received from the IRB committee for the selected hospital setting on November 11, 2015.

**Sampling Plan**

Flyvbjerg (2006) argued that execution of case-study research can be strengthened by selecting the best cases that represent the phenomenon of study. He further claimed that random samples are unable to produce the insight required for validity as compared to best case
examples. Therefore, the PI used a screening process to support selection of the best suited cases for inquiry. Cases were selected based on inclusion and exclusion criteria outlined in Table 3.

### Table 3: Inclusion and Exclusion Criteria for Selecting Cases

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
<th>Exclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical nurses in which their role/position directly/non-directly influences patient care and clinical outcomes (i.e. non-direct influence from nurses in administration or leadership roles)</td>
<td>Clinical nurses in which their role/position does not influence patient care or clinical outcomes; (i.e. occupational health nurse role)</td>
</tr>
<tr>
<td>Nurse authors publishing at least 2 or more times during calendar years 2010-2016</td>
<td>Nurse authors publishing less than 2 times during calendar years 2010-2015</td>
</tr>
<tr>
<td>Nurse authors with first author experience</td>
<td>Nurse authors without first author experience</td>
</tr>
<tr>
<td>Scholarly articles (e.g. research briefs, original research, concept analysis, systematic review of literature, evidence-based article, and quality improvement article) published in research/peer-reviewed journals. Peer-reviewed articles provide sound, up-to-date information judged by specialist in the field.</td>
<td>Editorials, letters to the editor, or opinion/debate pieces published in research/peer-reviewed journals; articles published in other mediums without a professional, peer-reviewed process (i.e. hospital-generated journal or newsletter)</td>
</tr>
</tbody>
</table>

The Magnet Program Director was asked to forward a recruitment e-mail to potential cases asking individuals to contact the PI directly if interested. The director reported that the recruitment e-mail was sent to 11 nurses who had previously reported publishing at least twice since 2010. Ten (91%) nurses responded. Those ten individuals were asked to e-mail citations of published and “accepted” works from calendar years 2010-2016.

To minimize bias, the Dissertation Chair was asked to assist with selection of the best cases. Cases were evaluated on inclusion criteria discussed in the previous section. Quantity and quality of scholarly publications was taken into consideration. Quantity was assessed by
meeting the designated amount of scholarly articles in peer-reviewed journal. Quality was assessed by using a variety of evaluation methods including the:

1) scholarly nature of non-research articles,
2) evidence hierarchies as described by Polit and Beck (2012),
3) criteria for judging quality of qualitative inquiry as described by Patton (2002), and
4) journal impact factor.

Of the ten individuals who responded, three (30%) did not meet criteria, five (50%) met criteria, and two (20%) declined. One individual who declined cited a lack of time to schedule an interview. The other individual who declined was on family medical leave.

Data Collection Procedures and Instruments

There are certain strategies that can be applied in case study design to enhance rigor and credibility. One of those strategies is the triangulation of multiple sources to improve construct validity (Yin, 2014). To improve construct validity, data were triangulated from four sources of evidence: 1) physical artifacts, 2) direct observations, 3) case interviews, and 4) documentation.

Physical Artifacts

Physical artifacts are physical evidence that offer a “broader perspective” to studying a case (Yin, 2014, p. 118). In this multiple-case study, scholarly publications written by study cases were identified as physical artifacts. Publications were used to prompt the cases during the interview process. (i.e. *What actions did you take that supported you in your efforts to publish this particular article?*). These publications provided another source of data for triangulation. Data collected from case publication informed the interviews and findings related to empirical-found patterns used for single-case analysis. Scholarly publications were collected during the screening process in selecting a case for the study.
**Direct Observations**

Patton (2002) noted that with appropriate training and rigorous preparation “ordinary looking” can turn into “systematic seeing” (p. 261). Direct observations took place through observational fieldwork at the Magnet® hospital where the cases are employed. There were six advantages to using observational fieldwork to supplement other methods of data collection: 1) allows for a holistic perspective, 2) promotes discovery and inductive thinking, 3) provides opportunity to see nuances that people in setting may not be aware of, 4) offers forms of information that may not be accessible by interviews, 5) moves beyond selective perceptions of people in setting, and 6) allows for personal knowledge during interpretation stage of analysis (Patton, 2002).

**Fieldwork dimensions.** There are many variations to fieldwork design (Patton, 2002). Table 4 illustrates the dimensions of fieldwork which were applied to this dissertation study. These dimensions complement focused ethnography methodology as described by Knoblauch (2005).

**Sources of evidence.** Direct observations provided data from the following sources: 1) setting, 2) social environment, 3) historical perspective, and 4) planned activities. Table 5 illustrates sources of data collected and methods used.
Table 4: *Dimensions of Fieldwork for Dissertation Study*

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Dissertation Study</th>
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</thead>
<tbody>
<tr>
<td>Role of observer</td>
<td>Passive observer, spectator</td>
</tr>
<tr>
<td>Insider verses outsider perspective</td>
<td>Outsider perspective</td>
</tr>
<tr>
<td>Who conducts the inquiry</td>
<td>Solo researcher, PI</td>
</tr>
<tr>
<td>Disclosure of the observer’s role to others</td>
<td>Selective disclosure; “interested in publications by clinical nurses”; “what factors facilitate publication.”</td>
</tr>
<tr>
<td>Duration of observation and fieldwork</td>
<td>Short-term; multiple observations over 11 weeks</td>
</tr>
<tr>
<td>Focus of observations</td>
<td>Narrow focus; data collection pertaining to research question and purpose of study</td>
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</tbody>
</table>
### Table 5: Sources of Evidence

<table>
<thead>
<tr>
<th>Sources of Evidence</th>
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<tbody>
<tr>
<td><strong>Direct Observations</strong></td>
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<tr>
<td>Nursing Research &amp; EBP Event</td>
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<tr>
<td>Interview with Career Advancement Program Coordinator</td>
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<tr>
<td>Interview with Director, Nursing Research</td>
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<tr>
<td>Nursing Research Council Meeting</td>
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<td>Interview with Director, Magnet Program</td>
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<td>Interview with Editor, Hospital Journal</td>
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<tr>
<td>Editorial Meeting – Hospital Journal</td>
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<tr>
<td>Interview with CNO</td>
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<tr>
<td>Interview with Interim CNO</td>
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<tr>
<td>Interview with Nurse Academy Program Manager</td>
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<tr>
<td>Interview with Academy Graduates</td>
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<tr>
<td>Interview with Nursing Education Representative</td>
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<tr>
<td><strong>Case Interviews</strong></td>
</tr>
<tr>
<td>Morgan*</td>
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<tr>
<td>Daisy*</td>
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<tr>
<td>Kennedy*</td>
</tr>
<tr>
<td>Rose*</td>
</tr>
<tr>
<td>Ally*</td>
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<tr>
<td><strong>Physical Artifacts</strong></td>
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<tr>
<td>Research Articles (9)</td>
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<tr>
<td>Non-Research Articles (25)</td>
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<tr>
<td><strong>Documentation</strong></td>
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<tr>
<td>Social Media Links</td>
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<tr>
<td>Research Event Presentations</td>
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<tr>
<td>Research Event Posters</td>
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<tr>
<td>Career Advancement Guidelines</td>
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<tr>
<td>Research/EBP/QI Activity Guidelines</td>
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<tr>
<td>Hospital Journal</td>
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<td>Nursing Research Council Flowchart</td>
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<td>2016 Nursing Research Council Objectives</td>
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<td>2016 True North Goals</td>
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<td>Hospital Webpage</td>
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<td>2013 Annual Report</td>
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<td>2015 Annual Report</td>
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</table>

*Pseudonym
**Observational instrument.** An observational instrument was used to collect direct observations during fieldwork. The instrument was designed to capture field notes of observations deemed to be noteworthy. The instrument design was adapted from the Cornell Note-taking System (Cornell University, 2007) and suggestions for writing field notes (Emerson, Fretz, & Shaw, 2011; Munhall, 2003; Patton, 2002). Refer to Appendix A for instrument.

**Case Interviews**

Interviews are considered one of the most significant sources of case study evidence (Yin, 2014). In this study, interviews with cases were conducted to provide the perspective of the clinical nurse. The nurse’s perspective offered an opportunity to discover multiple factors which contribute to publication by clinical nurses in Magnet hospitals. Guidelines for preparing and conducting semi-structured interviews were used (Doody & Noonan, 2013; Jacob and Furgerson, 2012).

**Semi-structured interviewing.** For this study, a qualitative approach using semi-structured face-to-face interviewing was used to collect primary interview data. Each case was asked to review their publication works prior to the interview. To facilitate the interview process, cases were asked to write reflection notes prior to the interview on what factors supported them in publishing each scholarly article. An audio-taped interview lasting approximately one hour was conducted with each case in their place of employment. The interviews took place in conference and office room spaces to allow for privacy and confidentiality.

**Interview instrument.** The pilot study conducted by Tyndall and Caswell (in press) informed the development of the interview instrument (see Appendix B). The pilot was also helpful in building researcher confidence and skill development in qualitative inquiry through
interviews. In particular, interviewing of cases helped in the refining of questioning skills and the restructuring of interview questions for the current dissertation study.

**Documentation**

There can be multiple sources of data through documentation of evidence pertaining to the phenomenon of interest. Data collection of documents can occur from a variety of sources including e-mails, written reports, and administrative documents (Yin, 2014). In this study, documents that could confirm or negate support of publication by clinical nurses were requested. Specifically, documents that could provide evidence pertaining to resources to write, opportunities to write, opportunities to disseminate writing, and recognition for writing were solicited. These documents offered “background and context, additional questions to be asked, supplementary data, a means of tracking change and development, and verification of findings from other data sources” (Bowen, 2009, p. 30-31).

Documents were requested from hospital representatives and reviewed prior to fieldwork. Documents consisted of policies and procedures related to clinical advancement programs and annual reports. Refer to Table 5 for a complete list of documents reviewed. Content within documents needing clarification was indicated by researcher markings. Areas of clarification were pursued from key informants during fieldwork.

**Documentation instrument.** A documentation instrument was used to collect written documents prior to fieldwork. Documents were also collected during fieldwork. The tool design was developed using key elements for evaluating documents (Bowen, 2009). Refer to Appendix C for instrument.

**Data Analysis**

Multiple content reviewers were used to analyze the data. Consistent with Yin’s methodology, the study incorporated data triangulated from four sources of evidence: 1)
physical artifacts (scholarly publications), 2) direct observations (field notes), 3) case interviews, and 4) documentation (documents as evidence of support/resources for publishing). Field note analysis was used to examine direct observations collected during fieldwork. Case analysis considered interpretations from review of publications and interviews with individual cases. Document analysis was used to study the documentation evidence collected from the Magnet® hospital selected for the study. Convergent evidence provided empirically-found patterns for each single-case. All single cases were then analyzed using pattern matching for cross-case analysis.

Field Note Analysis

Field notes were collected using an observational tool (Appendix A). Analysis of field notes began during fieldwork and continued through the data collection period. Preliminary analysis was recorded as interpretations in the Summary section of the observational tool. Data recorded in the Summary section was analyzed using both content analysis (Bowen, 2009; Miller & Alvarado, 2005) and holistic and pattern coding methods (Saldaña, 2013). Holistic and pattern coding methods assisted with identifying a coding scheme, main categories, and patterns for each individual case. Field note analysis contributed to empirically-found patterns for each case.

Case Analysis

Publications by each case were reviewed and used to guide interview questions. Interviews with each case were audio-recorded. Each case interview was transcribed verbatim by the PI into a Microsoft© Word document. Initially, memos were written in the margins of the transcripts to codify topics. Next, holistic and pattern coding was used to identify a coding
scheme, main categories, and patterns for each individual case (Saldaña, 2013). Case analysis contributed to empirically-found patterns for each case.

**Document Analysis**

Documents can be particularly helpful in understanding social practices within a setting. Documents were collected from the Magnet® hospital and were used to establish meaning and contribution to publication by clinical nurses. Documents were analyzed using content analysis (Bowen, 2009; Miller & Alvarado, 2005) and holistic and pattern coding methods (Saldaña, 2013). Document analysis contributed to empirically-found patterns for each case.

**Pattern Matching**

*Pattern matching*, is recognized as one of the most desirable analytic techniques for case study analysis (Yin, 2014). Pattern matching involves the paralleling of theoretical-based patterns with similar empirical-found patterns. However, there is little guidance in the literature that provides instructions on implementing the technique. To compensate for this gap in knowledge, Almutairi, Gardner, and McCarthy (2014) used Yin’s description of pattern-matching to develop a practical approach for use of the technique in case study research. The researchers investigated the impact of cultural diversity on the quality and safety of patient care and developed a graphic depiction for the pattern-matching process they used in their study. This graphic depiction was adapted for use in this study (See Figure 2 and 3).

**Single-case analysis.** Data were analyzed using convergence of multiple sources of evidence: physical artifacts, direct observations, case interviews, and documentation. Convergent evidence provided empirically-found patterns for each single-case. Figure 2 depicts the process for single-case study analysis and pattern-matching.
**Cross-case analysis.** Data were analyzed using convergence of evidence from each case. Cross-case analysis occurred from data triangulation of all five cases. Data triangulation used patterns found from analysis of each individual case. Then a cross-case analysis was performed to match patterns across the cases. Figure 3 depicts the process for cross-case study analysis and pattern-matching.
Figure 2: Pattern-matching process for single-case analysis

Adapted from: Almutairi, Gardner, and McCarthy (2014)
Figure 3: Pattern-matching process for cross-case analysis

Multiple-Case Study

Case Study 1
Case Study 2
Case Study 3
Case Study 4
Case Study 5

Empirically-found patterns

Theoretical Propositions

Pattern of the findings does not match the pattern of proposition

Pattern of the findings matches the pattern of proposition

IF

The finding supports the proposition, confirming the theory

Alternative explanation required

Adapted from: Almutairi, Gardner, and McCarthy (2014)
Ethical Considerations

With great privilege, this doctoral student accepted the responsibility to ensure that this study was conducted ethically. To prepare for this responsibility, doctoral studies have consisted of coursework related to conducting ethical research, protection of human subjects, and scholarship. This coursework provided guidance to minimize threats to research integrity. Two strategies that were employed to minimize threats to research integrity included 1) protection of human subjects and 2) minimizing researcher bias.

Protection of Human Subjects

The study was submitted for review and approval by the East Carolina University (ECU) & Medical Center Institutional Review Board (IRB). Upon IRB approval, each case received a copy of the informed consent to review prior to interview. A copy of the informed consent was e-mailed to each case 1-2 weeks prior to interview for their review. Before the scheduled interview, the consent was reviewed with the case present. At this time, clarifications and questions were addressed. The informed consent included an explanation of “minimal risks”. In addition, cases were informed that their participation, or lack of participation, would not prejudice their future relations with ECU College of Nursing. Cases selected pseudonyms to provide anonymity. Recordings and documents pertaining to the study were kept in a locked area to protect privacy and confidentiality and then erased/shredded per university policies and procedures.

Minimizing Researcher Bias

One method to minimize researcher bias is the use of outside consultation (Yin, 2014). The use of outside consultation can serve as an interface between the researcher and the data collected. There were several opportunities for the doctoral student to engage in outside
consultation. Initially, consultation with the dissertation chair was used to select the Magnet hospital setting to conduct the study. Consultation with the dissertation chair minimized any researcher bias that could have been influenced by personal preference or interest. Additionally, the dissertation committee was consulted during and after data collection. The dissertation committee was asked to offer feedback on preliminary findings and make suggestions for ongoing data collection.

**Minimizing Threats to Research Integrity**

The researcher kept a journal with personal reflections to record thoughts, feelings, and insights before, during, and after completing data collection. The researcher’s preconceptions and potential biases were bracketed in these personal reflections (Tufford & Newman, 2012). Threats to research integrity were minimized by using tactics specifically recommended for case study research (Yin, 2015). These tactics described below were aimed at enhancing construct validity and reliability.

**Construct Validity**

Construct validity involves the legitimacy of inferences posited from data collection to the theoretical constructs (Polit & Beck, 2012). In this study, construct validity was enhanced by using the tactic of collecting and triangulating multiple sources of data (Yin, 2014). Multiple sources of data were collected and triangulated from direct observations, case interviews, and documentation. Triangulation of multiple data sources were used to increase the dependability of the findings (Krefting, 1991; Shenton, 2004). Triangulation of data sources included the analysis of observations made during fieldwork within the setting, face-to-face semi-structured interviews, and institutional documents. Developing convergent evidence from triangulation of data strengthened the construct validity (Yin, 2014).
Reliability

Minimizing errors can enhance reliability in case study research (Yin, 2014). Errors were minimized by the use of a case study protocol. The protocol included a step-by-step account of sources collected. Sources were adequately cited or footnoted. Citations and footnotes provided a chain of evidence that can be accurately traced by an external observer. Evidence was organized using a case study database. This database contains a hard copy of evidence (printed and maintained in a case binder) and an electronic copy. The case study database contains evidence from physical artifacts, direct observations, case interviews, and documentation.

Summary

This chapter provides an overview of a focused ethnographic, multiple-case study research design to explore the cognitive, behavioral, and environmental factors that facilitate publication by clinical nurses in Magnet hospitals. Cases for study were selected using a screening process to determine the best suited cases for inquiry of the phenomenon. Data collected was triangulated from four sources of evidence: 1) physical artifacts, 2) direct observations, 3) case interviews, and 4) documentation. Field note, case, and document analysis were performed for the multiple sources of data. Convergent evidence from data provided empirically-found patterns for both single-case analysis and multiple-case analysis using the analytic technique of pattern matching. Single-case and multiple-case analysis are explained further in Chapter 4.
Chapter 4: Findings

The purpose of this study was to examine the cognitive, behavioral, and environmental factors that facilitate peer-reviewed publication by clinical nurses in Magnet hospitals. A focused ethnographic, multiple-case study design was used to explore the research question: *What cognitive, behavioral, and environmental factors facilitate peer-reviewed publication by clinical nurses in Magnet hospitals?* In addition, propositions were posited using a theoretical framework based on Social Cognitive Theory and the concept of “human agency”. This chapter will present findings to answer the stated research question and provide interpretations to propositions posited for studying clinical nurses who publish in peer-reviewed journals.

**Coding Scheme**

Consistent with Yin’s methodology, data were analyzed from triangulation of four sources of evidence: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), 3) case interviews, and 4) documentation (documents evidencing support/resources for publishing). These four sources of evidence provided input to begin the development of a coding scheme. Initially, memos were written in the margins of the field notes, transcripts of case interviews, and documents to codify topics. Next, holistic and pattern coding were used to identify a coding scheme, main categories, and patterns for each individual case (Saldaña, 2013).

**First Cycle Coding**

During first cycle coding, all data were reviewed using holistic coding. Holistic coding captured the essence of the cognitive, behavioral, and environmental factors facilitating publication by clinical nurses. First cycle coding resulted in 19 holistic codes. Next, these 19 holistic codes were organized into three categories: 1) cognitive factors, 2) behavioral factors, and 3) environmental factors.
Second Cycle Coding

During second cycle coding, all data sources were reviewed again using pattern coding to group the existing holistic codes into larger sets. Decisions were made about the grouping of the 19 holistic codes into categories based upon similarities. Some decisions resulted in the deletion of certain holistic codes. For example, two holistic codes “peer” and “presentations” were deleted and grouped with holistic codes with similar meanings. Other decisions resulted in the grouping of holistic codes to form pattern codes. For example, holistic codes “sharing of knowledge” and “responsibility” were combined into one pattern code. This pattern code was identified as Professional Perspective. Second cycle coding resulted in seven pattern codes (Table 6). These seven pattern codes were used to identify empirical patterns within the data of each individual case.

Credibility of Coding

The coding scheme was reviewed by two members of the dissertation committee to strengthen credibility of the study. After the student researcher solidified the coding scheme, two case transcripts were randomly selected. Data were coded by all three researchers (student researcher and two members of dissertation committee) separately and then collaboratively. Initial inter-rater reliability was 86% (71/83 variances). Variances in coding were discussed for agreement to achieve an inter-rater reliability of 96% (80/83 variances).
<table>
<thead>
<tr>
<th>Pattern Code</th>
<th>Factor</th>
<th>Definition / Example of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>Cognitive</td>
<td>An individual’s capacity to view things in their true relations or relative importance</td>
</tr>
<tr>
<td>Perspective</td>
<td></td>
<td>“I really reflect on the legacy that I’m leaving behind. So, how do I give back in a meaningful way? For me, how I’ve defined that right now is publishing…it’s one way I give back to nursing” (Kennedy)</td>
</tr>
<tr>
<td>Writing Knowledge</td>
<td>Cognitive</td>
<td>Facts, information, or skills an individual gains through experience or education to enhance one’s writing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I was a reviewer for a while for two separate journals” (Rose)</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>Cognitive</td>
<td>An inner desire to publish by accepting opportunities and new challenges without relying upon external pressures or desire for rewards</td>
</tr>
<tr>
<td>Motivation</td>
<td></td>
<td>“I have zero time, I [write for publication] on the side” (Ally)</td>
</tr>
<tr>
<td>Writing</td>
<td>Behavioral</td>
<td>Strategies an individual used to improve success of publication</td>
</tr>
<tr>
<td>Strategies</td>
<td></td>
<td>“We [writing group] had a set time to meet…she [University faculty] could make some of our meetings…as we received edits from the editor, she would say ‘this is how we need to tweak it’ (Daisy)</td>
</tr>
<tr>
<td>Taking Initiative</td>
<td>Behavioral</td>
<td>Actions an individual takes to facilitate writing for publication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I’ve definitely had an opportunity to get to know the editorial staff for a few [journals]… I will reach out to the editor and say ‘hey, I’m thinking about this article. Do you think you’d be interested in it?’ (Kennedy)</td>
</tr>
<tr>
<td>Pattern Code</td>
<td>Factor</td>
<td>Definition / Example of Code</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Culture</td>
<td>Environmental</td>
<td>The underlying values, beliefs, and principles that serve as a foundation for nursing practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I think when you reach a certain level it’s [publication] an expectation, but it’s not a pressured expectation. So, it’s not like your tenure is based on it” (Daisy)</td>
</tr>
<tr>
<td>Resources</td>
<td>Environmental</td>
<td>Source of supply or support in order to write for publication</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“So, one of my peers was interested in publishing, I…felt it was over my head but she really helped me walk through it and [it] gave me the confidence when it was published” (Morgan)</td>
</tr>
</tbody>
</table>
Case Analysis

A summary of the patterns presented in Table 6 was provided to each case to validate researcher interpretation. After validation of patterns from all five cases, the researcher began case analysis. Single-case analysis resulted from triangulation of four sources of evidence: physical artifacts, direct observations, case interviews, and documentation. These four sources were triangulated to uncover empirically-found patterns within each case. In the next sections, patterns are presented for each of the five cases (single-case analysis) followed by patterns from a cross-case synthesis (multiple-case analysis).

To protect the identity of the individual cases, a summary of the case demographics is provided. All cases were White females and ranged in age from 42 to 60 years ($m = 52.2$). Two cases had completed doctoral studies and three cases held a master’s degree in nursing. Cases had an average of 31.2 years of nursing experience. Three cases were advanced practice registered nurses (APRN) and two cases were in leadership roles within the organization. Number of peer-reviewed publications ranged from two to 20 ($m = 7$). Of the 35 peer-reviewed articles written by the five cases, nine (26%) were research-based articles and 26 (74%) were non-research.

Single-Case Analysis: Morgan Interview

The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by Morgan. Cognitive factors were derived from three pattern codes: Professional Perspective, Writing Knowledge, and Intrinsic Motivation. Behavioral factors were derived from two pattern codes: Writing Strategies and Taking Initiative. Environmental factors were derived from two pattern codes: Culture and Resources.
Professional Perspective. Within this pattern code, Morgan validated the importance of sharing nursing knowledge through peer-reviewed publication. She shared how this perspective influences her daily work practices. She stated, “every time I’m in a quality improvement meeting I’m thinking ‘we’ve got to publish’. She elaborated on the amount of work involved in conducting a research study and the importance of sharing those results.

Writing Knowledge. Writing knowledge can be reflected from Morgan’s self-awareness of her writing abilities and writing comfort. Morgan recognized manuscript writing did not come naturally. She shared how an experience in graduate school contributed to her knowledge about writing for publication. While in graduate school she was approached by one of her work peers about writing an article together. Even though she felt publication “was over [her] head”, she took the opportunity. She noted the experience gave her confidence when it was published. Morgan reported no formal training on writing for publication, but attributed writing papers in graduate school as a significant contributor to her writing development in general.

Intrinsic Motivation. Morgan noted although financial incentive “would always be nice…I think it’s more intrinsic. It’s something you want to accomplish.” Morgan’s inner desire to publish was evident by her behavior to take opportunities to publish. Taking opportunities led her to publish her first article resulting in increased confidence. Because of this confidence, she was motivated to take action and disseminate findings from research in which she was involved.

Morgan was ambivalent about continuing to write for publication. When asked if she planned to continue efforts to publish, she laughed and stated “no, because it’s terribly painful.” She spoke about the time commitment required to publish her most recent article. “This last one has dragged on for two years. In the beginning I was really enthusiastic…but it just went on and on”. Even though Morgan did not seem to be interested in future publications, she admitted she
would probably write for publication again later in the interview. She made reference to a new group project upon which she was working. She acknowledged she would likely mentor the members of the new group who have not published.

**Writing Strategies.** Morgan credited collaborative writing as being the main facilitator to her success in writing for publication. She felt writing for publication would be too daunting to take on by herself. She had writing partners for each of her peer-reviewed publications. She added sharing the work was not as intimidating when compared to solo writing. Morgan stated working with a multidisciplinary group added different perspectives to the article.

**Taking Initiative.** Within this pattern code, Morgan demonstrated initiative by seeking out a university statistician to which she was introduced by a peer. Her experience collaborating with the statistician was productive. “He was great to work with…he’ll run all the numbers for you.” This collegial relationship flourished and has led to an invitation for her group to present their research project at an international statistics conference.

**Culture.** The pattern code, *Culture* was defined as the underlying values, beliefs, and principles that serve as a foundation for nursing practice. Within this pattern code, Morgan expressed that the organizational culture encouraged the sharing of nursing knowledge with other nurses. Morgan shared the organization hosts an annual research event to raise awareness and get clinical nurses more involved with nursing research. She elaborated this event serves as a “springboard” for clinical nurses to share their work through poster presentations. Morgan shared there were 50 posters by clinical nurses at the last event and “you could tell they were so proud”. She added after clinical nurses complete a poster presentation, “there is a gentle nudge to get them to publish”.

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Resources. Resources was defined as a source of supply or support in order to write for publication. For Morgan, both lack of time to write and lack of training became barriers to writing for publication. She described the barrier of time by stating “our job [CNS] is just too busy…all day seeing patients, meetings, and things like that…we have to do it on our own time.” Writing on her own time meant Morgan “binge” writes to meet timelines. She mentioned writing a first draft of her most recent article over Christmas vacation to meet a timeline. She also mentioned not transforming an academic paper she wrote in graduate school into a peer-reviewed publication. “I should have tried to publish that…but I was busy”. Morgan reported no formal training on writing for publication. She learned how to write for publication by co-authoring with a peer.

Single-Case Analysis: Daisy Interview

The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by Daisy. Cognitive factors were derived from three pattern codes: Professional Perspective, Writing Knowledge, and Intrinsic Motivation. Behavioral factors were derived from two pattern codes: Writing Strategies and Taking Initiative. Environmental factors were derived from two pattern codes: Culture and Resources.

Professional Perspective. Within this pattern code, Daisy expressed the importance of sharing her nursing knowledge with other nurses. Daisy recognized she had nursing knowledge to share that was specific to her practice area to share. Reflecting on her first article, she noted she brought the pre- and post- perspective to the article. She identified “a push from [a] mentor” was the main facilitator in her publication efforts. This “push outside of [her] box” from a mentor changed her perspective. She elaborated she is a “behind the scenes kind of person” and
the fact that her mentor encouraged her gave her the confidence to recognize “[she] had the knowledge and [she] could do it”. She noted publishing has given her “a whole new appreciation” for the process. This new appreciation changed her perspective to motivate her to “encourage other staff…and [she] is willing to read [their work].”

**Writing Knowledge.** Writing knowledge can be reflected from Daisy’s self-awareness of her writing abilities and writing comfort. She expressed she has felt comfortable with writing since high school. Daisy reported no formal training on writing for publication, but alluded to factors which contributed to her writing knowledge. These factors included reading articles concerning writing for publication and collaborative writing. Daisy elaborated collaborative writing helped her learn about the process of writing for publication. She mentioned she collaborated with university faculty on two articles. This faculty person helped to mentor them on successful publication by attending some of their writing meetings, giving them advice on manuscript edits, and responding to reviewer comments.

**Intrinsic Motivation.** Daisy shared that her mentor approached her to be a lead author on a manuscript for a specialty topic. She initially rejected the idea because “[at] that point in my life [publication] wasn’t a priority for me.” Daisy noted how her mentor kept encouraging her to write the manuscript and “so through coaching she got me to do it”. Daisy admitted she probably would not have written this article if not for coaching by her mentor. Upon reflection, she was “very glad” she did it. She co-authored with her mentor; however, she was lead author.

Daisy was ambivalent about future writing for publication efforts. She spoke of events going on in her life (i.e. building a house) and felt the time commitment for manuscript development was overwhelming. She concluded by saying, “I won’t say I won’t…I might”. Despite the ambivalence, she noted there was a self-satisfaction in “[seeing] it in print”. But
brought the conversation quickly back to a lack of motivation to publish in the future. “Would it be a goal I would set for myself? Probably not…not without some motivation from others.”

**Writing Strategies.** Daisy credited collaborative writing on her first two articles as an effective writing strategy. The writing group had set times to meet where they discussed the literature and explored writing topics. Collaborative writing kept her on task and forced her to “pull [her] weight as a team member”. To pull her weight, she gave herself deadlines and set aside time on Saturday mornings at home. Writing at home gave her “quiet time” and a place where she couldn’t be interrupted. She added, “You’ve got to be willing to set it as a priority, take the time.”

**Taking Initiative.** Within this pattern code, Daisy demonstrated initiative by taking an opportunity to join a writing group when she was approached by a mentor. After she was approached, she took initiative by seeking out other group members. “We put it out there offering people the opportunity…anyone that had an interest in publishing”. Taking initiative resulted in her first publication. When members of the same group were ready to write a second article, Daisy again approached other potential group members to solicit interest in publication. This initiative resulting in a second publication three years later.

**Culture.** Within this pattern code, Daisy expressed the organizational culture encouraged sharing of knowledge with other nurses. Daisy elaborated by discussing the organization’s internal research day where clinical nurses present their work. “It’s a way to grow our own from within.” “You are definitely expected to share your nursing knowledge”. She added nurses are expected to share their knowledge “whether it is through publication, poster presentation, or…podium presentation.” She mentioned “we do have a clinical ladder, and there
is recognition.” Even though Daisy mentioned the recognition, she quickly interjected, “what motivated me to publish was a push from [a mentor].

**Resources.** For Daisy, both lack of time to write and lack of training became barriers to writing for publication. In regards to time, she acknowledged her writing group met during work time. However, “a lot of us are salaried, so even though it was during work time, our day may have been extended.” She added it “is nice to your name in print”, but the time commitment to writing a manuscript is a barrier for her. Thus, to write for publication she set aside time to write at home on Saturday mornings. Daisy reported no formal training on the topic of writing for publication. Additional resources she accessed to facilitate her writing included reading articles on the topic of writing for publication. She also noted she learned about APA formatting during her graduate studies.

**Single-Case Analysis: Kennedy Interview**

The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by Kennedy. Cognitive factors were derived from three pattern codes: **Professional Perspective**, **Writing Knowledge**, and **Intrinsic Motivation**. Behavioral factors were derived from two pattern codes: **Writing Strategies** and **Taking Initiative**. Environmental factors were derived from two pattern codes: **Culture** and **Resources**.

**Professional Perspective.** Within this pattern code, Kennedy expressed the importance of sharing nursing knowledge with other nurses. This perspective was influenced by completion of her doctorate in nursing. “If I didn’t take anything away from my doctorate program, it’s that we have to clearly articulate our impact on care.” One way Kennedy articulates her impact on care is through publishing herself and through mentoring of other clinical nurses with their
efforts to publish. “I really reflect on the legacy that I’m leaving behind. So, how do I give back in a meaningful way? For me, how I’ve defined that is publishing.”

She coached new authors on format and content related to their writing on poster abstracts, poster presentations, and publications. She was sure to mentor clinical nurses at their specific writing level and provided a place where their vulnerability was not exploited. She emphasized how important it was to “meet each of them where they [were]” and give them a “safe place” to share their writing.

**Writing Knowledge.** Writing knowledge can be reflected from Kennedy’s self-awareness of her writing abilities and writing comfort. Kennedy recognized she was “very comfortable in [her] skin presenting.” She admitted “I am not a natural writer”, but alluded to factors which contributed to her writing knowledge. These factors included knowledge gained through the process of writing, submitting, and revising a manuscript. She noted she “self-taught” herself about writing for publication through “trial and error”. She reported no formal training or classes on writing for publication. She pointed out completing her doctoral program increased her understanding of the value of peer-reviewed publication and recognized that nurses should “clearly articulate our impact on care”.

**Intrinsic Motivation.** Daisy assuredly noted she was “definitely driven, someone who is always trying to seek more knowledge and grow myself”. She elaborated publishing was “personally important to me”. She routinely makes time to write at home and even finds opportune moments during her child’s soccer practice to read articles and begin organizing her thoughts. Kennedy’s motivation to publish influenced her interactions with her co-authors. She routinely makes contact to keep them on target. “I’m going to hound [them] to death until we get that [manuscript] submitted.”
Writing Strategies. Daisy identified using strategies such as feedback from others and collaborating with other writers. She obtained feedback by letting her peers read her work. She pointed out that she selects individuals to provide feedback who can give her a “safe place” where she is not “going to be ridiculed.” She reflected on past experiences where peers were critical and left her feeling vulnerable about her writing.

Kennedy used collaboration with other writers as a writing strategy. She noted she has partnered with university faculty, colleagues in the organization, and nursing students to write for publication. “I’m always partnering up. You always make time for that.” Kennedy especially makes time for students whom she mentored during their academic programs. She has offered to mentor students that might want to publish their academic papers. “No matter what background it is in, I can share what has been successful for me or what my thoughts are on this, but I’m willing to partner with anyone if that’s what they want to do.”

Taking Initiative. Within this pattern code, Kennedy took the initiative to get to know editorial staff for journals. She reached out to editors to inquire about interest in topics she was considering for publication. She admitted not all her manuscripts have been accepted. Recognizing rejection as part of the process, she took advice she once received, “don’t give up”, and submitted to another journal. Kennedy also described taking advantages of opportunities. “I don’t turn down opportunities that come my way”. She kept abreast of topics of interest in her practice area so she could reach out and say “yes, I’d like that opportunity.” She has published 14 articles in her practice specialty journal.

Culture. Kennedy elaborated on the culture of Magnet empowers nurses to share their knowledge. She brought attention to the shared governance model and even looked at her name badge to share all the components of Magnet. She noted being a Magnet center of excellence
contributed to an inquisitive environment. Kennedy felt this inquisitive environment and application of best practices supported sharing of knowledge through publication.

Kennedy also described how the Magnet culture encourages excellence in nursing. “It really supports that established practice is not best practice”. She added the culture encouraged reviewing the literature and nurses basing their practice on sound evidence. “We definitely strive to be national leaders in healthcare…and in some of our clinical practices we are national leaders in healthcare.”

Resources. For Kennedy, she dedicated time to write to meet her goals. She noted she did not write at work and was adamant about writing at home. “I don’t want anyone to ever think that I sit in my office and just write articles, so I really separate work”. She elaborated about her writing routine and how she writes early on weekend mornings while her family sleeps. “I just carve the time into my weekend, but not to impact my home-life balance”. To promote home-life balance she noted only writing for a couple of hours on weekend mornings and when she has leisure time. She mentioned one opportunity of leisure being soccer practice. During her child’s soccer practice, she prepares by reading articles. “I go to soccer practices, and that’s an hour and a half that it’s not really anything I’m watching on the field, but I can go through those articles and start organizing my thoughts”.

Single-Case Analysis: Rose Interview

The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by Rose. Cognitive factors were derived from three pattern codes: Professional Perspective, Writing Knowledge, and Intrinsic Motivation. Behavioral factors were derived from two pattern codes:
Writing Strategies and Taking Initiative. Environmental factors were derived from two pattern codes: Culture and Resources.

Professional Perspective. Within this pattern code, Rose expressed the importance of sharing nursing knowledge with other nurses. One way Rose shared knowledge was by publishing “to fill a hole or meet a specific need.” Her solo articles have been a direct result of her clinical experience and recognizing a gap in the literature. She reflected on a clinical issue she experienced first-hand and wanted to make a difference in practice. “The impetus behind that article was real close to my heart.” She emphasized this particular article had “purpose behind it”. She pointed out that she only had a “handful” of publications when compared to other authors. However, she felt satisfied with her own publications written for the purpose of “what’s really needed and what would be of value.”

She described how doctoral studies have changed her perspective on writing for publication. “I wasn’t thinking data before the doctoral program…but now it’s qualitative, quantitative, measurement, what’s out there, how can we fill a hole. Yeah, I think there’s a different perspective.” She adds she has always had a passion to write, but completing her doctoral program increased her “sense of responsibility.”

Writing Knowledge. Writing knowledge can be reflected from Rose’s self-awareness of her writing abilities and writing comfort. Rose reported no formal training on writing for publication, but noted she had a “natural tendency toward writing.” Rose is very comfortable with her writing and noted she had been a gifted writer since high school.

In addition to being a natural writer, achieving higher education has further developed her writing knowledge. During her graduate studies, she was exposed to collegial relationships that provided opportunities which developed her as a writer. She called attention to being invited to
become a manuscript reviewer by the Dean of her graduate program. As a reviewer of manuscripts, she was exposed to knowledge pertaining to expectations for journals. “It put me in the perspective of the publisher’s chair, the editor’s chair, what [manuscripts] do we select.” Her writing knowledge was also influenced by her doctoral studies. She elaborated that doctoral studies helped her with evaluating the quality of articles. In particular, “how strong is this, how weak is this, where are the correlates, is this of value, is this a fluff?”

Intrinsic Motivation. Rose noted she tries to publish every couple of years. She is motivated by her love of writing. “I do need to write, I’m always writing…I love it. It’s horrible, but I love it (laughter)”. She spoke of her new goal to publish more as a second author through her mentoring of others. She is interested in seeking partnerships on clinical projects where her writing skills may be of value. She added her main facilitator of writing for publication was communicating something both she and others valued.

Writing Strategies. Rose credited following author guidelines and solo writing as strategies contributing to her writing for publication. She noted two of her articles were written after editors of journals approached her. She stated, “I really tried to be sure I understood the intent of what was being asked”.

Rose preferred to write alone. “I’d rather write by myself. I meet my own deadline.” During the interview, she reflected on a previous writing partnership where the manuscript did not get accepted. Unable to agree upon revisions, the manuscript did not get resubmitted. She did recently publish a research article that was a collaboration between two other authors. One author was a faculty member at a local university. This article has been the only collaborative writing for publication, but noted working with that group of authors was “a natural fit.” She
elaborated to say, “I think, as always, it really depends on the players.” She reiterated again, “So, I’d much rather write by myself.”

**Taking Initiative.** Within this pattern code, Rose took initiative to change nursing practice by publishing clinical articles. Rose shared a practice experience where she witnessed nurses struggling with how to respond to patients in spiritual distress. Recognizing that nurses needed guidance in the management of spiritual distress, she wrote a clinical articles to address the issue. Rose also talked about her work with the (practice specialty) team. She took initiative to collaborate because it was a clinical interest of hers. Based upon this clinical interest, she wrote an article to address a gap in the literature. She presented this work to her leadership team and the information was later used to teach clinical guidelines to new graduates within the organization.

**Culture.** Within this pattern code, Rose expressed that the organizational culture supported the sharing of nursing knowledge with other nurses. She elaborated on the structures in place such as the Nursing Research Council, CNS mentors, and the Magnet Showcase event within the organization. All of these structures encourage sharing of knowledge with other nurses. In particular, the Magnet Showcase event is aimed to get clinical nurses talking about their practice and EBP/research projects. She added, “[talking about your practice] is the first step in putting your ideas into some organized format.”

She added the culture celebrated people for their accomplishments. She noted the organization is currently working with a nursing profile system which will provide a centralized location of all accomplishments. She felt the system would assist with identifying accomplishments in a more consistent manner.


**Resources.** When asked about resources within the organization, Rose pointed out “I think there are a lot, but none of them particularly impacted me”. She reported writing for publication efforts are done at home on her own time. She reflected on the possibility of being able to find more time to write for publication since finishing her doctoral program. She added writing at home will become easier since “one child is launched, the other one is on his way. So life is not as intervening.”

**Single-Case Analysis: Ally Interview**

The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by Ally. Cognitive factors were derived from three pattern codes: *Professional Perspective, Writing Knowledge,* and *Intrinsic Motivation.* Behavioral factors were derived from two pattern codes: *Writing Strategies* and *Taking Initiative.* Environmental factors were derived from two pattern codes: *Culture* and *Resources.*

**Professional Perspective.** Within this pattern code, Ally expressed the importance of sharing nursing knowledge with other nurses. One way Ally shared her nursing knowledge was by “getting…information out there to help other people”. She elaborated by sharing about her publication of an article on Magnet designation for hospital systems due to an overwhelming need for the knowledge. While presenting at national conferences, she realized that other nurse leaders needed knowledge about system designation. She wrote an article in response to “massive calls” and questions as a way to provide “an article to refer them to.”

**Writing Knowledge.** Writing knowledge can be reflected from Ally’s self-awareness of her writing abilities and writing comfort. Ally conceded that manuscript writing did not come naturally, but alluded to factors which contributed to her writing knowledge. These factors were
writing papers in her doctorate studies and working with faculty mentors to transform her papers into manuscripts. Through these faculty mentors, she enhanced her knowledge about writing for publication. Ally reported no formal training on writing for publication.

**Intrinsic Motivation.** Ally noted she has “a passion to help people.” She described having knowledge that could not be found in the literature. “Really, that is my impetus…we need to share this with other [nurses].” She expressed a motivation to share her nursing knowledge. She admitted she “doesn’t have a passion to write”; however, her passion to help people “is so strong…it has helped [her] to publish.” She elaborated on how this passion “gets [her] into a lot of trouble” because she finds it difficult to turn others away that need her help.

**Writing Strategies.** Ally found that first determining the targeted journal facilitated her writing for publication. She described strategies which included reaching out to editors to see if they were interested in certain topics. She also discussed collaborative writing as a positive strategy. She first collaborative with faculty mentors in her doctoral studies. Collaborative writing with her faculty mentors was helpful because they provided a “very hands-on, supportive” approach. This approach included listening, making recommendations, and editing her drafts. Ally published her doctoral work after completing her program. She add, “I would not be published if it wasn’t for [my faculty mentors].”

She shared she blocks out time to write at home, but admitted this was not always a successful strategy due to family commitments. Her blocked writing times were mostly in the evening when she was “zapped” from the activities of the day. She admitted writing a manuscript “takes [her] a really long time…a really long time…embarrassing long”.

**Taking Initiative.** Within this pattern code, Ally demonstrated initiative by reaching out to editors. Reaching out to editors sometimes triggered her to “hit the panic button” when they
would show interest and give her “timelines that [were] impossible.” She has also demonstrated initiative by seeking out opportunities to publish with her faculty mentors from her doctoral studies. She has two recent publications she co-authored with one of her faculty mentors.

**Culture.** Within this pattern code, Ally expressed that the organizational culture encouraged the sharing of nursing knowledge with other nurses. Sharing of nursing knowledge was expressed through descriptions of the organization supporting nursing excellence. She proceeded to discuss how organization is “committed to our patients and our employees”. She noted nursing leadership was in “support of all, and not just to the nurses here.” She elaborated the culture valued the “greater purpose” while encouraging and celebrating professional advancement.

Ally discussed potential differences in culture between the clinical setting and the academic setting. She felt if clinical settings supported publications (i.e. allotted dedicated time to publish) similar to academia then writing for publication efforts would increase. She elaborated, “We are more clinically outcomes focused than scholarly.”

**Resources.** For Ally, time was a barrier. She noted she has no time to write at work because her job responsibilities are focused upon other priorities. She elaborated that publications do not have any weight on her performance evaluation. As a director her performance measures “tied to the organizational objectives… to the matrix, patient satisfaction, nurse engagement, [and] quality indicators.” She added publication can be reflected in her performance evaluation, “but it doesn’t change the measure for me.” Not having time at work to write nor expectations to write, she wrote at home to meet her publication goals.
The four propositions were either supported or refuted based upon pattern matching between the propositions and empirical-found patterns. The following sections provide the results from this pattern matching.

**Multiple-Case Analysis: Five Case Interviews**

Multiple-case analysis occurred from cross-case synthesis of the five cases. Cross-case synthesis involved pattern matching of empirically-found patterns. The following sections present the findings related to empirically-found patterns for cognitive, behavioral, and environmental factors facilitating peer-reviewed publication by clinical nurses. Cognitive factors were derived from three pattern codes: *Professional Perspective*, *Writing Knowledge*, and *Intrinsic Motivation*. Behavioral factors were derived from two pattern codes: *Writing Strategies* and *Taking Initiative*. Environmental factors were derived from two pattern codes: *Culture* and *Resources*.

**Professional Perspective.** The pattern code, *Professional Perspective*, was defined as an individual’s capacity to view things in their true relations or relative importance. Within this pattern code, cases expressed the importance of sharing nursing knowledge. Two of the cases described how completing doctoral studies changed their perspective regarding the value of peer-reviewed publication. For these cases, sharing knowledge through publication was viewed as a professional responsibility.

The cases shared their knowledge through a variety of mechanisms. These mechanisms included mentoring others, presenting at conferences, being a resource person to novice writers, and contributing to organizational committees or practice projects. Most significant, to the interest of this study, the cases shared their knowledge through peer-reviewed publication. Notably, 35 articles have been published to date between the five cases. Nine (26%) of the 35
articles were based on research design and 26 (74%) articles were non-research clinical or leadership articles. Three of the cases (Kennedy, Rose, and Ally) were actively writing draft manuscripts during the study.

**Writing Knowledge.** *Writing Knowledge* was defined as facts, information, or skills an individual gains through experience or education to enhance one’s writing. Writing knowledge can be reflected from the cases’ self-awareness of their writing abilities and writing comfort. Only one of the five cases (Rose) identified themselves as being a natural writer. The other four cases (Morgan, Daisy, Kennedy, and Ally) recognized writing did not come naturally, but alluded to factors which contributed to their writing knowledge. These factors included writing papers during graduate/doctorate studies, collaborative writing, and the presence of a mentor. All of the cases affirmed an increase in writing knowledge gained through the process of writing, submitting, and revising a manuscript. It is important to note that knowledge for all of the cases was gained informally. None of the cases reported any formal training on writing for publication.

**Intrinsic Motivation.** Pattern code, *Intrinsic Motivation*, was defined as an inner desire to publish by accepting opportunities and new challenges without relying upon external pressures or desire for rewards. Three of the cases (Morgan, Daisy, and Rose) expressed an external gratification resulting from “seeing your name in print.” However, all of the cases agreed internal gratification was a greater reward for their efforts.

One of the five cases (Kennedy) was highly motivated to publish in peer-reviewed journals. Other cases had varying degrees of intrinsic motivation. Two of the five cases (Morgan and Daisy) initially lacked a desire to publish but changed their minds after encouragement from a peer. Both of these cases expressed ambivalence towards future writing
for publication efforts due to the substantial time commitment required by the process. Another case (Rose) admitted she was not motivated to publish on her own in the future. However, she noted her new goal is to mentor others on writing and be a second author. Finally, one case (Ally) was motivated to write, but found her efforts to block off time for writing were largely unsuccessful.

Writing Strategies. The pattern code, Writing Strategies was defined as strategies an individual used to improve success of publication. Within this pattern code, cases described two main writing strategies: making time to write and collaborative writing. Making time to write was an essential strategy discussed among cases. Three of the cases (Morgan, Daisy, and Kennedy) noted some planning and writing was done on work time. However, all cases expressed they predominately wrote during their personal time. The cases discussed the importance of allotting blocks of time in their schedules and finding that optimal time where distractions were few and creativity was greatest.

Each case was strategic and inventive in managing their time to write. Two of the cases (Daisy and Rose) identified deadlines were helpful in managing time to write. Two cases (Kennedy and Ally) wrote in the early hours of the morning while their families slept and one case (Kennedy) shared she wrote during her child’s soccer practice. Although all of the cases had successfully published, each one of them noted time was and continued to be a major barrier to achieving their goals. Dedication and planning were keys to successful time creation.

Collaborative writing was also noted to be a successful strategy. One case (Morgan) noted collaborative writing was less daunting and not as intimidating as solo writing. She elaborated her writing partners divided up sections to get the writing completed. Another case (Daisy) identified how her writing group had consistent times to meet for draft reviews.
Consistently meeting with the group motivated her to “pull her weight” as a team member. Collaborative writing was essential for three cases (Morgan, Daisy, and Ally) who admitted they might not have successfully published without peer support. Interestingly, one case (Rose) described herself as a natural writer and preferred to write alone. Notably, she had recently published as a result of collaborative writing.

**Taking Initiative.** Pattern code, *Taking Initiative*, was defined as actions an individual takes to facilitate writing for publication. Within this code, cases demonstrated initiative by connecting with others and seizing opportunities. Cases connected with others in a variety of ways. Three of the cases (Kennedy, Rose, and Ally) connected to others by reaching out to editors of targeted journals. Connecting with editors facilitated initial discussions related to topics of interest and continued discussions about the progress of submitted manuscripts. All cases described situations where they connected with other writers by joining writing groups and partnering with university faculty.

The cases also demonstrated initiative by seizing available opportunities. One case (Rose) seized an opportunity to foster collegial relationships. Upon graduating with her master’s degree, the university invited her as a guest lecturer. By accepting this opportunity, she maintained periodic contact with the university’s dean and faculty. This action forged collegial relationships resulting in serving on the board for her specialty area of practice and being a reviewer for critical care journals and texts. Another case (Kennedy) seized opportunities through her preceptor role with students. She offered to mentor students who wrote academic papers for their course requirements in manuscript development. This initiating behavior resulted in co-authorship with two students.
**Culture.** The pattern code, *Culture* was defined as the underlying values, beliefs, and principles that serve as a foundation for nursing practice. All cases affirmed that the organizational culture encouraged the sharing of nursing knowledge with other nurses. The organization encouraged the sharing of knowledge through various methods such as poster presentations, podium presentations, and publications. The cases described organizational activities which encouraged a culture of nursing excellence. Each case was involved in scholarly activities including membership on shared governance councils (*Kennedy, Rose, and Ally*); facilitating EBP/research projects (*Morgan, Daisy, Kennedy, and Rose*); and mentoring other nurses in clinical practice, practice projects, or writing (*Morgan, Daisy, Kennedy, Rose, and Ally*). Four of the cases (*Morgan, Daisy, Rose, and Ally*) validated the organization recognized professional advancement.

**Resources.** *Resources* was defined as a source of supply or support in order to write for publication. Cases used various types of resources to facilitate their publication efforts. However case descriptions emphasized two main resources which were lacking: time to write and education on the topic of writing for publication. All cases wrote for publication predominately during their personal time. Personal time was described as time away from the work environment. All of the cases described heavy work responsibilities which hindered their ability to write at work. Cases had to be strategic and inventive in managing their time to write in order to successfully publish. Although all of the cases had successfully published, each one of them noted that time was and continued to be a major barrier to achieving their goals. Dedication and planning were keys to successful time creation.

All of the cases learned how to write for publication informally. Because the organization did not offer any formal training on writing for publication, other learning
opportunities were explored. In particular, one case read articles on the topic. Four of the five cases (Morgan, Daisy, Kennedy, and Ally) learned about the process of manuscript development and submission through collaborative writing. One case (Rose) described how she taught herself through “trial and error.” Two of the five cases (Morgan and Ally) credited writing papers during their nursing education as helpful in their overall writing development. This overall writing development later contributed to ease with writing for publication. Finally, one case (Rose) identified that her experience as a manuscript reviewer for a journal gave her insight about writing for publication.

**Triangulation of Data**

Interview data from each case was used to examine patterns pertaining to cognitive, behavioral, and environmental factors facilitating publication. Patterns were then compared across all five cases using a pattern matching technique. The following section presents the findings related to pattern matching from the multiple-case analysis (interview data) with other sources of data. Data were analyzed from triangulation of three other sources: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), and 3) documentation (documents evidencing support/resources for publishing). Since all cases were derived from one Magnet designated facility, the next sections will describe the impact of that certification on the studied organization and how the Magnet culture influenced practice standards. In addition, triangulated data will be presented in four areas: 1) resources to write, 2) opportunities to write, 3) opportunities to disseminate knowledge through writing, and 4) recognition for writing.

**Impact of Magnet**

Ethnographic methodology offered a mode of inquiry to explore the cases within the context of their practice setting. Data collected through fieldwork activities provided
opportunities to explore organizational culture. The culture supported underlying values, beliefs, and principles indicative of Magnet recognition. Magnet recognition created a synergy that was palpable throughout the researcher’s fieldwork activities. This synergy was also noted during case interviews through descriptions of scholarly activities in which the cases were involved.

Each case was involved in scholarly activities including membership on shared governance councils (Kennedy, Rose, and Ally); facilitating EBP/research projects (Morgan, Daisy, Kennedy, and Rose); and mentoring other nurses in clinical practice, practice projects, or writing (Morgan, Daisy, Kennedy, Rose, and Ally). These activities, and others, contributed to how the cases viewed their professional practice and responsibilities. Their view of professional practice and responsibilities was not just to support the facility’s Magnet designation status. Rather, the cases were genuinely dedicated to advancing their practice and professional responsibilities.

There was a sense of pride heard by four of the cases (Morgan, Daisy, Kennedy, and Ally) associated with being employed by the organization. One case (Morgan) reflected on her previous employment at another hospital and noted the studied organization “was more supportive [of scholarly activities].” Two cases (Daisy and Ally) described nursing leadership’s commitment to the organization and its employees. Finally, one case (Kennedy) stated, “I feel very valued as a nurse here in this organization…[my] voice is important.”

**Magnet Standards.** The organization achieved its first Magnet designation in 2005. A review of the current Magnet standards revealed organizations must provide evidence of dissemination. Providing evidence of dissemination was found in the expectations for the New Knowledge, Innovations, and Improvements component of Magnet (ANCC, 2014). Specifically, it was discovered that the organization must demonstrate the dissemination of its
“nursing research findings to internal and external audiences” (ANCC, 2014, p. 11).
Organizations are required to provide one example, with supporting evidence, demonstrating the means by which clinical nurses disseminated to external audiences. An interview with the Magnet Program Director revealed the connection of Magnet to the value of knowledge sharing. The director reported, “publications have been a by-product” of the Magnet culture.

**Nursing Practice Model.** Kennedy described one aspect of their nursing culture as striving to be national leaders in healthcare. The researcher obtained the organization’s nursing practice model from an article within the hospital-generated journal. The model promoted the philosophy that patients and families are at the center of care. In addition, patients and families were impacted by the strong connection of evidence-based practice, interdisciplinary relationships and shared governance. The article communicated that nurses have the authority to practice based upon current literature and proven interventions through the use of clinical practice guidelines, policies and procedures. The shared governance model emphasized a systematic approach to ensure that nurses have input at the departmental and organizational levels. The three C’s — caring, competence and celebration — are hardwired into the organization’s nursing culture.

**Resources to Write**

Fieldwork involved the exploration of available resources within the organization which could facilitate writing by clinical nurses. Data were analyzed from triangulation of three sources of data: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), and 3) documentation (documents evidencing support/resources for publishing). Resources concerning higher education, writing workshops, and time to write are described below.
**Higher Education.** For four of the cases (Morgan, Kennedy, Rose, and Ally) attending graduate school influenced their scholarly writing or manuscript writing development. Documents reviewed found organizational support for higher education among their nurses. During an interview, the Chief Nursing Officer (CNO) stated she began her tenure by setting standards to support nurses returning to school. She elaborated that measures had been put into place in an effort to eliminate barriers so nurses could reach this goal. The career development program for bedside nurses required a minimum of a BSN for a RN3-level position and a minimum of a MSN for a RN4-level position. The Interim CNO affirmed that leadership positions require a minimum of a master’s educational level.

A review of the annual report revealed a four-year growth of nearly 30% in the educational levels (BSN or higher) of nurses. Documents indicated 47% in 2011 and rates have steadily grown to 73.9% in 2015. A review of documents on the organization’s webpage found scholarship loan programs available to nurses interested in all levels of nursing education. Scholarship loans have been forgiven provided nurses complete an employment contract and provide service in the level of education studied. Additionally, the organization contracted with a local university to offer RN to BSN courses on campus for the 2014-2015 academic year.

**Writing Workshops.** All cases reported no formal training on writing for publication. An interview with a representative from the education department evidenced the organization has not offered formal classes on writing for publication since a workshop was offered in the 80’s. Morgan noted an editor was not available through the organization so her writing group did their own edits. The researcher explored whether or not an editor was available to assist clinical nurses with these types of revisions. The Director of Nursing Research reported the absence of such an editor.
**Time to Write.** All cases wrote for publication predominately during personal time. All cases described heavy work responsibilities which hindered their ability to write at work. Fieldwork activities revealed that clinical nurses are given time to participate in other types of scholarly activities. For example, new graduates who are in one of the five Nurse Academy Programs must complete a civic project which involves a minimum of one day of service within the community. In addition, new graduates may volunteer to participate in a research project during their enrollment in the academy; however, time to write for publication was not a supported activity.

**Opportunities to Write**

Fieldwork involved the exploration of opportunities to write within the organization which could facilitate writing by clinical nurses. Data were analyzed from triangulation of three sources of data: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), and 3) documentation (documents evidencing support/resources for publishing). Opportunities to write concerning collaborative writing and university partnerships are described below.

**Collaborative Writing.** Collaborative writing influenced four of the five cases (*Daisy, Morgan, Kennedy, and Ally*). Even though one case (*Rose*) preferred to write alone, her most recent publication involved collaborative writing. In a review of the 35 articles written by the five cases, 24 (69%) were written by two or more authors. To explore writing partnerships within the organization, the hospital-generated journal was reviewed. Publications by clinical nurses were recognized in sections referred to as “in print” and “publications and presentations” within the hospital journal. Approximately 74 peer-reviewed articles have been given recognition in the hospital journal between the years 2004-2016. Of those 74 articles,
approximately 50% were written by two or more authors. An exact number could not be verified due to inconsistencies in journal reporting noted by the researcher. For example, some reporting of publications only cited the clinical nurse employed at the organization and failed to cite the co-author from another organization.

A review of the career development program revealed inconsistencies with opportunities to write collaboratively. Specifically, clinical nurses within the program were given writing activity points for publishing an article in the hospital journal. However, the editor for the journal reported that articles are written by the editorial staff. A review of articles in the journal confirmed this account. Considerations were underway for increasing opportunities to write collaboratively. During the attendance of an editorial meeting, the researcher witnessed plans to solicit clinical nurses to write in the upcoming issue. Plans included mentoring clinical nurses to write about practice projects through the use of a template.

**University Partnerships.** The Director of Nursing Research acknowledged that university partnerships were an identified need for the organization. One case (*Kennedy*) indicated the organization was not affiliated with the local universities. Initiatives were ongoing to cultivate partnerships. The previous Chair noted the research council had objectives to partner with local universities for a variety of support. The Interim CNO confirmed these objectives extended beyond the council. She recently initiated conversations with the Dean at a local university to explore partnership opportunities. Previous partnerships occurring between the cases and university faculty resulted from an informal networking process. Four of the five cases (*Morgan, Kennedy, Rose, and Ally*) had partnered with university faculty to write for publication.
Opportunities to Disseminate Knowledge through Writing

Fieldwork involved the exploration of opportunities for clinical nurses to disseminate knowledge through writing within the organization. Data were analyzed from triangulation of three sources of data: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), and 3) documentation (documents evidencing support/resources for publishing). Opportunities to disseminate knowledge through writing concerning EBP/research events and the Nurse Academy Program are described below.

**EBP/Research Events.** The Director of Nursing Research spoke about the facility’s annual research event during an interview. She noted the annual event began nine years ago to educate nurses about research. During this event, nurses shared projects upon which they were working. Bedside nurses have been especially targeted to encourage dissemination of their work through poster presentations.

The director added that the internal event was expanded four years ago based upon the organization’s objective to host an annual symposium. Fieldwork during this year’s symposium revealed expansion over the four years. Announcements during the symposium reported 315 attendees from 29 counties representing the event’s largest growth to date. Clinical nurses from across the state presented evidence-based practice (EBP) and research in poster form to the attendees during breaks. Forty posters represented projects by clinical nurses from nine organizations. The organization included in this study represented 55% of the posters.

**Nurse Academy Program.** The organization provided five Nurse Academy Programs for new graduates. An interview with the Nurse Academy Program Manager provided data to support how new graduates generate new knowledge. During these Academies, new graduates have been given the opportunity to participate in a research project. Interviewing the manager
lead the researcher to contact two Academy graduates who completed a research project. Through an interview with both graduates, it was discovered that they presented findings from their research project in the form of a poster presentation at a national conference.

**Recognition for Writing**

Fieldwork also involved exploring recognition for writing within the organization which could facilitate writing by clinical nurses. Data were analyzed from triangulation of three sources of data: 1) physical artifacts (scholarly publications), 2) direct observations (field notes), and 3) documentation (documents evidencing support/resources for publishing). Recognition for writing concerning recognition strategies and the career advancement program are described below.

**Recognition Strategies.** Four of the cases (*Morgan, Daisy, Rose, and Ally*) affirmed that clinical nurses who publish are recognized within the organization. One case (*Morgan*) noted there was no “pressure to publish”, but added nurses were recognized when they did. A review of documents and field notes revealed publications were recognized in a variety of ways. Examples included e-mail announcements, article citations published in the hospital-generated journal, and recognition events. One case (*Morgan*) mentioned a luncheon that was held to recognize nurses who had published during that previous year.

**Career Advancement Program.** The researcher explored data pertaining to recognition within their career advancement program. A review of the career advancement program guidelines and a meeting with the program coordinator evidenced recognition for staff-level position nurses that shared knowledge with others (i.e. RN, RN3, RN4). The program promoted scholarship by allowing smaller milestones to occur for career development and allowed for individuality and preference.
Each nurse participating in this program was required to achieve a specified number of points for EBP and/or research activities. Writing was one category in which nurses could complete activities to achieve points. Writing activities ranged in point values from 0.5 points to six points. There was no differentiation of point value between quality improvement, EBP, or actual research activities. Examples of writing included: submitting a research question to the Nursing Research Council (0.5 points), publishing an article in the hospital-generated journal (4 points), submitting an article for publication (5 points), and publishing an article (6 points).

Another EBP/research activity was categorized as “sharing”. Examples of sharing included: attending EBP/research grand rounds (0.5 points), providing a local podium presentation (4 points), and providing a podium presentation at a state or national level (6 points). When writing activities were compared to sharing activities, there was no differentiation in point value. Specifically, a nurse who conducted a podium presentation at a state or national level was credited with six points. Similarly, a nurse who published an article outside of [hospital] was credited with six points.

This concludes the discussion of empirical-found patterns from triangulation of case interviews with additional data sources. Multiple-case analysis is continued in the next section by matching empirically-found patterns against theoretical propositions.

**Theoretical Propositions**

Social Cognitive Theory and the concept of “human agency” provided a theoretical framework for studying clinical nurses who publish in Magnet hospitals. Four propositions were posited:

1. clinical nurses within Magnet hospitals publish in response to cognitive, behavioral, and environmental factors;
2. these three factors are interdependent and influence one another;

3. clinical nurses (as human agents) are not only a product of, but also a producer of their environment; and

4. within the human agent level, the clinical nurse is responding to various influences that may or may not facilitate their endeavors to write for publication.

The four propositions were either supported or refuted based upon pattern matching between the propositions and empirical-found patterns (Figure 4). The following sections provide the results from this pattern matching.

**Figure 4: Empirical Factors Facilitating Scholarly Publications**

Adapted from: Bandura’s 1986 Social Cognitive Theory Triadic Model

**Theoretical Proposition 1: Multiple-Case Analysis**

Clinical nurses within Magnet hospitals publish in response to cognitive, behavioral, and environmental factors.

Patterns from the multiple-case analysis discussed in the previous section were matched with Theoretical Proposition 1. Based on a result of pattern matching, findings support the
proposition. Specifically, it was found that the cases published in response to cognitive, behavioral, and environmental factors. However, the cases credited cognitive and behavioral factors as most often contributing to writing for publication.

**Cognitive / Behavioral Factors**

Morgan credited “peer support” as the main facilitator in her efforts to write for publication. She affirmed the behavioral strategy of collaborative writing as less daunting and not as intimidating. Collaborative writing contributed to enhancing cognitive factors. Specifically, writing with peers increased her knowledge of manuscript writing and increased her confidence. This belief in her ability to publish motivated future writing to disseminate findings from research projects in which she was involved.

Daisy credited a “push from [a] mentor” as being the main facilitator in her efforts to write for publication. She affirmed this encouragement gave her confidence to recognize she had valuable knowledge to share. This confidence changed her professional perspective about the value of peer-reviewed publication. As a result, she engaged in collaborative writing with this mentor. Collaborative writing produced her first publication as a lead author.

Rose credited “communication” as being the main facilitator in her efforts to write for publication. She elaborated that communicating knowledge both she and others valued as rewarding. She affirmed her attempts to publish were to impact nursing practice based on an identified need in the literature. She is motivated by her enjoyment for writing. This enjoyment prompted her to accept an invitation to be a reviewer for a practice journal.

Kennedy credited being a “driven” individual as being the main facilitator in her efforts to write for publication. She affirmed intrinsic motivation to publish was supported by her desire to grow personally and professionally. She has also been motivated by her professional
perspective. She noted this perspective was influenced by doctoral studies and recognizing the need to articulate her impact on nursing care.

Ally credited “faculty mentors” as the main facilitator in her efforts to write for publication. She elaborated that collaborative writing with two mentors during her doctoral studies contributed to her success. Since then, she has continued to publish with both mentors. She affirmed that without these faculty mentors, she would not have recognition as a published author.

**Environmental Factors**

Although the organization encouraged peer-reviewed publication, there was limited support to assist with writing efforts. Consequently, all five cases initiated behaviors to create an environment conducive for writing manuscripts. They set aside time to write during personal time away from the work environment. One case (Morgan) set aside time to write at home even if it meant “binge” writing to meet deadlines. Another case, (Daisy), set aside time to write at home on weekend mornings. One case (Ally) admitted that setting aside personal time was often futile.

Hospital representatives reported no training opportunities to educate the cases on the topic of writing for publication. Thus, each case learned about writing for publication through behaviors they initiated. These behaviors included collaborative writing (Morgan and Ally), reading articles on the topic of writing for publication (Daisy), self-instruction by “trial and error” (Kennedy), and accepting a reviewer invite for a journal (Rose).

**Theoretical Proposition 2: Multiple-Case Analysis**

*Cognitive, Behavioral, and Environmental factors are interdependent and influence one another.*
Patterns from the multiple-case analysis discussed in the previous section were matched with Theoretical Proposition 2. Based on pattern matching results, findings support the proposition. Specifically, it was found that cognitive, behavioral, and environmental factors which facilitated publication by the cases were interdependent and influenced each other.

Despite a culture that did not value peer-reviewed publication as a preferred method of dissemination, the cases still chose to publish. This choice to publish may be explained by viewing each case as a human agent and creating their own necessary environment to control outcomes (i.e. publication). Findings suggest each case was more likely to publish when they contributed to the creation and support of their own environment.

The organizational environment provided limited support to assist the cases with efforts to publish. Consequently, each case initiated behaviors to create an environment to support their efforts. As a result of these behaviors, the cases produced peer-reviewed publications. Successful outcomes of peer-reviewed publications confirms the interdependence and influence of all three factors.

**Theoretical Proposition 3: Multiple-Case Analysis**

*Clinical nurses (as human agents) are not only a product of, but also a producer of their environment.*

Patterns from the multiple-case analysis discussed in the previous section were matched with Theoretical Proposition 3. Based on a result of pattern matching, findings support the proposition. Specifically, it was found that the cases (as a human agents) are both a product of, and producer, of their environment.

All of the cases initiated behaviors necessary to publish within their environment. Although the environment (i.e. organization) encouraged the sharing of nursing knowledge, case descriptions emphasized peer-reviewed publication was not the preferred method of
dissemination. Additionally, the organization encouraged publication but offered insufficient resources and rewards for publishing. Thus, the cases (as human agents) created an environment to support their publication efforts. Consequently, they became producers of their environments.

Cases were also producers of their environment (i.e. organization) by influencing other clinical nurses to publish. One way cases influenced other clinical nurses to publish was through mentoring other nurses. One case (Kennedy) referenced “growing our own” which captured how clinical nurses within the organization created a support system from within. All cases described situations where they had “planted a seed”, contributing to the professional growth of another nurse.

**Theoretical Proposition 4: Multiple-Case Analysis**

*Within the human agent level, the clinical nurse is responding to various influences that may or may not facilitate their endeavors to write for publication.*

Patterns from the multiple-case analysis discussed in the previous section were matched with Theoretical Proposition 4. Based on a result of pattern matching, findings support the proposition. Specifically, it was found that the cases (within the human agent level) responded to various influences that did and did not facilitate their efforts to write for publication.

In their endeavors to publish, the cases were continuously responding to cognitive, behavioral, and environmental factors. Case descriptions emphasized the causation effect among all three factors. In addition, descriptions emphasized that each individual case (as a human agent) had control over their publication outcomes. Having control allowed each case to make decisions on whether or not they wrote for publication. These decisions resulted in responses to cognitive, behavioral, and environmental factors and included assessment of and reacting to
factors that did and did not facilitate publication. Some of the case responses resulted in successful publication. In contrast, other case responses resulted in failure to publish.

**Summary**

This chapter presented findings to answer the research question: *What cognitive, behavioral, and environmental factors facilitate peer-reviewed publication by clinical nurses in Magnet hospitals?* Empirical patterns were found to support the four propositions posited. The next chapter will discuss both implications and recommendations for nursing practice, education, and research drawn from the findings presented in this previous chapter.
Chapter 5: Implications and Recommendations

Clinical nurses are in pivotal positions to generate best practices to influence health care reform and advance nursing science in hospital settings. It is critical that clinical nurses disseminate these best practices through scholarly publication in peer-reviewed journals. Yet, research into factors that facilitate publication by clinical nurses is limited and inconclusive. As a result, little is known about how to implement interventions in hospital settings that enhance the dissemination of knowledge related to best practices. This study aimed to explore the theoretical propositions that behavioral, cognitive, and environmental factors influence publication by clinical nurses. These factors were explored using a focused ethnographic, multiple-case study design. This chapter will discuss both implications and recommendations for nursing practice, education, and research drawn from the findings presented in the previous chapter.

Nursing Practice

The Magnet® Recognition Program has been instrumental in propelling organizations toward a culture of nursing excellence. That culture includes fostering nursing research and educational advancement of nurses. The social context created by Magnet recognition provides an advantage for nurses practicing in those settings to use, generate, and disseminate best practices (ANCC, 2016b). Hence, using cases situated within a Magnet hospital allowed for examining organizational culture as an influence on the generation of peer-reviewed publication by clinical nurses within a social context. Ethnographic methodology offered a mode of inquiry that supported this exploration.

In 2008, the ANCC restructured their standards to include a Magnet Model which reflected a greater focus on measuring outcomes. The new model consists of five components. These core components include: 1) transformational leadership, 2) structural empowerment, 3)
exemplary professional practice, 4) new knowledge, innovation, and improvements, and 5) empirical quality results (ANCC Magnet Model, 2008).

In particular, component four has required organizations to demonstrate creation of new knowledge, innovation, and improvements (ANCC, Magnet Model, 2008). One way organizations can evidence new knowledge generation is to submit visible contributions to the science of nursing made by nurses within the institution. One contribution requirement includes dissemination of outcomes from research conducted within the organization. This requirement entails providing one example of evidence to demonstrate “how clinical nurses disseminated to external audiences” (ANCC, 2014, p. 11).

Researcher review of multiple data sources revealed a great deal of focus upon the use and generation of evidence. Yet, minimal structures or strategies existed to support dissemination of that knowledge through peer-reviewed publication. Specifically, activities to encourage peer-viewed publication were minimal, somewhat leaving it to individual nurse preference and comfort level. Findings also affirm that presentations and posters were more frequently the choice of practicing clinicians for dissemination rather than peer-reviewed publication. Many possibilities could contribute to this finding, but review of the cases suggest specific factors hindering writing for publication. These factors included: lack of familiarity with writing scholarly, inadequate time required for writing manuscripts, limited writing mentors, and insufficient opportunities for collaborative writing.

To amend this disparity, organizational efforts should focus on “transforming scholarly practice into clinical scholarship” (Limoges & Acorn, 2016, p. 749). Peer-reviewed publication by clinical nurses is one example of transforming scholarly practice into clinical scholarship. Findings suggest that there are opportunities within the organization to increase peer-reviewed
publication by clinical nurses. Exploring these opportunities has the potential to increase clinical scholarship.

A logical next step would be the consideration of higher standards for dissemination of knowledge to achieve Magnet recognition. While disseminating evidence through presentations, both internal and external, is admirable, publication in peer-reviewed journals provides access to a broader audience. Hence, one recommendation from this study is to propose publication, not just presentations, as a higher dissemination standard in the Magnet program. In particular, consideration of local versus national and international presentation and publication of findings is recommended. Dissemination to external audiences could have an effect on the advancement of nursing science through the dissemination of new knowledge, innovation, and improvements.

Implications for Practice

The organization in this study has flourished in elevating practice standards since their initial Magnet® designation a decade ago. Efforts to elevate practice standards are supported by the implementation of various initiatives including a comprehensive career advancement program, a professional practice model, nursing shared governance councils, new nurse academy programs, higher education requirements, and EBP/research structures. These initiatives, along with others, produced a culture which promoted the use, generation, and dissemination of best practices; yet, infrastructures to support and reward dissemination beyond the local level was limited.

In addition, case descriptions affirmed that peer-reviewed publication was valued similarly with other methods of dissemination. Specifically, peer-reviewed publication was valued at the same level as other methods of dissemination (i.e. state/national podium presentation). This sentiment was consistent among initiatives and infrastructures including the
organization’s career advancement program, job expectations, and EBP/research events. Although verbal methods of dissemination should be valued (Halligan, 2008); poster and podium presentations reach a select audience. Peer-reviewed publication has the potential to reach broader audiences. Reaching broader audiences empowers the voice of nursing and provides opportunities that showcase nursing contributions to healthcare.

**Recommendations for Practice**

Nurse leaders are pivotal in changing the organizational culture from one that views publication as ‘nice to do’ to one that views publication as ‘need to do’ (Tyndall & Caswell, in press). Placing more value on peer-reviewed publication could result in a greater number of publications by clinical nurses. To increase the value of publication, organizations need to be strategic and emphasize the dissemination of knowledge beyond departmental and organizational levels. When organizational efforts have been strategic, writing for publication outcomes by nurses have been favorable (Shirey, 2013; Wilson et al., 2013). Findings from this study suggest organizational efforts should include at least these two initiatives: 1) recognition and reward systems and 2) writing resource availability.

**Recognition and Reward.** Recognition and reward initiatives are a critical element in promoting positive scholarship outcomes (Sanderson, Carter, & Schuessler, 2012; Santo, Engstrom, & Reetz, 2009). These initiatives should acknowledge peer-reviewed publication as a high-level accomplishment. It is recommended that organizations evaluate their dissemination practices and develop a ranking system based upon specific criteria. Specifically, the rating system should reflect a higher value for peer reviewed publication when compared to other methods of dissemination (i.e. hospital newsletter, posters, presentations). Disseminating at any level, such as hospital newsletter or internal research event, should be recognized and rewarded.
as these levels build writing competencies for novice authors. However, peer-reviewed publication has a greater audience potential and should receive a higher ranking.

Evaluation criteria should include the quality of publications. Quality of publications can be assessed using a variety of evaluation methods including the scholarly nature of the article, evidence hierarchies, and journal impact factor. Other aspects of quality to consider might include position of authorship (i.e. first author vs. subsequent authorship) and relevance of topic to nursing practice. A panel of experts, comprised of clinicians and academicians, could assist with determining the quality of publications and the creation of an evaluation rubric.

**Availability of Resources.** A lack of resources for writing support was a repeated observation throughout the researcher’s fieldwork. Resources, such as time to write, writing workshops, and collaborative writing opportunities need consideration. Frequently, cases voiced individual behavioral strategies, rather than organizational to find these necessary resources outside of the work environment. Clinical nurses who demonstrate potential as authors need appropriate resources to write for publication.

**Time to Write.** Consistent with the literature, time was seen as a major barrier affecting the cases. (Dowling et al., 2013; Luiselli, 2010; Oermann & Hays, 2015; Shah et al., 2009). It has been recommended that nurse leaders view writing time similar to other role responsibilities (Tyndall & Caswell, in press). Dedicated time to write has been identified as a main resource facilitating publication (Dowling et al., 2013). Clinical nurses who have shown dedication to writing for publication should have writing time associated with their job responsibilities.

**Writing Workshops.** Writing workshops are an effective way to prepare nurses for peer-reviewed publication (Derouin et al., 2015). Findings from this study have already prompted nurse leaders within the organization to assess opportunities to educate clinical nurses on the
topic of writing. For example, the Magnet Program Director contacted the Area Health Education Center (AHEC) and inquired about hosting a writing for publication program. The director has invited the researcher to collaborate on the program.

**Collaborative Writing Opportunities.** Opportunities to write collaboratively is a resource that should be considered. When opportunities to write collaboratively have been available, publication by clinical nurses has increased (Horstman & Theeke, 2012; Jackson, 2009; Salas-Lopez et al., 2011). Ongoing mentoring by experienced authors is an essential component to collaborative writing (Richardson & Carrick-Sen, 2011; Shatzer et al., 2010; Winslow et al., 2008). Collaborative writing between university faculty and clinical nurses have also shown positive outcomes associated with writing for publication (Stone et al., 2010). Organizations should approach universities to establish partnerships aimed at increasing collaborative writing opportunities. Hosted events can provide regular opportunities to connect university faculty with clinicians and energize relationships between the organization and the university.

**Nursing Education**

Findings from this study suggest that both graduate and doctoral levels of education influence writing for publication. In particular, graduate and doctoral education programs attended by four of the five cases shaped their perspectives about the value of peer-reviewed publication, developed them as scholarly writers, and provided scholarly opportunities through formation of collegial relationships and partnerships. These influences contributed to both cognitive and behavioral factors that facilitated writing for publication efforts within each case, highlighting the importance of nursing education in the development writers in nursing.
Implications for Nursing Education

Educational preparation of graduate and doctorate nursing students should contain scholarly writing development and dissemination of knowledge (AACN, 2006; 2008; 2010; 2011). Scholarly writing development is common in undergraduate curriculums (Troxler, Vann, Oermann, 2011); however, curriculum essentials have mostly suggested publication writing at doctoral levels (AACN, 2006; 2011). Hunker et al. (2014) recommends beginning competencies of manuscript writing development at the graduate level. This recommendation would require strategic approaches to develop writing across all educational program levels with the ultimate goal of developing writing for publication competencies. The following are recommendations that may facilitate the development of these competencies.

Recommendations for Nursing Education

Graduate and doctoral students are subject to copious amounts of writing throughout their educational programs. Nurse educators must determine whether or not writing “academic papers” is optimally serving our students to achieve discipline-specific writing. To achieve discipline-specific writing, academic programs should identify what genres are necessary to prepare students for future career opportunities (Gimenez, 2008). Peer-reviewed publication is one genre that is necessary for the dissemination of knowledge created by advanced nurses, academicians, and nurse scientists. The following recommendations are suggested to accelerate scholarly writing development for the genre of peer-reviewed publication.

Manuscript Writing Development. It is recommended that faculty structure education for graduate and doctoral students to support writing manuscripts necessary for discipline-specific writing. Scaffolding, which involves sequencing and structuring writing activities, has been shown to be effective in developing scholarly writing in nursing students (Gazza & Hunker,
Specifically, both course assignments and required courses can be scaffolded to support the stages of manuscript development. Assignments and courses can be bridged to facilitate continued development of writing projects throughout the education program with targeted goals of “submission” or “acceptance” to a journal by the end of students’ studies. Reaching publication goals such as these will require the presence of writing opportunities and support for students (Chyun & Henly, 2015). Thus, students will need opportunities for writing experiences and support in the form of writing resources.

**Writing Experiences.** Faculty mentoring has shown positive outcomes for students writing for publication (Dowling et al., 2013; Thein & Beach, 2010). Collaborating with a faculty member can offer students an opportunity to experience the process of writing and submitting a manuscript. Writing and submitting a manuscript can provide competencies related to writing for publication. Students may be more motivated to follow-up on revisions and/or rejected manuscripts if they have already dedicated time and are invested in the manuscript. Thus, decisions about revisions or journal selection might feel less daunting.

Going through the process of writing and submitting a manuscript could assist students in developing competencies related to publication. Responding to a reviewer, making revisions, and dealing with rejection are an integral part of writing for publication. In particular, dealing with rejection can be difficult. However, normalizing rejection can be a productive experience for new authors (Conn et al., 2016).

Group writing can also facilitate student writing experiences and increase success with publication. Salas-Lopez et al. (2011) discovered that writing groups were helpful for increasing publication among healthcare professionals. Writing groups offer students opportunities to build
competencies in negotiation. Negotiation competencies can result from deciding on authorship, discussing writing responsibilities, and debating manuscript revisions.

**Student Resources.** Resources can be employed to decrease the faculty burden of reviewing student manuscript drafts. Consultants from university writing centers have been shown to facilitate student writing development (Latham & Ahern, 2013; McMillan & Raines, 2011). Targeting consultants who have expertise with scholarly publication and manuscript development is recommended.

Student peers are another resource faculty can employ to facilitate manuscript writing development. Students can benefit by reading and critiquing other student’s writings through the peer review process. Peer review has been shown to develop student writing in undergraduate and doctoral nursing programs (Fauchald & Bastian, 2015; Peinhardt & Hagler, 2013; Shirey, 2013). Hattie and Timperly (2007) suggest a four-level model of feedback to enhance learning. The four levels are designed to enhance the peer review process and increase the effectiveness of peer feedback.

**Faculty Resources.** Challenges with scholarly writing have been reported in nursing students at graduate and doctoral levels (Gazza & Hunker, 2012; Gimenez, 2008). Although many faculty are published authors, they may lack an understanding of how to mentor students who are struggling with scholarly writing. If faculty are to successfully mentor these students, they need to be competent teachers of writing. Faculty competency is an integral part of developing writing in students (Zygmont & Schaefer, 2006). Professional development opportunities to assist faculty in becoming more effective teachers of writing is suggested. University faculty with writing expertise may be able to offer professional development opportunities to faculty that are less proficient.
Nursing Research

Sharing nursing knowledge through peer-reviewed publication can advance nursing practices through the dissemination of innovative approaches. Innovations to advance best practices are already occurring in the health care system through nurse-led research and evidence-based projects (IOM, 2010). Efforts need to include not only generating the development of best practices, but also disseminating that knowledge. In this study, Social Cognitive Theory provided a framework to examine factors influencing dissemination of nursing knowledge. Advancement in the science within this topic area will need standardized instruments and operational definitions. Standardized instruments and operational definitions will allow for parallel research that can be aggregated.

Theory Development

Based on the findings, there are opportunities to expand on the existing framework that guided this study. Findings provide an opportunity to expand on the framework to include patterns noted as a result of the multiple-case study. Findings identified patterns of cognitive factors (Professional Perspective, Writing Knowledge, and Intrinsic Motivation), behavioral factors (Writing Behaviors and Taking Initiative) and environmental factors (Culture and Resources). These patterns have been visualized below (Figure 4). Identification of these patterns provides insight into some of the various factors which facilitate publication by clinical nurses in Magnet settings. The refining of this theoretical framework allows for further research to expand the knowledge gained from this study. In particular, there is a need for more studies in varied clinical setting (Magnet and Non-Magnet) to examine factors contributing to writing and publication.
Future Research

Instrument development and operational definitions are recommended to facilitate further research. Patterns identified in Figure 4 can support the development of operational definitions for cognitive, behavioral, and environmental factors. These operational definitions can assist with developing an instrument to measure the strength of each individual factor. A study conducted by Morris, Hatton, and Kimberlin (2011) can be used as a template in designing a potential instrument. This cross-sectional design used a 34-item questionnaire to study factors associated with publication by pharmacists. Specifically, the questionnaire measured motivating factors and significance of barriers using Likert scaling.

Both instrument development and quantitative design may facilitate deeper exploration of this topic. It is recommended that deeper exploration include studying peer-reviewed publication in additional Magnet hospitals and other settings. Other settings may include non-Magnet hospitals, non-acute care settings, and academia. Comparing and contrasting data obtained from these types of settings can expand knowledge on the influence of environmental factors upon cognitive and behavioral factors. Knowledge pertaining to environmental factors could stimulate discussion among nurse leaders in these settings. These discussions could further facilitate initiatives that have the potential to impact collective efforts in the profession and may possibly result in the advancement of science in all areas of nursing.

Limitations

Rigor was enhanced in this study by using strategies such as pattern matching and cross-case analysis within a multiple-case study design. Multiple-case design involved the triangulation of data from various sources to validate findings from five cases. Although cases
were selected to best study the phenomenon, all cases studied were generated from one setting.
Findings from studying cases within one setting may have limitations in generalizability. Future
studies in multiple settings from various geographical areas has the potential to strengthen
construct validity. In addition, the case sample was homogeneous (White, older females).
Studying this topic with a larger sample size may have the potential to enhance generalizability.

Final Conclusions

Disseminating knowledge through scholarly publication in peer-reviewed journals is one
way nurses can influence health care. The published nurses’ perspective offered an opportunity
to discover factors facilitating publication by clinical nurses in Magnet hospitals. Research into
factors that facilitate publication by clinical nurses is limited and inconclusive. As a result, little
is known about how to implement interventions in hospital settings that enhance the
dissemination of knowledge related to best practices. This focused ethnographic, multiple-case
study adds to the body of science in this area. Findings lend themselves to implications and
recommendations for nursing practice, education, and research.
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Appendix A

Observational Instrument for Direct Observations during Fieldwork

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This space will also be used to record the observer’s own feelings, reactions, and reflections.

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Appendix B

Interview Instrument for Case Interviews

Study Interview Questions

Research Question: What cognitive, behavioral, and environmental factors facilitate peer-reviewed publication by clinical nurses in Magnet hospitals?

Supporting Questions:

- What about you, as an individual, led you to publish?
- What did you do to make sure you got these articles published? What specific actions did you take?
- What outside factors (time constraints, family, etc.) did you have to manage so that you could publish?
- How did you react and respond to the peer reviewer comments?
- What policies or procedures at your hospital helped you to publish?
- What resources at your hospital helped you to publish?
- What institutional practices (i.e. action, ideas, values, ethics) helped you to publish?

Demographic Information:

- Age.
- Years of experience as a Registered Nurse.
- Number of publications, manuscripts under review, manuscripts in progress & order of authorship
- Employment locations and nursing positions during calendar years 2010-2015.
- Levels of education and years of obtaining degrees.
- Case ethnicity/race.
Documentation Instrument for Data Collection Prior to Fieldwork

**Magnet® Hospital Setting**

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Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: Deby Tyndall
CC: Elaine Scott
Date: 10/6/2015
Re: UMCIRB 15-001421
Factors Facilitating Peer-Reviewed Publication by Clinical Nurses

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 10/5/2015 to 10/4/2016. The research study is eligible for review under expedited category # 6, 7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

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The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418