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PROTECTIVE NURSING ADVOCACY SCALE

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PROTECTIVE NURSING ADVOCACY SCALE

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Dedication

I dedicate this work to the nurses who participated in this study and those nurses that practice nursing advocacy for their patients.

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PROTECTIVE NURSING ADVOCACY SCALE

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Nursing advocacy for patients is considered to be an important function of nursing practice. The research surrounding nursing advocacy is relatively new, with few psychometric instruments developed to measure nursing advocacy. The purpose of this study was to determine the psychometric properties of the Protective Nursing Advocacy Scale (PNAS) and provide measures to support validity.

The study design was a descriptive correlational design using a randomly selected sample of 419 medical-surgical registered nurses in the State of Texas. The data were collected using a mailed survey and the mailed survey included demographic data, the PNAS, a nursing ethics instrument, the Nursing Professional Values Scale Revised (NPVSR), and an existing nursing advocacy instrument, the Attitudes toward Patient Advocacy Scale (APAS). In addition, narrative responses to three open-ended questions were analyzed for category response frequency. The resulting dataset of PNAS items was analyzed for significance of PNAS scores among the demographic groups. The PNAS items were further analyzed using an exploratory factor analysis along with other psychometric descriptions of the data.

The PNAS analysis resulted in the items loading onto four theoretically connected components, subsequently referred to as subscales. The overall reliability of the PNAS demonstrated an acceptable level of reliability, as did the four subscales. No significant differences were noted between mean total PNAS scores and the majority of the demographic data. Construct validity evidence was provided by exploratory factor analysis. Convergent validity evidence was supported by correlations of the PNAS scores and the APAS and NPVSR scores. Content analysis by an expert panel demonstrated an acceptable level of validity index. Narrative responses to open-ended questions help provide support for the items from the PNAS. The six PNAS items that did not load onto components or that were not theoretically connected need revision and piloting in a future version of this instrument.

Implications for nursing include using with practicing nurses to improve their advocacy skills, which may help improve patient outcomes. Additional versions of the

PNAS could be written to be used in the education of nursing students and for use by patients in evaluating the nurse's advocacy ability.

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CHAPTER 1: INTRODUCTION

INTRODUCTION

Advocacy for patients is an important aspect of current professional nursing care and is considered to be a fundamental value of professional nursing by many nursing scholars. Although the terms “patient advocacy” and “nursing advocacy” are used interchangeably in the literature, nursing advocacy may be misconstrued as nursing advocacy for the advancement of nurses. For the purposes of this study, nursing advocacy indicates nursing advocacy for patients.

All nursing ethical codes cite advocacy for patients as an essential aspect of nursing practice (Hamric, 2000). For example, the American Nurses Association (ANA) explicitly includes advocacy in the “Code of Ethics for Nurses” (ANA, 2001): “The nurse promotes, advocates for, and strives to protect the health, safety, and rights of the patient.” Other nursing codes, such as the International Council of Nurses’ (ICN) “ICN Code of Ethics for Nurses,” imply advocacy: “The nurse shares with society the responsibility for initiating and supporting action to meet the health and social needs of the public, in particular those of vulnerable populations” (p. 2).

Although nursing has included advocacy as a function of nursing since Florence Nightingale (Nightingale, 1970), advocacy has not always been an explicitly-stated critical component of nursing practice. Since the origin of the patient advocate in the 1970s (Annas & Healey, 1974), nursing has been viewed as the ideal profession to take on this advocate role due to the intimate relationship of the patient and nurse (Annas, 1974). The recognition of nursing advocacy as an integrated and critical component for nursing emerged in the United States in the 1980s (Hamric, 2000).

STATEMENT OF THE PROBLEM

The nursing literature regarding nursing advocacy for patients is largely philosophical in nature. There has been little empirical research examining nursing advocacy, and the majority of the research is qualitative. In addition, the quantitative

research conducted has not used an exclusive medical-surgical nursing specialty sample in the United States (Hanks, 2008a).

The Protective Nursing Advocacy Scale (PNAS) has been developed to further quantitative research related to nursing advocacy between the nurse and patient from the protective perspective. Development of the PNAS items was based on the identified protective aspects of nursing advocacy for patients from the works of Cho (1997), Ingram (1998), Hanks (2005) and additional empirical nursing advocacy literature. The goal of this study is to determine the psychometric properties and validity of the PNAS using a sample of registered professional nurses with experience in the medical-surgical specialty area within the acute care setting. In addition, correlations and comparisons between demographic data and scores on the PNAS will be evaluated for significance.

BACKGROUND AND SIGNIFICANCE OF THE STUDY

Although the nursing profession has indicated that nursing advocacy for patients is a central concept to the practice of nursing, there exist few actual psychometric instruments to measure nursing advocacy (Bu & Wu, 2007). Currently, there are three instruments found in the nursing literature that measure nursing advocacy: 1) Hatfield's (1991) Nursing Advocacy Belief and Practices (NABP) scale; 2) the NABP-based Patient Advocacy Scale (PAS) that Ingram (1998) developed for use in the UK; and 3) the Attitudes towards Patient Advocacy Scale (APAS) developed by Bu (2005). The NABP measures advocacy from the perspective of autonomy and agency support for the nurse, as does the subsequently developed PAS. The APAS measures attitudes of nurses towards patient advocacy from a broad perspective covering the areas of safeguarding patients' autonomy, acting on behalf of patients, and championing social justice in the provision of health care. While the PNAS instrument does have overlap in some of the content measured by the NABP, PAS, and APAS, the PNAS provides a quantitative measure of nursing advocacy from a protective perspective. This more specific measure of protective nursing advocacy for patients can be used by the practicing nurse to enhance previously learned nursing advocacy skills and nurses' ability to protect the patient in the clinical setting. In addition, this instrument can be used with nursing students to gauge

the effectiveness of an educational program's nursing advocacy content and the subsequent use of nursing advocacy in student clinical experiences. Measuring the effectiveness of nursing education and increasing the practicing nurse's ability to advocate for patients may result in improved patient outcomes. This study provides statistical evidence of the psychometric properties of the PNAS along with reliability and validity testing of the PNAS.

STATEMENT OF CONCEPTUAL FRAMEWORK

The concept of nursing advocacy for patients is not associated with a substantial nursing theoretical framework. For the purposes of this study, the theoretical basis of the PNAS is the protective aspects of nursing advocacy for patients, which is reflected in three conceptual models that provided guidance for the development of the PNAS items and additional research studies regarding nursing advocacy. These three theoretical models are Cho's (1997) "Conceptual Structural Model of Client Advocacy", Ingram's (1998) advocacy domains identified in "The Nurse as the Patient's Advocate", and Hanks' "Sphere of Nursing Advocacy Model" (2005). The conceptual basis of the PNAS will be further delineated in Chapter Two, "Review of Literature".

Importance of Models to the Instrument

The three models used for the development of the PNAS items were selected based on the concept that the models are reflective of the protective aspects of nursing advocacy between the nurse and the patient, which is the focus of the PNAS. In addition, various other aspects of influence on nursing advocacy are measured, including nursing education, support from institutions and other healthcare professionals, and risk-taking on the part of the nurse while advocating for patients.

DEFINITION OF RELEVANT TERMS

The following conceptual definitions are used in the discussion of the theoretical foundations of the PNAS:

- *Nursing advocacy* has its origin in the legal definition of advocate, defined as "a person who assists, defends, pleads, or prosecutes for another" (Garner, 2000, p.

43). Nursing advocacy can indicate communicating with and informing patients, protecting patients, speaking out for patients, and building relationships.

- *Patients' Rights* refer to those rights that human beings should be afforded while they are in a patient status. Patients' rights include the right of the patient to make their own autonomous decisions (Beauchamp & Childress, 2001).
- *Environment* refers to the actual setting of the advocacy act, which is most often the workplace setting of the nurse.
- *Work status* indicates the employment status of the nurse, or position held, within a healthcare institution.

DESCRIPTION OF PROPOSED FACTORS

The PNAS underwent pilot testing as the Protective Nursing Advocacy Behavior Scale (PNABS) with a sample of 108 participants responding to 38 items that had been developed from the three conceptual models of Cho (1997), Ingram (1998), and Hanks (2005). The resulting exploratory factor analysis resulted in the following proposed five factors (Hanks, 2008b):

1. **Acting as Advocate.** The items contained in this factor are meant to represent the need to advocate for patients, the legal and ethical duty to advocate for the patient, and the actual actions that constitute the nurse acting as an advocate. The actions that constitute advocacy on the part of the nurse include acting as patients' voice, acting on patients' behalf, speaking on behalf of patients, and acting as the patients' representative
2. **Environment and Advocacy.** The items in this factor represent environment influences, e.g., organizational structure, work environment, relationships with other healthcare professionals, that affect nurses' ability to act as an advocate.
3. **Protecting Patients through Advocacy.** The items in this factor represent the intrinsic nature of the nurse that increases the ability to effectively advocate for patients. In addition, there are items that reflect vulnerable patients' need for advocacy on the part of the nurse.

4. **Work Status and Advocacy Actions.** This factor includes items that reflect consequences of nurses' advocacy, such as nurses' level of work status or employment status.
5. **Protecting Patient Rights.** The items contained in this factor are meant to represent the protection of patients' rights when the nurse is acting as a patient advocate. Patients' rights include the right of self-determination and autonomy to make one's own decisions.

Further description and explanation of the pilot testing of the PNAS items in the PNABS pilot study is explicated in Appendix G. It should be noted that these five factors represent the proposed factors based on the pilot study and the subsequent chapter on results details the factors and factor labels from this study, which are different from the originally proposed PNABS factors.

STATEMENT OF PURPOSE AND GOALS

In this study, the purpose is to determine the psychometric properties and validity of the PNAS instrument. The design of the study is a descriptive correlation design. A randomized sample of 5,000 registered nurses with medical-surgical experience practicing in Texas was selected from the entire list of registered nurses in Texas who self-identify as medical-surgical nurses to the Texas Board of Nursing. If the PNAS is able to provide statistical evidence of reliability and validity, the instrument could then be used for enhancing nursing advocacy practices in the workplace and enhancing patient outcomes as a result of the nurses' advocacy actions. The goal is to demonstrate sufficient reliability for a new instrument and to use additional established instruments to provide convergent validity for the PNAS.

RESEARCH QUESTIONS AND HYPOTHESES

Two research questions guided this study: 1) What are the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations?; and 2) What is the convergent validity when using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes Toward Patient Advocacy Scale (APAS)?

The following hypotheses were tested from the first research question using principal components analysis and reliability statistical techniques:

- 1) The exploratory factor analysis will load onto five predicted factors with factor loadings of $>.30$ and no secondary loadings.
- 2) The total reliability (Cronbach's alpha) will be $>.90$.
- 3) The scale alpha if item removed will not vary more than .05 from the total reliability.
- 4) The item-scale correlations will have a high correlation between item and entire scale.

The following two hypotheses were tested from the second research question using correlational statistical techniques: What is the convergent validity when comparing the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes toward Patient Advocacy Scale (APAS) total scores with PNAS total scores?

- 5) The NPVSR total score will significantly positively correlate with total PNAS score.
- 6) The APAS total score will significantly positively correlate with total PNAS score.

OVERVIEW OF DESIGN

This study will use a descriptive correlational design to determine the psychometric properties and validity of the PNAS. A descriptive correlational design will describe the correlation of items with each other and with the entire scale (Gliner & Morgan, 2000). This type of research design is indicated because the PNAS is a newly developed instrument and will undergo exploratory factor analysis to ascertain the cohesiveness of the items into factors (Pedhazur & Schmelkin, 1991). Additionally, descriptive correlational designs will be used to examine the association of total scores of the PNAS and: 1) the total scores on the Nursing Professional Values Scale Revised; 2) the total scores on the Attitudes Toward Patient Advocacy Scale; and 3) total scores on the Rosenberg Self Esteem Scale (SES).

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION

The term “nursing advocacy” as used in this study is defined as nursing advocacy *for patients* to differentiate it from those nursing advocacy actions undertaken by nurses to advocate for the promotion of the nursing profession. In this chapter, a brief review of salient philosophical underpinnings of nursing advocacy will be discussed. A review of the empirical nursing research literature regarding nursing advocacy and a synthesis of this nursing advocacy research will follow. After the synthesis of nursing advocacy research, representative exemplars from other disciplines involved with advocacy research for their respective disciplines will be reviewed. Models of nursing advocacy then will be discussed, and the relationship between the selected models and the Protective Nursing Advocacy Scale (PNAS) explicated. The chapter concludes with a study rationale, the ways in which this study will close the knowledge gaps in nursing advocacy, and a review of relevant study related instruments.

REVIEW OF RELEVANT THEORETICAL LITERATURE

Historical Philosophical Underpinnings of Nursing Advocacy

Although there have been several articles written from the philosophical perspective regarding nursing advocacy, there exists a historical core of nursing advocacy literature from three authors: Leah Curtin, Sally Gadow, and Mary Kohnke. These three authors have provided the initial definitions that have formed the philosophical foundations of nursing advocacy. Furthermore, the contribution of Patricia Benner relative to nursing advocacy is worthwhile to note.

Curtin (1979) based her philosophy of nursing advocacy on the belief that the humanity of each individual emanates from human needs. According to Curtin (1979), nurses provide a supportive atmosphere for their clients’ decision-making process, which is the basis of all other nursing activities. As human advocates, nurses assist clients to

discover the significance of their life processes (Curtin, 1979). In later works, Curtin (1983) further explained that nursing advocacy is enacted when a nurse enables the patient to resume an independent state, respects the patient as a person, or alleviates suffering. More recent articles written by Curtin (2002) have focused on the ethical and managerial issues of nursing practice, rather than on nursing advocacy for patients.

Gadow (1980) has a similar philosophy of nursing advocacy to Curtin; Gadow's philosophy is termed existential advocacy. Gadow (1980) described existential advocacy as nurses' assistance when patients exercise their right of self-determination; the nurse provides judgments that recognize the complexity of their patients' values. Gadow (1980) argued that only the patient can decide what is in their own best interest, and that the nurse is entirely engaged in assisting the patient in this process. Gadow further explained the warning against paternalism in a subsequent article (1983), and proposed a model of advocacy as a partnership rather than a paternalistic action on the part of the healthcare professional.

Gadow (1989) additionally explored advocacy for the vulnerable patient, contending that nurses have a moral commitment to enhance a patient's autonomy. Gadow believed that nurses are in a unique position to assist the vulnerable patient through advocacy, and that nurses ought to understand the patient's needs and speak for the patient.

Subsequent literature by Gadow (2000, 2003) focused on nursing philosophy beyond the realm of nursing advocacy. Gadow (2003), however, continued writing in reference to unique areas of nursing practice, but from a broader ethical stance.

Kohnke (1980) applied a pragmatic approach to the study of nursing advocacy. She alerted the nurse not to advocate from a paternalistic viewpoint, suggesting that the nurse re-orientate oneself to have faith in patients' ability to self determine their own decisions. Kohnke (1981) also introduced a caution to nurses to avoid bias while acting as an advocate; that is, for the nurse to provide advocacy without involving the nurse's own beliefs into a patient's decision. These same concepts are reiterated in a subsequent article (Kohnke, 1982c), but in the context of the nurse acting as an advocate when

conducting nursing research, providing protection to the patient from harm, and protecting without subjugating the patient.

Kohnke (1982a) further explored the role of nurse advocate and delineated two specific functions—that of an informer to the patient and as a supporter of the patient’s decision. The nursing advocacy functions of being an informer and supporter of the patient’s decision carry the risk of alienating the nurse advocate in regards to other healthcare professionals when there is a conflict between the nursing advocacy actions and actions of another healthcare provider (Kohnke, 1982a). Kohnke (1982a) included an additional aspect pertaining to nursing education—for one to be a proficient nurse advocate, the nurse must have an adequate knowledge base in domains such as ethics, social law, and politics. Subsequent research by Kohnke (1990) reiterated previous work, culminating in the book *Advocacy: Risk and Reality*. There is a paucity of literature by Kohnke after 1990 in available literature databases.

Patricia Benner, a prominent figure in the nursing profession, has authored several articles and books related to nursing ethics and nursing practice. Although Benner’s work encompasses a broad spectrum of nursing issues, including nursing ethics, one work in particular is related to nursing advocacy. In her seminal book *From Novice to Expert* (2001), originally published in 1984, Benner described competency levels in the practice of nursing. The mention of advocacy in this particular book is sparse, described as a type of power that nurses use in the clinical setting “that removes obstacles or stands alongside and enables” (p.212). Benner alluded to advocacy in subsequent publications regarding ethical comportment, which is defined as “a prereflective, socially embedded practical knowledge that is rational, even though it is not based on rational calculation” (Benner, 2006, p.77). Ethical comportment is additionally described by Benner (1994) as a type of knowledge that “exceeds what can be captured by ethical theories” (p. 401) and not based on any formalized theory (Day & Benner, 2002).

It is the use of this practical knowledge, or ethical comportment, that Benner (2002) tied to Gadow’s (1980) concept of existential advocacy, including caring for the silent patient. Nurses in Benner’s study of caring for the silent patient (2002) explicated

strategies used by nurses from a practical standpoint when working with silent patients, such as those patients that are sedated, paralyzed, or less alert. Similar to Gadow's (1989) examination of advocacy for the silent patient, Benner (2002) found nurses using techniques of knowing the patient and preserving the personhood of the patient, rather than depersonalizing the nursing care of the silent patient. These findings directly mirror Gadow's (1989) philosophical argument that the nurse should personify the characteristics of the patient into the nurse's care, and to become the patient's voice.

Controversy Regarding Nursing Advocacy

Although nursing has indicated that nursing advocacy for patients is a core component of nursing (ANA, 2001), the philosophical underpinnings of nursing advocacy are not without controversy. Various authors have questioned the belief that nursing is the best profession to assume the advocate role as the role was developing and gaining support within the nursing profession in the 1970s and 1980s. Abrams (1978) speculated whether a patient needed an advocate, and if this was an appropriate role for nursing to undertake. Abrams questioned whether nurse advocates have financial independence from the institution, considering that the healthcare institution is the setting for the advocacy actions and, moreover, is the employer of the nurse advocate. Lastly, Abrams inquired about the concept that only one healthcare profession, i.e., nursing, should be the advocate. Abrams suggested that patient advocacy may be the responsibility of all healthcare professions, and is not a function unique to nursing.

Miller et al. (1983) expanded further on Abrams' (1978) concern that nursing advocacy would be adversarial to the nurse's own position in the medical system. Even though the authors conceded that nurses have acted in the advocate role, the authors stated that the nurse may not have the power or authority to be an effective advocate (Miller et al., 1983).

A number of authors have discussed how barriers within an institution stymie nurse advocacy. Becker (1986) and Norrie (1997) mentioned that societal and institutional constraints may limit nurses' ability to effectively advocate. Additionally, a concept analysis of barriers to nursing advocacy (Hanks, 2007) indicated that intuitional

barriers may act as a significant deterrent. Almark and Klarzynski (1993) further explored this issue and concluded that the nurse may be in conflict in deciding what is best for the patient; that is, balancing the nurse's perceived need to advocate and the patient's need to have an advocate.

Similarly, nursing has been accused of self-serving promotion by some authors with regard to the concept of nursing acting as the preferred profession in the advocacy role (Bernal, 1992; Cameron, 1996; Grace, 2001). Indeed, Willard (1995) directly questioned the authority of nursing to take on the advocate role. Moreover, advocacy by nurses remains poorly defined in the literature according to some authors (Bennett, 1999; Wheeler, 2000). Mitchell and Bournes (2000) raised concern about the lack of theoretical ties between nursing advocacy and current nursing theory; similarly, Grace (2001) stated there is an inconsistency between the theoretical and practice issues surrounding advocacy in the practice setting.

Even with the controversy surrounding nursing advocacy, the nurse is ethically obligated to advocate for their patients as part of the American Nurses Association "Code of Ethics for Nurses" (ANA, 2001). The "Code of Ethics for Nurses" obligates that "the nurse promotes, advocates for, and strives to protect the health, safety and rights of the patient" (ANA, 2001). In addition, state graduate nurse competencies may dictate that the nurse act as an advocate for the patient, particularly the vulnerable patient (Texas State Board of Nursing [BON], 2002), although this expected advocacy behavior varies according to each state's nursing education competencies.. Nonetheless, there are guiding national criteria used for accrediting nursing educational programs that include advocacy statements. For example, the American Association of Colleges of Nursing's (AACN) *The Essentials of Baccalaureate Education for Professional Nursing Practice* (1995) states that "patient advocacy is, and will continue to be, a hallmark of the professional nursing role, and requires that nurses deliver high quality care, evaluate care outcomes, and provide leadership in improving care" (p. 4).

Review of Research Regarding Nursing Advocacy

Nursing advocacy is not a new role for nursing, but nursing research regarding nursing advocacy is relatively recent, with studies first conducted in the 1980s. The majority of nursing advocacy literature is focused on philosophical positions rather than empirical studies of nursing advocacy. The preponderance of published research undertaken in relation to nursing advocacy for patients has been qualitative in nature, with relatively few published quantitative studies. The disproportionate number of qualitative studies may be explained by the explorative nature of the initial inquiries in nursing advocacy. An additional reason for the lack of quantitative studies is the absence of instruments with sound psychometric properties to measure nursing advocacy.

The role of education in nursing advocacy was researched by Altun and Ersoy (2003) with a sample of 55 Turkish undergraduate nursing students in a four-year longitudinal study. The study findings demonstrated, as measured by an author-developed questionnaire, increased awareness of ethical issues and increased need for advocating on the part of patients as the students progressed through the nursing program. Although the findings support inclusion of nursing advocacy education in nursing programs, there is a paucity of supporting nursing literature regarding nursing advocacy and undergraduate nursing students.

A phenomenological approach was used by Breeding and Turner (2002) to study five Australian critical care nurses' experiences with advocacy. They defined advocacy as the nurse advocating on behalf of a client in response to an awareness of the client's needs or a sense that "something is wrong" (Breeding & Turner, 2002, p. 113). The act of advocacy is supported by the nurse's belief in rightness and the concept of focusing on the client's needs and best interests. The nurses' advocacy interventions are aimed at correcting that original sense of wrong and include supporting clients, speaking for clients, providing information, and acting for clients. The act of providing information is also supported in studies by Hellwig et al. (2003) and Watt (1997). The acting on behalf of clients is echoed in other studies that detail such acts as being the patient's voice (Foley et al., 2000) and acting on the patient's behalf (Sellin, 1995). Breeding and Turner

concluded that the consequences of the advocacy actions are varied and may include a negative resolution or a lack of resolution to the original client issue.

Exploration of nurses' views of patient advocacy was undertaken by Chafey et al. (1998) using a qualitative descriptive design and a sample of 17 nurses. Advocacy was defined by participants as coordination with the system, intervening with the system on the patient's behalf, relating interpersonally with the patient, and empowering the patient. Coordination with the system and intervening with the system on the patient's behalf are concepts supported by other studies as well (Hellwig et al., 2003; O'Connor & Kelly, 2005; Sellin, 1995). Similarly, relating interpersonally with patients as a part of advocacy has been cited by other authors (Hellwig et al., 2003; Lindahl & Sandman, 1998; Snoball, 1996; Watt, 1997). Influencing factors for the nurse to act as an advocate included self-confidence, personal beliefs and values, and strength of conviction. Personal beliefs and values mirror findings from Breeding and Turner (2002) and Penticuff (1989). The concept of conviction is supported by Segesten's (1993) work. Influences not to act as an advocate included 1) lack of environmental support; 2) physician demeanor; and 3) lack of knowledge, experience, and self-confidence. Environment has been found to be a factor in nursing advocacy in other studies (Davis et al., 2003; Foley et al., 2002; Sellin, 1996). Concepts of knowledge and experience as components of advocacy are found in the work of Hellwig et al. (2003), Mallik (1997), and O'Connor and Kelly (2005). Chafey et al. proposed a conceptual model depicting factors that influence advocacy interactions between the client, nurse, and environment.

Davis et al. (2003) surveyed 24 Japanese graduate nurses and clinical teachers using a questionnaire developed by the authors. The survey results were presented in a percentage format. The findings indicated that a majority of the participants felt that nurses in Japan do have a specific and strong advocacy role, and that the nurse should enact this role. In addition, a majority of the participants indicated that Japanese nurses may have limited social support for the advocacy role, even though most participants acknowledged that advocacy was a team approach. A preponderance of the respondents indicated that they have acted as advocates; however, the respondents indicated a lack of

specific education regarding advocacy. A similar finding of lack of specific education regarding advocacy was found in Foley et al.'s (2002) research of military nurses. This finding contrasts with Vaartio et al.'s (2006) conclusion that nurses' concepts of advocacy ability and education about advocacy were not related.

Exploring the experiences of military nurses when acting as advocates was undertaken in a phenomenological study by Foley et al. (2000) using a sample of 24 U.S. Army nurses. At the time of study, nurses were deployed on a military operation and were providing nursing care to vulnerable soldiers that were separated from the traditional support networks of families and friends. The data analysis found a pattern of safeguarding emerged, with four corresponding, supporting themes of advocating: protecting, attending the whole person, acting as the patient's voice, and preserving personhood. Sellin (1995) had similar findings of protection as advocacy in the form of physically preventing a procedure to occur. The theme of acting as the patient's voice is a theme reflective of Watt's (1997) delineation of advocacy as representing the patient.

Further exploration into how military nurses develop the skill of advocating for patients was researched using a phenomenological method by Foley et al. (2002), who observed a sample of 62 military nurses. The emergent major themes that formed a constitutive pattern included who the nurse was and how they were raised, watching other nurses interact with patients, and gaining confidence from working with mentors in a supportive environment. The implication from this study is that nursing advocacy was not being taught in nursing programs, but rather was learned on the job. The concept of nursing advocacy as being a skill acquired "on the job" is supported by similar findings of the absence of formal nursing advocacy education by Davis et al. (2003); however, it contrasts with Vaartio et al.'s (2006) findings indicating special education was not required to act as a nurse advocate.

Godkin (2006) explored patient advocacy among dialysis nurses (a specialized nursing practice subset) using a grounded theory approach with 12 participants. The resulting theory that emerged indicated that the social process of the nurse-patient relationship consisted of three phases: establishing, cultivating, and transforming. The

importance of this relationship in regards to nursing advocacy is found in many of the nursing advocacy studies (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; O'Connor & Kelley, 2005; Selling, 1995; Snoball, 1996; Watt, 1997). Additionally, Godkin's study indicated that advocacy was a part of the nurses' everyday practice rather than an exclusively separate action. The advocacy actions on the part of the nurse impacted patients' lives by providing for the patients' well-being and overall quality of life. This finding is congruent with Hanks' (2008a) study in which medical-surgical nurses indicated that patients' lives had changed due to their advocacy actions.

Hanks (2008a) researched the lived experiences of three medical-surgical nurses with nursing advocacy using a phenomenological approach. The emergent themes were: Speaking Out and Speaking for Patients; Compelled to Act on Unmet Needs of Patients; Fulfillment and Frustration; Patient Is Changed; Primarily Learned on the Job; and Confidence Gained through Practice. The theme of the nurse feeling compelled to act on unmet needs echoes similar findings by Breeding and Turner (2002), Mallik (1997), and McGrath and Walker (1999). This particular cohort of nurses indicated feeling fulfilled and frustrated by the advocacy actions, in a manner similar to Millette (1993) and Breeding and Turner (2002). Gaining confidence and learning about advocacy through practice is a concept also touched on by Foley et al. (2002) and Davis et al. (2003). The theme of changing patients' lives is a similar finding to Godkin's (2006) research with dialysis nurses.

Nursing case managers advocating for patients was the focus of Hellwig et al.'s (2003) research using a phenomenological inquiry of seven nursing case managers. The emergent themes from this research included the advocacy perspective, taking care of business, being a veteran, advocacy barriers, advocacy facilitators, and feelings related to advocacy. The advocacy perspective theme relates to empowerment of the client and directiveness on the part of the nurse case manager. Empowerment as a component of nursing advocacy is cited as a part of advocacy in studies by Chafey et al. (1998), Lindahl and Sandman (1998), Mallik (1997), and Vaartio et al. (2006).

Taking care of business is the process of acting as an advocate and includes educating the client and navigating the system (Hellwig et al., 2003). Navigating the system is similar to Chafey et al.'s (1998) coordination with the system, O'Connor and Kelly's (2005) bridging the gap between the patient and healthcare system, and Sellin's (1995) using organizational structures to act as an advocate. Educating the patient as a component of nursing advocacy is cited by Breeding and Turner (2002) and is similar to the concept of informing the patient, as detailed in Watt's (1997) study.

The concept of being a veteran refers to the use of knowledge, relationships, trust, and organizational skills to provide advocacy for the client (Hellwig et al., 2003). Building relationships as part of nursing advocacy is reflected in many studies (Chafey et al., 1998; Lindahl & Sandman, 1998; Snoball, 1996; Watt, 1997). The use of organizational skills is similar to O'Connor and Kelly's (2005) and Sellin's (1995) research citing the use of organizational structures to act as an advocate.

The advocacy barriers theme in Hellwig et al.'s (2003) study is unique in that the authors found barriers to advocacy included time constraints and "doing more with less" (p. 59). The majority of advocacy barriers cited by other researchers include environmental or institutional barriers (Chafey et al., 1998; Sellin, 1996). Hellwig et al.'s advocacy facilitators theme suggests physician support, using a team approach, and rapport with other agencies as being vital to effective advocacy. This finding appears to be unique in the nursing advocacy literature, and may be reflective of specific aspects of the nurse case manager's role.

The feelings related to the work of advocacy theme include frustration, personal satisfaction, and making a difference in patient outcomes after discharge (Hellwig et al., 2003). Mallick (1997) found similar findings of frustration when nurses acted as advocates. In combination, the resulting themes purported by Hellwig et al. (2003) support the conclusion there are various definitions of advocacy and that there are various skills and behaviors required to act as an effective advocate.

Kubsch et al. (2004) described the use of a holistic model of advocacy in an author-designed questionnaire. The model contains moral-ethical, legal, political,

spiritual, and substitutive advocacy components. The results from the returned questionnaires indicated that the use of all five subsets of advocacy was not consistently employed by a sample of 52 nurses. Certain types of advocacy were affected by specific variables; for example, work setting was associated with a significant difference in the use of moral-ethical advocacy and moral stage development was associated with a significant difference in substitutive advocacy.

Additionally, Kubsch et al. (2004) supported the five categories of advocacy contained in their model by utilizing a separate qualitative analysis of case studies written by a sample of 40 RN-BSN students. According to the authors, each of the five areas of nursing advocacy was supported by the student-written narratives.

Swedish intensive care nurses' role as patient advocates was explored by Lindahl and Sandman's (1998) phenomenological study of six intensive care unit nurses. The resulting themes included the role of advocacy defined as building a caring relationship, carrying out a commitment, empowering the patient, interconnecting with patients, risk-taking, acting as a moral agent, and creating a trusting atmosphere conducive to recovery. Relationship building and interconnecting with patients have been found to be components of nursing advocacy in other advocacy studies (Chafey et al., 1998; Hellwig et al., 2003; Snoball, 1996; Watt, 1997). The finding of empowering the patient is congruent with findings from other researchers (Chafey et al., 1998; Mallik, 1997; Vaartio et al., 2006). Similarly, risk-taking is a finding cited by other researchers either as risk-taking (Segesten, 1993) or in similar forms thereof, as in Mallik's (1997) finding of potential lowering of status or punishment as a result of advocacy actions. Lindahl and Sandman's theme of carrying out a commitment echoes similar findings of correcting a sense of wrong (Breeding & Turner, 2002), the nurse's duty to advocate (Mallik, 1997), professional commitment (McGrath & Walker, 1999), and acting out of conviction (Segesten, 1993).

Additional perceptions of nursing advocacy were explored by Mallik (1997) using qualitative focus group interviews involving a sample of 104 nurses. The emergent themes indicated the causal conditions for nurses to advocate included patients' fear of

medical authority, patients' vulnerability, direct patient requests for advocacy, nurses' duty to advocate, and nurses' assessment of the advocacy needed by the patient. Other researchers have investigated patient vulnerability as a causal factor in advocacy (McGrath & Walker, 1999; O'Connor & Kelly, 2005; Sundin-Huard & Fahy, 1999); this vulnerability appears similar to the powerless patient detailed in Segesten's (1993) work. The nurse's duty to advocate echoes Segesten's (1993) advocating out of conviction as well as advocating due to professional commitment as identified by Lindahl and Sandman (1998) and McGrath and Walker (1999). Patients' fear of medical authority and direct patient requests for advocacy appear to be unique findings by Mallik (1997).

Mallik (1997) found that the conditions that support nurses while advocating include patient recognition of the nurse's advocacy role, significance of the nurse-patient relationship, emotional responses of the nurse, and moral justification. The nurse-patient relationship is cited by others as a component of advocacy (Chafey et al., 1998; Lindahl & Sandman, 1998; O'Connor & Kelly, 2005; Sellin, 1995; Snoball, 1996; Watt, 1997). Additional supportive conditions while the nurse is advocating are comprised of the nurse's knowledge about advocacy, the advocacy expertise of the nurse, and legitimacy of the nurse to advocate. The supportive condition of the nurse's knowledge about advocacy and advocacy expertise is a similar finding to Chafey et al. (1998), Hellwig et al. (2003), McGrath and Walker (1999), and O'Connor and Kelly (2005). Mallik's (1997) findings parallel advocacy communication strategies in other studies that promote direct communication (Martin, 1998a) as well as Snoball's (1996) use of negotiation skills. Additional advocacy strategies included indirect advocacy routes and empowering patients, which mirror findings from other researchers (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; Snoball, 1996; Watt, 1997). The potential consequences to the nurse following the advocacy actions included punishment, lowering of status, anger, and frustration. Furthermore, frustration was found as a consequence in Hellwig et al.'s (2003) research. Lowering of status and punishment reflect findings from Sellin (1995), which documented one consequence of advocating as being labeled.

In exploring the perceptions of nurse leaders regarding nursing advocacy for patients, Mallik (1998) interviewed six United Kingdom (UK) nursing leader participants in a qualitative study. The resulting themes included advocacy as a good professional practice, advocacy as a professionalization strategy, and the concept that the unique relationship between nurse and patient lends itself to advocacy. The overarching theme of career dilemma was supported by the themes of advocacy as risk-taking, advocacy as the conflict between nurses and doctors, recognition of the nurse's ability to advocate by the patient, and education of nurses to advocate. Altun and Ersoy (2003) and Foley et al. (2002) had similar findings about the need for nurses to be formally educated about advocacy. Mallik (1997) found a compatible theme of advocacy as risk-taking, as did Segesten (1993). Mallik (1998) suggests that the social factors that might influence the adoption of the advocacy role include recognition of the interaction of advocacy and patients' rights, the interaction of advocacy and the healthcare system, and the development of professional patient advocates.

Martin (1998a) investigated communication and nursing advocacy in a sample of 20 UK registered nurses using a qualitative method to analyze written reflections from the nurses. The results of the analysis indicated that parentalism did play a role in the nurses' ability to advocate effectively. The parentalism cited included behaviors on the part of nurses, physicians, and employers toward patients. Furthermore, Martin (1998a) found an environment of dependency on the part of patients that were too ill to be involved with the decision-making process. The use of specialized language, such as medical terminology, was found to be a method of control over the knowledge about the patients' care. Martin recommends communicating at a "human level" (p.155) with patients to provide the most effective advocacy for the patient, a finding that is similar to Mallik's concept of (1997) direct communication.

In further exploration of nursing advocacy, Martin (1998b) studied ritual action and nursing advocacy with a sample of nine registered nurses from the UK using a qualitative method based on written narratives from the sample. The findings indicated that the ritualized nurse-doctor relationship affected the nurse's ability to act as an

advocate, and that other ritual actions such as ward routines, ritualized nursing duties, and ritualized nursing behaviors negatively affected nurses' ability to act as effective advocates. The concept of ritualized actions as described by Martin (1998b) and its effect on nursing advocacy appears to be unique in the advocacy literature.

McGrath and Walker (1999) used a qualitative approach to explore the perceptions and experiences of advocacy in a sample of five Australian nurses from various nursing backgrounds. The resulting themes found advocacy to be a moral obligation, and that understanding and knowing the patient is essential to for effective advocacy. For the nurse to act as an advocate, McGrath and Walker found there are certain triggers, e.g., patient vulnerability, which may lead to advocacy actions. The concept of patient vulnerability being a trigger also is supported by several other studies (Mallik, 1997; O'Connor & Kelly, 2005; Sundin-Huard & Fahy, 1999). The nurses in McGrath and Walker's study stated that they considered the consequences of advocating before acting as advocacy and realized that difficulties may arise from advocating. As reflected in the work of multiple authors (Lindahl & Sandman, 1998; Mallik, 1997; McGrath & Walker, 1999; O'Connor & Kelly, 2005), the nurses in McGrath and Walker's study indicated that advocacy was a professional commitment to the patient. The findings additionally indicated that the nurse must become an effective advocate to fulfill the role of advocate. Lastly, the outcomes of nursing advocacy may include successful, unsuccessful, or inconclusive outcomes, as demonstrated in findings from Breeding and Turner (2002).

Specific situational nursing advocacy was explored by McSteen and Peden-McAlpine (2006) in a phenomenological study of nurses who act as patient advocates with dying patients. Seven registered nurses with end-of-life care experiences participated in the interviews. Salient findings included acting as a guide during transition at the end of life, acting as a liaison between the healthcare team and the family, and acting to support the meaning of the illness to the patient and family. Due to the highly specialized nature of this type of advocacy, its findings of acting as a guide and supporting the meaning of the illness are unique. However, acting as a liaison is

manifested in other nursing advocacy studies as navigating the system (Hellwig et al., 2003), coordination with the system (Chafey et al., 1998), bridging the gap between the patient and healthcare system (O'Connor & Kelly, 2005), and using organizational structures to act as an advocate (Sellin, 1995).

Moral orientation and nursing advocacy were examined by Millette (1993) in a study of 500 registered nurses in Massachusetts. Millette studied the nurses' preference for various models of advocacy and the relationship of the preferred models and demographic factors. The findings indicated that the client advocacy model had the most appeal for staff nurses. Staff nurses were more likely to approach moral decisions within a context of care. According to Millette, the justice orientation to advocacy is more likely to be selected by a nurse in a managerial position.

O'Connor and Kelly (2005) investigated Irish nurses' perception of advocacy and how those nurses enacted their role as patient advocates using a qualitative focus group design with 20 nurses. Causal conditions for nurses to act as advocates included patient vulnerability, obligation of the nurse, and moral obligation. The causal condition of patient vulnerability is reflected by many authors (Mallik, 1997; McGrath & Walker, 1999; Sundin-Huard & Fahy, 1999), as is the obligation of the nurse (Lindahl & Sandman, 1998; Mallik, 1997; McGrath & Walker, 1999). According to O'Connor and Kelly (2005), the context of the nursing advocacy action was at the intimate nurse-patient level. The intervening conditions of nursing advocacy included the nurse-patient relationship, nursing knowledge and expertise, and the nurse's relationship with others. Action strategies of the advocacy included use of expert knowledge and challenging traditional power structures, which are similar to findings from Hellwig et al. (2003), McGrath and Walker (1999), and Sellin (1996). The consequences of nursing advocacy included positive outcomes for patients; however, the nurses experienced both positive and negative consequences. The positive and negative consequences for the nurse are reflected in Breeding and Turner's (2002) findings. Advocacy itself was defined as bridging the gap between the healthcare system, medical profession, and the patient, which is analogous to themes from studies by Hellwig et al. (2003) and Chafey et al.

(1998). Nurses in this study perceived different levels of advocacy such as clinical advocacy and organizational advocacy.

One of the first attempts at measurement of nursing advocacy was undertaken by Pankratz and Pankratz (1974), who developed the Nursing Autonomy and Patients' Rights Questionnaire that measures nursing autonomy and nurses attitudes toward patient rights. Measures of autonomy are linked by the authors to nurses' ability to advocate for patients. A total of 702 nurses of various backgrounds and in five settings were sampled to complete the questionnaire. Higher scale scores on the Nursing Autonomy and Patients' Rights Questionnaire correlated with higher education levels and with higher levels of specialization.

In a more specialized sample, neonatal intensive care nurses' advocacy on behalf of infants using a qualitative approach with 20 neonatal nurses was studied by Penticuff (1989). The findings indicated the pressures to act as a nurse advocate included innate characteristics of the nurse such as caring, beliefs, and observing infant suffering without benefit. Beliefs were found to be a factor by Breeding and Turner (2002) and Chafey et al. (1998). Additional findings in Penticuff's research indicated that the characteristics of the neonatal unit, the status of nursing on the unit, and the communication patterns present on the unit were influential to the nurse acting as an advocate.

In another early quantitative study of nursing advocacy, Perry (1984) studied relationships between scores on the Tennessee Self Concept Scale and the Nursing Autonomy and Patients' Rights Questionnaire in her study of 104 nurses of various backgrounds in Missouri. The results indicated a significant association between self-concept and advocacy, and a significant correlation between autonomy and the highest degree held in nursing.

Segesten's (1993) qualitative study of 32 Swedish nurses' lived experiences illustrated that patient advocacy is composed of the following components: a powerless patient, issues concerning the patients' own will, and an adversary. The powerless patient is analogous to the vulnerable patient found in other studies (Mallik, 1997; McGrath & Walker, 1999; O'Connor & Kelly, 2005; Sundin-Huard & Fahy, 1999). Segesten found

that nurses' actions are triggered by a situation causing the nurse to act as an advocate out of conviction similar to the obligation, or duty, of the nurse to act as an advocate in other studies (Lindahl & Sandman, 1998; Mallik, 1997; McGrath & Walker, 1999; O'Connor & Kelly, 2005). The advocacy actions resulted in an additional workload and risk-taking on the part of the nurse advocate. Risk-taking is similar to the lowering of status and punishment theme identified by Mallik (1997), risk-taking as a career dilemma found by Mallik (1998), and Sellin's (1995) finding of the consequence of acting as an advocate can lead to being labeled.

Further qualitative research into nursing advocacy was undertaken by Sellin (1995), who explored patient advocacy among 40 nurses employed in institutional nursing. Findings from this study indicated that definitions of advocacy meant standing up for the patient, protecting the patient, and acting on the patient's behalf. These three definitions mirror related themes found in studies by Breeding and Turner (2002), Chafey et al. (1998), Foley et al. (2002), and Watt (1997). Strategies used by the participants while advocating resembled organizational structures described in Chafey et al. (1998) and Hellwig et al. (2003). The participants in Sellin's study indicated that strategies of advocacy additionally included speaking out to other healthcare professionals and physically refusing to allow a procedure to take place, which is similar to the theme of protecting the patient in Foley et al. (2000). The strategy of risk assessment used by the participants included being labeled or being a target, which reflects Mallik's (1997) lowering of status or punishment. The factors influencing the nurse's advocacy actions included unit culture, as was described in Penticuff's (1989) work. The nurses' personal and professional characteristics were found to be an influential factor, similar to Penticuff's (1989) findings. Sellin additionally found that the quality of the nurse-patient relationship was an influential factor in nurse advocacy, which is similar to other studies (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; Snoball, 1996; Watt, 1997). A majority of the participants indicated that caring was the central concept to advocacy.

The perceptions, understandings, and experiences of acting as a nurse advocate were studied by Snoball (1996) in her interpretive qualitative study. The 15 UK medical-surgical nurse participants stressed the importance of building a therapeutic relationship and relating well with the patient to be an effective advocate; these findings mirror the nurse-patient relationship described in other studies (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; Sellin, 1995; Watt, 1997). The environment of care was influential in the ability of the nurse to act as an advocate, a finding which corresponds with studies by Chafey et al. (1998), Penticuff (1989), and Sellin (1995). Snoball's findings include defining reactive advocacy as reacting to the patient's immediate needs, and proactive advocacy as a social type of advocacy, i.e., advocacy for a group of patients within a healthcare organization.

In a more limited spectrum of practice, Australian intensive care unit (ICU) nurses involved with end-of-life advocacy were studied using an ethnographic methodology by Sorensen and Iedema (2005). Major findings included that economic imperatives and primacy given to medical interventions impeded the nurses' ability to advocate. Additionally, the medical and nursing conflict, when combined with a lack of nursing authority, acted to further impair nurses' ability to act as an advocate in end-of-life care. The medical-nursing conflict is reflective of work by Chafey et al. (1998) and Martin (1998b), in that the physician-nurse relationship is central to effective advocacy.

The experience of moral distress and advocacy was studied by Sundin-Huard and Fahy (1999) using a qualitative approach with a sample of 10 Australian critical care nurses. The moral distress experience prompted attempts by the nurses to advocate for vulnerable patients, itself akin to Breeding and Turner's (2002) belief in rightness, Lindahl and Sandman's (1998) acting as a moral agent, and McGrath and Walker's (1999) & O'Connor and Kelly's (2005) advocating out of moral obligation. The nurses experiencing moral distress considered taking on the act of advocating for their patients in three ways. First, the nurse may anticipate the negative reactions to advocacy, causing them to not act as an advocate. Second, the nurse uses covert communication to alleviate the suffering of patients, a method similar to the indirect communication found in

Mallik's (1997) study. Third, the nurses may engage in direct advocacy, however risky it may be to their careers; this action is similar to the risk-taking in Segesten's (1993) and Mallik's (1998) studies as well as the consequences of punishment found in Mallik's (1997) study.

Thacker (2008) studied nursing advocacy behaviors in end-of life nursing care using a mailed survey of 317 participating nurses. The study found that the participants reported frequent contact with the dying patient, but only modest end-of-life education. Thacker did not find significant differences in the level of experience in regards to the ability to advocate, which is similar to the finding by Vaartio et al. (2006). Major supports to practicing advocacy in this study included managerial support, communication, nurse beliefs, and compassion. Communication as a significant part of nursing advocacy is described in other advocacy studies (Godkin, 2006; Martin, 1998a), as is nurse beliefs (Chafey et al., 1998; Foley et al., 2002; Perry, 1984). The most common barriers to advocacy included the physician, the patient's family, and fear. Physician support is implicated in several studies in regard to the impact on nursing advocacy (Chafey et al., 1998; Hellwig et al., 2003; Sorensen & Iedema, 2006). The important role of the patient's family appears to be a unique finding, and may be due to the specialized nature of end-of-life nursing care.

A unique study of nurses' and patients' perspectives of the definition of advocacy was undertaken by Vaartio et al. (2006). The authors explored the advocacy experience for the nurses and patients using a Finnish sample of 22 patients and 21 medical-surgical nurses. Nursing advocacy was defined as better than good care, empowerment of patients, a respect for patients' rights, and showing respect as a manifestation of professional duties. Empowerment of patients as advocacy is reported in many other studies (Chafey et al., 1998; Lindahl & Sandman, 1998; Mallik, 1997). Nurses and patients described advocacy as common in practice. The nurse participants indicated that no particular education was needed to act as an advocate, which contrasts to the finding of learning advocacy on the job in Foley et al.'s (2002) study, Altun and Ersoy's (2003)

findings of increased awareness of advocacy after education, and Davis et al.'s (2003) finding of lack of preparation for the advocacy role.

Watt (1997) explored nursing advocacy in a sample of eight Australian nurses using a grounded theory methodology. The emergent themes included conditions that appear to be the basis of nursing advocacy, such as respect for human rights and the relationship between the nurse and the patient. The relationship between nurse and patient as a part of advocacy is found in several other studies (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; Snoball, 1996). Watt found that the processes involved in the concept of advocacy include informing, supporting, and representing patients in the clinical setting. The finding of informing is similar to that of educating the patient, as reported by Breeding and Turner (2002) and Hellwig et al. (2003). Supporting patients as a form of advocacy is similar to findings from Breeding and Turner's (2002) study; representing the patient corresponds to acting as the patient's voice theme found in Foley et al.'s study (2000).

SYNTHESIS OF NURSING ADVOCACY RESEARCH

For the purposes of this study, major findings for each of the individual studies are clustered into four themes to assist in the synthesis of the literature: 1) components of nursing advocacy; 2) contributing influencing factors; 3) consequences of nursing advocacy; and 4) nursing education related to nursing advocacy. Studies cited in the components used a qualitative methodology unless otherwise indicated.

Components of Nursing Advocacy

The concept most frequently cited as a component of nursing advocacy research involves acting on the behalf of a patient. Chafey et al.'s (1998) study revealed that nurses defined advocacy as intervening on behalf of a patient within a system, resulting in nurses' actions of speaking, fighting, and standing up for patients. Similar findings of speaking out and speaking for patients were identified by Hanks (2008a). Foley et al.'s (2000) study of nursing advocacy among military nurses resulted in a theme in which advocacy was enacted via the nurse being the patient's voice. Acting as a guide or liaison is cited by McSteen and Peden-McAlpine (2006) as a component of nursing advocacy in

the nursing care of dying patients. Similar findings of protecting patients and speaking for patients as a component of nursing advocacy are cited in Sellin's (1995) study of nurses. Sellin's other salient findings included advocacy as protecting the client. Foley et al.'s (2000) study of military nurses included an emergent theme of advocacy as preserving personhood. In a study of Irish nurses, O'Connor and Kelly (2005) defined advocacy as using expert knowledge to advocate effectively, challenge traditional healthcare power structures, and bridge the perceived communication gap between patients and other professions and the healthcare system. In addition, empowerment of patients as a nursing advocacy theme is found in several studies (Chafey et al., 1998; Hellwig et al., 2003; Lindahl & Sandman, 1998; Mallik, 1997; Vaartio et al., 2006).

Additional components of nursing advocacy include relationships and communication between the nurse and patient. Dialysis nurses formed a strong nurse-patient relationship with their patients in some instances (Godkin, 2006), although this may be due to the specialized nature of dialysis care and the continuous chronic care of the dialysis patient. In another specialized nursing practice arena, i.e., end-of-life care, Thacker (2008) indicated that communication was a support to nursing advocacy. Nurse case managers indicated nursing advocacy included relationship building with other healthcare professionals (Hellwig et al., 2003), a finding similar to Swedish nurses describing advocacy as building caring relationships with patients (Lindahl & Sandman, 1998). Analogous themes were noted in a British study indicating that nursing advocacy involved developing a therapeutic relationship between the nurse and patient (Snoball, 1996). A parallel theme of improving communication to enhance advocacy emerged in Mallik's (1998) research with United Kingdom nursing leaders. Martin (1998a) recommends communicating at a "human level" (p. 155) to act as an effective nurse advocate.

The concept of caring as a component of nursing advocacy evolved in the qualitative portion of Millette's (1993) study and is additionally reflected in Sellin's (1995) work that describes caring as central to advocacy. Vaartio et al.'s (2006) Finnish study of nurses and patients found that nursing advocacy was defined as exceptional care

that went beyond good care, although good care was not clearly defined to indicate nursing care or caring behaviors. Watt's (1997) Australian study found an analogous theme of respect, and Watt asserted that advocacy can exist when there is respect for patients and patients' rights.

Educating and informing the patient is cited as an element of nursing advocacy. It includes educating that helps to empower the patient such as that indicated by Hellwig et al. (2003). Similar findings by Breeding and Turner (2002), Chafey et al. (1998), and Watt (1997) indicate that education and informing is a part of nursing advocacy.

INFLUENCING FACTORS

Several influencing forces factor into the nurse advocacy process. Intrinsic characteristics of the nurse are cited as one of the critical factors in the nurse's ability to act as a nursing advocate (Penticuff, 1989; Sellin, 1995). The primary component characteristics of a nurse's self-concept, personal values, confidence of the nurse, and personal beliefs influence nurse's ability to advocate (Chafey et al., 1998; Foley et al., 2002; Perry, 1984). Additional components that compelled the nurse to advocate include emotional and moral distress (Penticuff, 1989; Sundin-Huard & Fahy, 1999), moral obligation (McGrath & Walker, 1999), and vulnerable clients with unmet needs (Hanks, 2008a; Mallik, 1998; O'Connor & Kelly, 2005; Segesten, 1993).

The work setting is cited as an important factor in nurse advocacy. Chafey et al. (1998) and Hellwig et al. (2003) referred to positive physician support and behavior as supportive to nursing advocacy actions. In addition, the work environment can be an influential factor in nursing advocacy and may help determine the effectiveness of the advocacy (Chafey et al., 1998; Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995). As a subcomponent of the work environment, Martin (1998b) cites ritualized nurse-doctor relationships and ritualized nursing activities as affecting the nurse's ability to act as an advocate, as did Sorensen and Iedema's (2005) study of intensive care nurse's advocacy in end-of-life care.

Consequences of Nursing Advocacy

The consequences of nursing advocacy can result in a career dilemma and is viewed by some study participants as risk-taking (Mallik, 1997). Effective advocacy is found to be thwarted by feelings of frustration (Hanks, 2008a; Hellwig et al., 2003; Mallik, 1998) and anger (Mallik, 1998). Consequences of being a nurse advocate can lead to punishment and lowering of status (Mallik, 1998; Segesten, 1993), a disruption of collegial relationships (Sellin, 1995), and being labeled as disruptive (Sellin, 1995).

Nursing Education Related to Nursing Advocacy

One of the dominant themes identified in several nursing advocacy studies was nursing education and nursing advocacy. Altun and Ersoy (2003) found that nursing ethics courses are effective in developing the role of patient-advocate in nursing students. In one study, levels of education in practicing nurses affected perceived assertiveness, which in turn leads to advocacy (Kubsch et al., 2003). A higher degree attainment supported higher correlation with an autonomy scale, in which increased education is thought to be a liberating force (Pankratz & Pankratz, 1974). In addition, specialization in nursing was associated with increased autonomy scores (Pankratz & Pankratz). Perry's (1984) study supported the concept of an association of nursing education autonomy by finding a positive correlation between autonomy and highest degree held. Mallik's (1997) study indicates that acting as an advocate may be dependent on education level, with participants indicating that specialized nursing knowledge strengthened the ability to advocate. Foley et al.'s (2002) study of military nurses indicated that nurses learned advocacy by observing other practicing nurses advocate, and that nursing advocacy was not effectively taught in nursing programs attended by the participants; this theme is similarly reflected in Hanks' study (2008a). Additional related findings are echoed in the study of Japanese nurses by Davis et al. (2003), which found little educational preparation for the advocate role. Contrary to other research findings, Vaartio et al. (2006) indicated that participants who felt capable to act as a nurse advocate were not associated with level of nursing education, formal advocacy education, or the amount of nursing experience; however, the authors did not explicate the reason for these findings.

This finding was similar to Thacker (2008), in that level of education was not found to be a contributing factor in the ability to advocate.

Critique and Analysis of the Nursing Advocacy Literature

As detailed above, the existing nursing advocacy research varies in several aspects according to the rigor of the actual research and the researchers' expertise. Author credentials for performing the type of research cited in the article is lacking in a number of studies (Altun & Ersoy, 2003; Mallik, 1997; Mallik, 1998; Martin, 1998a, Martin 1998b; O'Connor & Kelly, 2005; Pankratz & Pankratz, 1974; Snoball, 1996; Sorensen & Iedema, 2005; Thacker, 2008; Watt, 1997). The specified method of qualitative research was not cited in several studies (Chafey et al., 1998; Kubsch et al., 2003; Martin, 1998a; Martin, 1998b; McGrath & Walker, 1999; Millette, 1993; Penticuff, 1989; Segesten, 1993). Mallik (1997) and O'Connor and Kelly (2005) indicated using concept analysis methods in their studies as a process in the qualitative approaches, but neither author presented information on the results of the concept analysis. The use of newly developed and untested questionnaires occurred in several of the quantitative studies (Altun & Ersoy, 2003; Davis et al., 2003; Kubsch et al., 2003, Thacker, 2008). Data analysis procedures were not specified in several of the qualitative studies (Kubsch et al., 2003; Mallik, 1997; Mallik, 1998; Martin, 1998a; Martin, 1998b; Millette, 1993; O'Connor & Kelly, 2005; Penticuff, 1989; Segesten, 1993; Sellin, 1995). Moreover, the findings in nursing advocacy research may be culturally-bound; for example, Altun and Ersoy's (2003) Turkish study and Davis et al.'s (2003) Japanese study may not be generalizable to other Western countries. Applicability may be a concern with several of the qualitative studies due to the specific samples used, such as those with military nurses (Foley et al., 2000; Foley et al., 2002), dialysis nurses (Godkin, 2006), nursing case managers (Hellwig et al., 2003), or end-of-life care (Sorensen & Iedema, 2005; Thacker, 2008).

ADVOCACY RESEARCH IN OTHER DISCIPLINES

Although this study is concentrated on protective nursing advocacy for patients, advocacy research has been performed by experts in other disciplines, e.g., medicine, social work, family violence. Grace (1998), who is a nurse, performed a philosophical

concept analysis of the concept of advocacy from the perspective of health care professionals in the health care setting. Grace's analysis of the definition of advocacy contains some aspects similar to the forthcoming discussion on nursing advocacy, but is more inclusive of all health care professionals, as exemplified in the following passage on systemic problematic institutional practices and the call for collective advocacy:

However, all the involved nursing professionals together with other nursing and health care professionals, whether or not they actually experienced such situations, on being made aware of them have a collective obligation, as articulated in their 'codes', to criticize social policy arrangements which facilitate institutional injustices (p. 220-221).

Similar to the consequences of nursing advocacy actions, other disciplines contend that advocacy by a particular group is not always successful. McDermott and Garofalo (2004), writing from the criminal justice perspective, noted that victim advocacy in domestic violence can actually lead to disempowerment on the part of battered women. The authors argue that disempowerment is an action of domestic violence advocates, in that the advocate becomes a paternalistic figure "presuming to know better than a victim what is in her own best interests" (p.1251). The anthropologist Schow (2006) studied domestic violence advocacy from the cultural perspective of the advocates using a grounded theory methodology. The findings compared to the findings from nursing studies in that the domestic violence advocates noted a lack of formalized training regarding advocacy (Davis et al., 2003; Foley et al., 2002; Hanks, 2008). In addition, this study found that the advocates wanted to protect their clients from harm, a theme similar to several nursing studies (Chafey et al., 1998; Sellin, 1995). Additionally, sociologists Dunn and Powell-William (2007) studied victim advocates in domestic violence using a qualitative approach. Salient themes that emerged included a struggle on the part of advocates of balancing the individual rights of the victims to self-determination in the context of forces that trap the battered women to be viewed as victims. This balancing act on the part of advocates echoes similar nursing advocacy studies citing acting as a liaison or navigating a system as part of the advocacy role (Chafey et al., 1998; Hellwig et al., 2003; O'Connor & Kelly, 2005; Sellin, 1995).

Additional examples of advocacy research include the experiences of independent advocates in mental health (Carver & Morrison, 2005), which concluded that the mental health advocates encountered ignorance of the advocate role and resistance to the advocates' presence. This finding mirrors similar findings in nursing advocacy studies, which indicated that a supportive environment and physician support enhanced the advocacy abilities (Chafey et al., 1998; Martin, 1998b).

NURSING ADVOCACY MODELS

In this study, philosophical underpinnings of nursing advocacy are segregated from author-identified models of nursing advocacy. Bu and Jezewski (2006) performed a concept analysis of the concept of patient advocacy using the Walker and Avant (1995) method of concept analysis, with an aim to form a basis of concept clarification and subsequent development of a mid-range nursing advocacy theory. Bu and Jezewski (2006) purport to have developed a mid-range theory that encompasses patient advocacy that other models of nursing advocacy have not included. The core attributes that are cited include: 1) safeguarding patient autonomy; 2) acting on behalf of patients; and 3) championing social justice in the provision of health care.

A concern with the Bu and Jezewski's proposed model is cited in Fowler's (1989) publication about a "social advocacy model" (Bu & Jezewski, 2006, p. 103). Further examination of the original publication (Fowler, 1989) demonstrated that Fowler did propose a social advocacy model. However, Fowler did not explicate literature sources used to propose this model, nor did Fowler cite any research that she had performed to develop this model. In fact, the social advocacy model as written by Fowler uses only two literature citations—one from 18 years earlier written by Freeman (1971) and the ANA 1985 "Code of Ethics" (ANA, 1985). It is this lack of research and literature evidence that appears to weaken the argument for using Fowler as a major attribute of social advocacy. In addition, Bu and Jezewski fail to mention the contribution of Kohnke (1982) in regards to social advocacy. Kohnke explained that "since you are a member of that community, you will be working both for yourself and the larger community" (Kohnke, 1982, p. 10), implying a community level of advocacy. While there is a paucity

of nursing theory regarding nursing advocacy, Bu and Jezewski (2006) appear to have compiled the work from these authors to formulate a mid-range theory, in this case using a concept analysis method (Walker & Avant, 1995) that has been criticized by several authors as being an oversimplified Wilsonian method (Hupcey et al., 1996; Morse, 1995; Morse et al., 1996), and which has been subsequently revised (Walker & Avant, 2005). In addition, several of the articles cited as empirical referents of patient advocacy are not actual nursing research results, but rather philosophical stances proposed by various authors.

The Sphere of Nursing Advocacy Model (Hanks, 2005) is a model synthesized by analysis of case studies using a grounded theory-inspired approach, which resulted in a pictorial model and written statements. The Sphere of Nursing Advocacy Model assists to describe nursing advocacy and the interaction between the nurse, patient, and the environment. The model is further explicated in its relationship to the PNAS in the “Theoretical Foundations” section of this chapter.

Conceptual Structure for Client Advocacy (Cho, 1997) is a model of nursing advocacy derived from a hybrid concept analysis method in which an analysis of the literature surrounding nursing advocacy and actual evidence from nursing practice are combined to create an explanatory model. Cho’s model and the contribution of the Conceptual Structure for Client Advocacy to the PNAS are discussed further under in this chapter in the “Theoretical Foundations” section.

Additional models that lend to the discussion of nursing advocacy include Grace’s (2001) Professional Advocacy Model based on her own dissertation research defining advocacy (Grace, 1998). In the Professional Advocacy Model, nursing has the perspective of focusing on professional role of advocacy as a professional role objective as a collective behavior, rather than an individualistic model. In this manner, both the promotion of advocacy for nursing and society or individuals in society can occur.

Jezewski (1993) uniquely proposed the model of culture brokering as a model for nursing advocacy. In this particular model, healthcare is seen as a culture, and nurses can utilize strategies such as negotiating to provide advocacy for their patients, thus leading

to a resolution and overcoming barriers to healthcare access. The premise of this model is that patients are not acculturated to the healthcare system, which, in turn, brings about the need for nurse advocacy to help with culture brokering so that the patient can have optimal care.

Godkin's (2006) model describing the relationship between dialysis nurses and their patients is previously described in the review of literature, as this model was based nursing research performed by Godkin. The model encompassed by Godkin's work may be a result of the specialized nature of dialysis nursing care, and the applicability of the findings to other types of nursing care may be difficult to ascertain.

Theoretical Foundations

Although there are several philosophical stances related to nursing advocacy, there is not a substantial nursing theory to guide nursing advocacy research. Bu and Jezewski (2006) have proposed a mid-range theory; however, this model lacks empirical support for the social advocacy construct. The lack of this support for social advocacy in Bu and Jezewski's work indicated the need to examine another theoretical basis for the PNAS. In addition, Bu and Jezewski's proposed theory is more extensive than the protective nursing advocacy that the PNAS measures.

For the purposes of this study, the theoretical basis of the Protective Nursing Advocacy Scale is the protective aspects of nursing advocacy for patients drawn from three conceptual models: 1) Cho's (1997) "Conceptual Structural Model of Client Advocacy"; 2) Ingram's (1998) advocacy domains identified in "The Nurse as the Patient's Advocate"; and 3) Hanks' (2005) "Sphere of Nursing Advocacy" model. These three conceptual models focusing on patient protection as function of nursing advocacy provided the theoretical basis for development of the PNAS and the scale items.

Cho's Conceptual Structure for Client Advocacy

Cho (1997) developed a conceptual structural model to explain client advocacy based on a hybrid concept analysis method. In Cho's model (Table 2.1), six resulting statements were developed as the structure of client advocacy. In the development of the PNAS, two facets of nursing advocacy were identified from all of the actions in Cho's

model that pertained to protecting a patient. For the purposes of the PNAS, the following two statements from Cho's model will be used as constructs: 1) acting on behalf of clients; and 2) speaking on behalf of clients. These two constructs were chosen for the PNAS because they are reflective of a protective advocacy role, which is the basis of the PNAS.

Table 2.1: Advocacy Behaviors Identified by Cho's (1997) Conceptual Structure for Client Advocacy

1)	Providing Information
2)	Providing Technical Care
3)	Monitoring and/or Assuring Medical Quality
4)	Taking the Mediator Role
5)	Acting on Behalf of Clients
6)	Speaking on Behalf of Clients

Advocacy Domains Identified by Ingram

Ingram (1998) identified four domains of nursing advocacy for patients based on the existing literature. The four domains (Table 2.2) include the advocate as a: 1) guardian of patient's rights; 2) conservator of the patient's best interests; 3) protector of patient's autonomy; and 4) champion of social justice. For the purposes of the PNAS, the following domains are used as constructs in the PNAS: 1) the advocate as guardian of patients' rights; and 2) the advocate as protector of patients' autonomy. These two domains were selected due to the protective character of the domains. The advocate as a conservator of the patient's best interest is identified by Ingram as a paternalistic view of the nurse-patient advocacy relationship and is incongruent with the underlying premise of the PNAS. The nurse advocate acting as a champion of social justice is beyond the relationships measured by the PNAS, as the PNAS is a scale examining the nurse-patient relationship, not the relationship of nurse, patient, and societal norms.

In further explanation of the selection of the two domains from Ingram (1998), the advocate as a guardian of patients' rights refers to the legal definition of the advocate as

“the act of pleading the cause for another” (Gates, 1994, p. 1), or as “a person who assists, defends, pleads, or prosecutes for another” (Garner, 2000, p. 43). The advocate as guardian of patients’ rights proposes that the nurse’s actions, which are guided by beneficence, protect the patient by assisting the patient to make decisions or receive care. The advocate as protector of patients’ autonomy is drawn from the works of Gadow (1989) and Kohnke (1982), in which the nurse acts to support the patient in making decisions about care. This protection is particularly important when the nurse is working with vulnerable patients who are unable to voice their concerns or participate in the decision making process (Gadow, 1989). The two domains selected, the advocate as guardian of patients’ rights and the advocate as protector of patients’ autonomy, are based on the concept that the PNAS is measuring protective nursing advocacy.

Table 2.2: Four Domains of Nursing Advocacy Identified by Ingram (1998)

1)	The Advocate as Guardian of Patients’ Rights
2)	The Advocate as Conservator of Patients’ Best Interest
3)	The Advocate as Protector of Patients’ Autonomy
4)	The Advocate as Champion of Social Justice

Sphere of Nursing Advocacy Model

The “Sphere of Nursing Advocacy” (SNA) model (Hanks, 2005) is a conceptual model describing protective nursing advocacy and the interaction between the nurse’s advocacy actions and the patient in the clinical setting. The SNA model was developed using a grounded theory-inspired approach in which case studies from the author’s acute care experiences were analyzed. Analyses of the cases were performed until saturation and redundancy in the data occurred. The resulting common themes led to delineation of the concept of the SNA model and the assumptions and propositions of the SNA model (Hanks, 2005). Statements one, two, and four from the SNA model (Table 2.3) were selected as constructs for this instrument.

Table 2.3: Sphere of Advocacy Model Statements (Hanks, 2005)

1) Nursing advocacy provides a protective shield for the client in vulnerable situations where the client may have varying degrees of in his/her own ability to self-advocate within the external environment/circumstances.
2) Nurses provide a semi-permeable sphere of advocacy between their client and the client's external environment allowing for protection of the client, yet allowing the client to self-advocate.
3) The client and the nurse can be simultaneously acting as advocates: the nurse may be advocating on the client's behalf, and the client may be self-advocating through the open areas of the nurse's sphere of advocacy called pores.
4) If the nurse provides a protective shield of advocacy for the client, then the client is protected from the external environment.
5) If the client is able to self-advocate, then the client will be able to work through the pores in the nurse's sphere of advocacy to interact with the external environment regardless of setting.

Statements three and five were not selected from the SNA model (Table 2.3) as part of the theoretical basis of the PNAS because both of these statements refer to the patients' ability to self-advocate, which is not congruent with the protective advocacy as measured by the PNAS.

Statements one, two, and four were selected from the SNA model (Table 2.3) because they relate to protective advocacy behaviors demonstrated by nurses. Statement one of the SNA model indicates that nurses will provide a protective shield between the vulnerable patient and the external environment when the patient may have varying ability to self-advocate. The second statement of the SNA reflects that nursing will provide a semi-permeable protective shield of advocacy for the patient, but will not be paternalistic in the approach to nursing advocacy, as the patient is still able to self-advocate. The final statement (number four), which is used as the basis of the PNAS items, indicates that the nurse will provide a protective shield of nursing advocacy for the

patient, thus protecting the patient from the environment. These three statements from the SNA model support nurses providing protective, but not paternalistic, advocacy for the patient.

Importance of Models to Instrument

The three conceptual models from Cho (1997), Ingram (1998), and Hanks (2005) that were used for the development of the PNAS items were selected because they are reflective of the protective aspects of nursing advocacy, the focus of the PNAS. Moreover, the previously cited nursing research regarding nursing advocacy provided additional mediating variables related to the ways in which nursing advocacy is measured including: 1) education; 2) support from institutions and other healthcare professionals; and 3) risk-taking on the part of the nurse while advocating.

Specific items in the PNAS are related to each of the conceptual models from Cho (1997), Ingram (1998), and Hanks (2005). The two statements from Cho's model related to PNAS items include: 1) acting on behalf of clients; and 2) speaking on behalf of clients. Acting on behalf of clients is the basis of the following PNAS items:

- 1. Patients need nurses to act on the patient's behalf*
- 5. I am acting on my patient's behalf when I am acting as my patient's advocate*
- 8. I am acting as the patient's representative when I am acting as the patient's advocate.*
- 25. I am ethically obligated to speak out for my patients when they are threatened by harm*

Speaking on behalf of clients is the basis of the following PNAS items:

- 6. I speak out on my patient's behalf when I am acting as my patient's advocate*
- 7. I am acting as my patient's voice when I am advocating for my patient*

Ingram's advocacy domains used as constructs include: 1) the advocate as guardian of patients' rights; and 2) the advocate as protector of patients' autonomy. The construct of the advocate as guardian of patients' rights are included in the following PNAS items:

3. As the nurse, I keep my patient's best interest as the main focus of nursing advocacy

9. I am advocating for my patient when I protect my patient's rights in the healthcare environment

32. I may be punished for my actions by my employer when I inform my patients of their own rights

35. When nurses act as patient advocates, they are not supporting patients (negative item)

Ingram's construct of the advocate as protector of the patient's autonomy that is used as a foundation of the PNAS is reflected in the following PNAS items:

11. I provide patient advocacy to protect my patients only when necessary in the healthcare environment

12. Nurses that act on a patient's behalf are preserving the patient's dignity

26. Nurses that provide information to patients about patient care are acting as patient advocates

37. Nurses are acting as advocates when nurses protect the right of the patient to make his/her own decisions

SNA's (Hanks, 2005) statement numbers one, two, and four are used as the foundation of PNAS items. Statement one of the SNA indicates that nursing advocacy provides a protective shield for the client in vulnerable situations where the client may have varying degrees of in his/her own ability to self-advocate within the external environment/circumstances. The following PNAS items are reflective of this statement:

10. I am acting as a patient advocate when I am protecting vulnerable patients from harm

27. Patients have varying degrees of ability to advocate for themselves

Statement two of the SNA postulates that nurses provide a semi-permeable sphere of advocacy between their client and the client's external environment, allowing for protection of the client yet also allowing the client to self-advocate. The PNAS items related to this particular statement include:

28. Vulnerable patients need my protection in harmful situations

Statement four of the SNA denotes that if the nurse provides a protective shield of advocacy for the client, then the client is protected from the external environment. The following PNAS items are derived from this statement:

2. Nurses are legally required to act as patient advocates when patients are perceived to be in danger

24. Nurses do not provide advocacy for their patients in the clinical setting (negative item)

36. Nurses can protect patients from harmful situations by physically barring a procedure to occur

38. Nurses should not advocate for patients when treatments cause suffering without patient benefit

Additional literature resources were used for the other items contained in the PNAS. As identified earlier in this chapter, nursing advocacy is influenced by various factors in the workplace setting. Intrinsic factors were found to be a critical factor in nurses' ability to act as a nursing advocate. These factors include nursing characteristics such as confidence of the nurse, personal values, and personal beliefs (Chafey et al., 1998; Foley et al., 2002; Perry, 1984)

19. I am able to be a better patient advocate because I have more self-confidence

20. Nurses that are committed to providing good patient care are better patient advocates

21. Increased dedication to nursing increases the nurse's ability to act as a patient advocate

23. I doubt my own abilities to provide advocacy for my patients

41. I am not an effective advocate because I am suffering burnout

42. Because I don't like working as a nurse, I am less willing to act as a patient advocate

43. I lack the dedication to the nursing profession to act as a patient advocate

The work setting is cited as an important factor in one's ability to act as a nurse advocate, including such concepts as physician support (Chafey et al., 1998; Hellwig et al., 2003) and determining the effectiveness of the advocacy (Chafey et al., 1998; Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995). The PNAS items reflective of the work setting influence on nursing advocacy include:

14. I utilize organizational channels to act as a patient advocate

15. I would benefit from the advice of ethics committees to be a more effective patient advocate

16. Lack of time inhibits my ability to act as a patient advocate

17. Nurses practice patient advocacy more when the nurse is working in a tolerant work environment

18. Nurses who are supported by physicians are better patient advocates

40. I am less effective at speaking out for my patients when I am tired

Education and experience regarding nursing advocacy can be additional influencing factors in nursing advocacy. Formal education regarding nursing advocacy and higher level of nursing education has been indicated as strengthening the ability to advocate (Altun & Ersoy, 2003; Mallik, 1997; Pankratz & Pankratz, 1974; Perry, 1984) as well as practical experience (Foley et al., 2002). This is reflected in the following PNAS items:

4. Nurses who understand the benefits of patient advocacy are better patient advocates

13. I scrutinize circumstances that cause me to act as a patient advocate

22. Increased nursing education enhances the nurse's effectiveness in patient advocacy

29. Increased nursing experience does not increase the nurse's ability to act as a patient advocate (negative item)

39. The more years that I work in nursing, the less effective I am at advocating for my patients

Lastly, there is the concern on the part of nurse advocates about the consequences of their nursing advocacy actions. The consequences of nursing advocacy include that the advocacy action may be viewed as risk-taking (Mallik, 1997) and create feelings of frustration and anger (Hellwig et al., 2003; Mallik, 1998). Additional consequences of being a nurse advocate can be punishment and lowering of status (Mallik, 1998; Segesten, 1993), a disruption of collegial relationships (Sellin, 1995), and being labeled as disruptive (Sellin, 1995). The following PNAS are based on the foundation of consequences:

30. I may suffer risks to my employment when acting as a patient advocate

31. Nurses that speak out on behalf of patients may face retribution from employers

33. Nurses that speak out on behalf of vulnerable patients may be labeled as disruptive by employers

34. When nurses inform and educate patients about the patient's rights in the clinical setting, the nurse may place her/his employment at risk

Existing Nursing Advocacy Instruments

The Nursing Advocacy Beliefs and Practices Scale (NABP) (Hatfield, 1991) was developed to measure patient autonomy, nursing autonomy, and agency support in a sample of 110 nurses from community health nursing agencies. The correlation coefficient for the relationship between nurses' beliefs about patient autonomy and ethical judgment was statistically significant ($r = .50$; $p = .01$), leading to the conclusion that a nurse's perception of autonomy in practice is influenced by ethical judgment.

Although adapted from the NABP scale (Hatfield, 1991) for United Kingdom nurses, the Patient Advocacy Scale (PAS) (Ingram, 1998) was used to examine those factors that were predictors of nursing advocacy. Using a convenience sample of acute care nurses ($n = 86$), Ingram concluded that two factors, educational level and attendance in ethics courses, were predictive of PAS scores. However, Ingram found the magnitude of relationships between the two variables and PAS were low: educational level ($r = .33$; $p = .002$) and ethics course attendance ($r = .26$; $p = .017$).

Bu (2005) developed the Attitudes toward Patient Advocacy Scale (APAS) to measure attitudes toward patient advocacy. This 64-item instrument measured three dimensions: 1) attitudes toward safeguarding patients' autonomy; 2) attitudes toward acting on behalf of patients; and 3) attitudes toward championing social justice in the provision of health care. The range of test-retest reliability coefficients of the instrument ranged from .94 to .96 ($n=27$), with Cronbach's alpha coefficients above .8 for the instrument and subscales ($n=459$). The APAS was designed to measure three dimensions; however, the analysis revealed a two or three factor solution that was viable (Bu & Wu, 2007). Correlations of the APAS and PNAS scores are further discussed in the Results chapter.

Nursing Ethics Instruments

Due to the paucity of established nursing advocacy instruments to provide validity, PNAS includes the use of a nursing ethical scale to support validity. Three nursing ethical scales found in the literature lend potential utility to validity of the PNAS.

Work environment is cited as a factor in nursing advocacy in several research studies (Chafey et al., 1998; Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995). The Hospital Ethical Climate Survey (HECS), a 26-item scale developed by Olson (1998), measures the ethical climate of nurses' work setting in the hospital. The HECS has a Cronbach's alpha of .91 for the entire scale and the alphas for the following subscales: patients .68; managers .92; peers .73; physicians .81; and .77 for the hospital. Construct validity for the HECS was assessed by confirmatory factor analysis.

The Ethical Issues Scale (EIS) developed by Fry and Duffy (2001) is a 35-item scale that incorporates three subscales: 1) patient care issues (14 items); 2) human rights issues (5 items); and 3) end-of-life treatment issues (13 items). The human rights issues subscale includes items relating directly to patient advocacy. Cronbach's alpha for the scale is cited as .91, and the following alphas for the subscales: end-of-life treatment .86; patient care issues .82; human rights issues .74. Construct validity was supported with use of confirmatory principal components analysis.

As a measure of the nurse's own ethical values, the Nursing Professional Values Scale Revised (NPVSR) (Weis & Schank, 2000), a 26-item instrument, measures professional nursing values based on the ANA "Code of Ethics" (ANA, 1985). The major factors measured by this instrument are caregiving and activism (Weis & Schank, 2000). The instrument items are directly derived from the ANA "Code of Ethics" (1985). Content validity for the NPVSR is provided from expert review of the instrument. Cronbach's alpha is cited as .94, indicating a high degree of reliability.

The NPVSR was selected as an instrument to provide convergent validity for the PNAS since there are NPVSR items directly related to advocacy, protection of the patient, and ethics. The NPVSR has a high degree of reliability at .94. The correlation of NPVSR and PNAS scores are further discussed in Results chapter.

Additional Instruments to Be Utilized

The Self-Esteem Scale (SES), developed by Dr. Morris Rosenberg (1989), is a unidimensional measure of global self-esteem consisting of 10 items scored on a four point Likert scale. Cronbach's alpha for the SES ranges from .77 to .88 depending on the sample cited (University of Maryland Department of Sociology, 2007). Construct validity for the SES has been demonstrated by significant associations between the SES and self-reports in the areas of depression, anxiety, and peer group reputation. The SES is utilized to provide data on the degree of acquiescence on the part of participants when completing the PNAS (Robinson et al., 1991).

GAPS IN THE LITERATURE

The preponderance of research regarding nursing advocacy is qualitative in nature. Of the quantitative studies, only one (Snoball, 1996) used an exclusive medical-surgical sample and none has used an exclusive medical-surgical sample in the United States. The current study will utilize a sample of registered nurses with experience in the medical-surgical nursing specialty. Registered nurses that are employed in the medical-surgical specialty comprise the largest segment (currently 28%) of the nursing workforce in hospital settings in the United States (U.S. Health and Human Services, 2004).

The existing nursing advocacy instruments developed by Bu (2005), Hatfield (1991), and Ingram (1998) to measure nursing advocacy are not specifically measuring nursing advocacy from a protective aspect, which is the intent of this study. The APAS (Bu, 2005) measures attitudes towards nursing advocacy in a global sense of safeguarding patients' autonomy, acting on behalf of patients, and championing social justice in the provision of health care. The PNAS is measuring nursing advocacy from a protective aspect and includes actions of the nurse, which Bu's instrument does not measure. Hatfield's (1991) Nursing Advocacy Beliefs and Practices Scale and the subsequent scale developed for UK nurses by Ingram (1998), the Patient Advocacy Scale, measure patient autonomy, nurses' autonomy, and agency support rather than advocacy directly.

Significance of PNAS Instrument

The PNAS will measure nursing advocacy using a medical-surgical nursing sample from the United States, a population that has not been thoroughly investigated regarding advocacy beliefs, actions, or behaviors. In addition, the PNAS measures nursing advocacy from the protective aspect of nursing advocacy rather than the autonomy and agency support that is measured by the Nursing Advocacy Beliefs and Practices (NABP) instrument (Hatfield, 1991) and the NABP derived Patient Advocacy Scale (PAS) developed for UK nurses by Ingram (1998). Nonetheless, some items on the NABP are similar to the PNABS, e.g., for patient autonomy the analogous item is "patients have the right to make their own choices," which is similar to the PNAS item "patients are able to advocate for themselves." However, the majority of the NABP items are based on beliefs about advocacy related to agency support and the effect of agency support on the nurse's ability to advocate as demonstrated by the following examples (Hatfield, 1991):

I am able to try new techniques with patients without getting permission from my supervisor.

Supervisors in the agency stimulate thinking about dilemmas of practice.

The agency provides help when I am dealing with an ethical dilemma in my practice.

The PNAS contains items that are more specific to the protective aspect of nursing advocacy in the nurse patient relationship and less dependent on agency support than the NABP. Examples of the protective aspect of the PNAS include the following:

I am acting as a patient advocate when I am protecting vulnerable patients from harm.

I provide patient advocacy to protect my patients only when necessary in the healthcare environment.

The PNAS measures nursing advocacy from a different perspective than the Attitudes toward Patient Advocacy (APAS) instrument, which measures attitudes toward patient advocacy (Bu, 2005). The APAS measures attitudes of nurses towards patient advocacy. Patient advocacy is defined by Bu (2005) as: 1) safeguarding patients' autonomy; 2) acting on behalf of patients; and 3) championing social justice in the provision of health care. The PNAS does share the constructs of safeguarding patients' autonomy and acting on behalf of patients, but the extent of the PNAS is limited to the protective nature of nursing advocacy. Championing social justice in the provision of health care, as addressed in the APAS, is beyond the scope of the nurse-patient relationship and is reflective of the relationship between nursing and society.

Items from the APAS reflect the broad aspect of the instrument's foundation. APAS items address the dimension of nursing advocacy that is supporting social justice, for example (Bu, 2005):

I should help patients access the health care services.

I should examine the health care institutional rules or policies to identify if any interfere with meeting patients' needs .

I should strive to assure that health programs in the institution bring equally good health care to both advantaged and disadvantaged patients. I should strive to assure that health programs bring equally good health.

The construct of social justice is not used in the development of the PNAS, as this construct is beyond the intimate nurse-patient relationship reflected in the PNAS items.

The PNAS reflects the protective aspect of the patient advocacy by using language that directly reflects protective behaviors, beliefs, or actions as demonstrated in the following examples from the PNAS:

Vulnerable patients need my protection in harmful situations.

I am ethically obligated to speak out for my patients when my patients are threatened by harm.

RATIONALE FOR STUDY

The underlying theme of the Protective Nurse Advocacy Scale is to have a quantitative measure of protective advocacy provided by nurses for their patients. From these quantitative data, methods of improving nursing advocacy for patients in the practice setting could be developed. This improvement in nurses' ability to advocate could then result in improved patient outcomes. In addition, this instrument could be a quantitative measure of evaluating nursing education about nursing advocacy.

SUMMARY OF HOW PROPOSED STUDY CLOSSES GAPS IN KNOWLEDGE

This study will help to build the body of knowledge in regards to a quantitative measurement of protective nursing advocacy using the theoretical foundations of Cho (1997), Ingram (1998), and Hanks (2005). The measurement is specific to protective nursing advocacy rather than a more global measurement of nursing advocacy as measured by Hatfield (1991), Ingram (1998), and Bu (2005). Additionally, this study sample consists of a medical-surgical nursing specialty sample from the United States, a population that has not been used exclusively as a sample in previous quantitative nursing advocacy studies. The importance and rationale for using a medical-surgical nursing specialty sample is that this specialty is the largest specialty employed in United States hospitals (U.S. Health and Human Services, 2004).

SUMMARY

In this chapter, the philosophical underpinnings of nursing advocacy were presented along with an extensive review of the nursing advocacy research literature.

Further, advocacy research exemplars from other disciplines were examined. The three models used to formulate the PNAS were described, and the relationship between the PNAS items and the theoretical framework were explicated. In addition, the present gaps in the nursing advocacy literature were reviewed, along with the rationale of this study in relation to closing those knowledge gaps. Finally, the rationale and significance of the medical-surgical nurse specialty sample was explained.

CONCLUSION

The PNAS instrument that is the subject of this study is derived from three conceptual models and salient concepts of nursing advocacy research literature. The synthesized framework of protective nursing advocacy guides this study. There are few existing nursing advocacy instruments, and none of the currently available instruments has a focus on protective nursing advocacy. In addition, there have been no published studies using an exclusively US medical-surgical nursing sample, even though this is the largest specialty in hospital-based nursing. The combined need for a reliable and valid measurement of this type of nursing advocacy and using an understudied sample of medical-surgical nurses will contribute to furthering nursing knowledge in this area.

CHAPTER 3: RESEARCH DESIGN

INTRODUCTION

This chapter describes the research design and methods utilized in the Protective Nursing Advocacy Scale (PNAS) study to determine the psychometric properties and validity of the scale. The guiding research questions for the research design of this study are: 1) What are the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations?; and 2) What is the convergent validity when using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes Toward Patient Advocacy Scale (APAS)? In this chapter, an initial presentation of the research design is reviewed. Following the research design is an explanation of the sampling method and access, data collection setting, recruitment procedures, and ethical considerations. The measurement methods and data collection processes are explicated and are followed by limitations and assumptions. Lastly, a description of the data analysis procedures is presented.

RESEARCH DESIGN

This study uses a descriptive correlational design to determine the psychometric properties of the PNAS and support validity. The use of a descriptive correlational design describes the correlation of items with each other and with the entire scale (Gliner & Morgan, 2000). A descriptive design is indicated since the PNAS is a newly developed instrument and will undergo exploratory factor analysis to ascertain the cohesiveness of the items into factors (Pedhazur & Schmelkin, 1991).

PILOT TESTING

Pilot testing of the Protective Nurse Advocacy Scale was performed to evaluate the original 38 items contained on the pilot instrument, the Protective Nurse Advocacy Behavior Scale (PNABS). The PNABS contained 38 items measuring 4 proposed factors and was administered to a convenience sample of 108 registered nurses with a minimum

of one year of medical-surgical experience (Hanks, 2008b), and is further detailed in Appendix D. The pilot data indicated that the items loaded onto five factors: Acting as Advocate, Environment and Advocacy, Protecting Patients through Advocacy, Work Status and Advocacy Actions, and Protecting Patient Rights. After the analysis was completed using exploratory factor analysis, actual wording of specific items were rewritten to provide item clarity. Four additional items were written to enhance the measurement of employment fatigue with regards to nursing advocacy. In addition, the name of the pilot instrument was changed to Protective Nurse Advocacy Scale for clarity, since the scale measures behaviors, actions, and beliefs of the registered nurse, not merely behaviors.

SAMPLING METHOD AND ACCESS

The PNAS was administered to a sample of the target population: registered nurses in the State of Texas with work experience in the medical-surgical specialty in acute care settings. Participants were recruited using a mailed cover letter that specifically recruited participation from eligible participants (Appendix C). Each potential participant was mailed a packet including the recruitment cover letter, a copy of the Protective Nursing Advocacy Scale (PNAS), Nursing Professional Values Scale Revised (NPVSR), Rosenberg Self-Esteem Scale (SES), and the Attitudes toward Patient Advocacy Scale (APAS), which are located in appendices A-C. The packets were expected to be returned by the participants within three weeks. A randomized mailing database of 5,000 medical surgical nurses obtained from the Texas Nurses Association (TNA), based on data obtained from the Texas Board of Nursing (BON), was used for selecting the sample. The PNAS has 43 items, requiring a minimum 214 study participants, with 300 being optimal (DeVellis, 2003). From the TNA mailing database, a systematic random sampling method was used to select names for mailing the packets; however, due to the low response rate, all 5,000 names on the mailing list were employed. Response rates were calculated to reflect the best representation of the target population (Gliner & Morgan, 2000). All recipients of the initial packet were sent

reminder postcards one week after the initial questionnaire was mailed (Becker et al., 2000).

Inclusion in this study was based on: 1) one year full time experience (or part-time equivalent) in the medical-surgical specialty area in an acute care setting; and 2) recognition by the State of Texas or associated Compact State to practice as a registered nurse. Exclusion criteria included: 1) nursing staff that are not currently recognized as a registered professional nurse in the State of Texas or associated Compact State; 2) less than one year full-time (or the part-time equivalent) experience in the medical-surgical specialty area working as a staff registered professional nurse.

ETHICAL CONSIDERATIONS

The participants for this study completed a written survey in a location chosen by the participants. The participants were at least 18 years of age, registered professional nurses in the State of Texas, and able to speak and understand English. In addition, the participants consented to participate by completing and returning the survey and the accompanying biodemographic data form. Refusal of consent to participate was indicated by not returning the mailed survey. This study did not involve any treatment or intervention.

Participants were recruited using a mailed letter approved by the University of Texas Medical Branch Institutional Review Board (IRB) (Appendix C). The recruiting letter included information about the purpose of the study, the role of the researcher, and the contact information for the investigator. The recruiting letter was distributed to registered professional nurses that self-identified medical-surgical experience with the Texas BON, from which the address database obtained from the Texas Nurses Association (TNA) is based. Every effort was made to recruit minorities for participation in this study.

Consent to participate was indicated by returning the completed survey forms to the researcher. The participants completed the IRB approved Biodemographic Form (Appendix A) included in the survey packet. To maintain privacy and confidentiality, the returned survey and biodemographic forms are located in a locked file drawer in the

researcher's office. Only the researcher has access to the surveys and biodemographic forms. No participant names will appear on the surveys or biodemographic forms and the data are presented as aggregate data without any individual identifiers. The participants could stop or withdraw from participation in the study at any time by not completing or returning the survey. No children or prisoners were eligible to participate in the study.

MEASUREMENT METHODS

This section includes a description of the measurement methods used in this study. The reader is referred to Appendices for reference to the actual data collection form discussed in the following sections. Reliability and validity calculations appropriate for the measurements are discussed, along with the procedures for handling missing data.

DEMOGRAPHIC DATA

Demographic data were collected in this study to determine if the participants met the inclusion criteria and to describe the characteristics of the sample. The demographic data form was developed by the author for the participants to self-report characteristics about gender, age, ethnicity, entry-level education to nursing, current level of education, and other educational degrees held. Years of experience in medical-surgical nursing, nursing, employment status, and employment title also were collected. Additionally, information about current medical-surgical certification, previous assertiveness training, and previous advocacy education were collected.

INSTRUMENT DATA

The actual PNAS items are a five-level Likert scale ranging from "strongly disagree" to "strongly agree." Although some instrumentation experts suggest not including a neutral choice in the items to reduce the chance of equivocation in selection of answers (DeVellis, 2003), the PNAS items do include a neutral category to increase variability of the items (I. Bernstein, personal communication, October 30, 2007). Positively and negatively stated items were included in the PNAS to avoid agreement bias (Robinson et al., 1991); however, the number of negatively worded items was minimized to avoid interfering with the reliability (Barnette, 2000). The reading level for

these items, in consideration of the target population, is college level. Included in Appendix B are items that comprise the Protective Nursing Advocacy Scale.

The PNAS includes three written questions about nursing advocacy actions that the participants responded to in a narrative written format (Appendix B). The content of the responses is indicated in a frequency format as part of the analysis and is used in this study to support the actual PNAS items.

The Nursing Professional Values Scale Revised (Weis & Schank, 2000), which is a 26-item scale measuring nurses' professional values based on the American Nurses Association Code of Ethics for Nurses (ANA, 1995), is used to provide validity in this study for the PNAS. The NPVSR uses a five-level Likert scale similar to the PNAS; however, the levels range from "not important" to "most important." For the purpose of this study, the total of the NPVSR scores are used to correlate with total PNAS scores.

Additional convergent validity is provided by the use of the Attitude toward Patient Advocacy Scale (APAS) developed by Bu (2005). Dissimilar to the PNAS and the NPVSR, the APAS uses a six-level Likert scale ranging from "strongly disagree" to "strongly agree." Total APAS scores are correlated with the total PNAS scores. Exemplars of APAS items are discussed in Chapter 2: Literature Review.

The Self Esteem Scale (Rosenberg, 1989) provides data to describe the sample's acquiescence to the PNAS items. The SES uses a four-level Likert scale, with half of the scale consisting of negatively-worded items. Total scores of the SES are correlated with total scores of the PNAS in an effort to determine the level of acquiescence to the PNAS items (Z. Wu, personal communication, May 16, 2007).

DATA COLLECTION PROCESS

After obtaining Institutional Research Board (IRB) approval, the PNAS was mailed, along with the biodemographical information form and recruitment letter (Appendix C), to a randomized sample of eligible medical surgical registered professional nurses in the State of Texas. Additional instruments included in the mailed packets were the Nurses Professional Values Scale-Revised (NPVSR), the Rosenberg Self-Esteem Scale (SES), and the Attitude toward Patient Advocacy Scale (APAS). The

mailed survey packets included a stamped return envelope addressed to the researcher. The time period for return of the completed surveys was 3 weeks. The returned survey and biographical demographic forms were then entered into a statistical program, Statistical Package for the Social Sciences (SPSS) for Windows version 15.0, for data analysis. Additional reminder postcards were sent to participants to increase the response rate and representativeness of the sample.

LIMITATIONS AND ASSUMPTIONS

A systematic sampling procedure was used to distribute the PNAS to a sample of medical-surgical registered nurses using a randomized list of medical surgical nurses' address obtained from the Texas Nurses Association (TNA) which is based on Texas Board of Nursing data; however, due to the low response rate, all 5,000 names on the TNA mailing list were used. Response to the mailing was voluntary, thus not all recipients of the PNAS returned a completed survey. The response rate may affect the representativeness of the sample (Waltz et al., 2005), so efforts to increase the response rate, such as reminders, were employed. Additionally, the TNA mailing list does not include all possible registered nurses in the State of Texas; rather, it represents those registered nurses that self-identify as medical-surgical nurses to the Texas Board of Nursing. The grouping of members by specialty is performed by the registered nurses indicating their own specialty, such as medical-surgical nursing, without demonstrating expertise or credentials to support the specialty claim.

DATA ANALYSIS PROCEDURES

In this section, the data analysis procedures of this study are explicated. Initially, a description of the data management is provided, followed by the statistical methods employed for evaluating the sample characteristics. The section concludes with the statistical analyses that were used for each research question.

DATA MANAGEMENT

The data management was initiated with the devising of the demographic data collection form (Appendix A) to include coded categories to facilitate data entry into SPSS. The data were then entered into a dataset using SPSS version 15.0 software. The

principle investigator (PI) entered data into the dataset using the coded data from the demographic data collection form. The data entry of each individual scale (PNAS, NPVSR, SES, and APAS) was entered using the Likert scale level associated with the scale. The narrative responses to the PNAS were transcribed by the researcher into a separate Microsoft Word document identified only by the participant code.

The data were evaluated by the PI for completeness of data. Missing data for the PNAS items resulted in the case being deleted from the analysis procedure (Allison, 2002) rather than using other missing data techniques. Each variable was checked for frequency distributions, measures of central tendency, variability, skewness and kurtosis (Tabachnick & Fidell, 2007). Any unexpected findings were verified by reviewing the original written survey and the dataset was corrected. Four cases of data error entry in the SPSS dataset were identified and corrected. A review of 10 randomly selected surveys was compared to the dataset, and the data entry was validated for correctness. No additional data entry errors were identified in the SPSS dataset.

The narrative dataset in Microsoft Word was reviewed by a second reviewer for completeness and categorization of the frequency of responses. No errors in the narrative dataset were found in transcribing from the original participants' handwriting to the Microsoft Word document.

DEMOGRAPHIC DATA

The demographic data were analyzed using measures of central tendency, distribution, and variability for the interval level data such as age, years of practice in nursing, and years of practice in medical-surgical nursing. Frequencies were analyzed for the nominal data including gender, ethnicity, entry level education, current educational level, certification in medical-surgical nursing, additional degrees held in other disciplines, disciplines of other degrees, majority of practice time in medical-surgical nursing, current employer, current employment status, current employment title, previous assertiveness training, and previous advocacy education. Correlations between total PNAS scores and interval data were calculated and are reported in the Results chapter. Mean total PNAS scores for each category of the nominal data collected were analyzed

using one-way analysis of variance (ANOVA) and included appropriate post hoc analysis when indicated. The results of the analyses are further discussed in the Results chapter.

FACTOR STRUCTURE

Due to the exploratory nature of this instrument, principal component analysis was performed along with oblique rotation (Stevens, 2002). Factor analysis is a data reduction technique that is used to group variables into coherent subsets, in which the subsets are thought to be independent of each other (Tabachnick & Fidell, 2007). The grouped variables, or subsets, are labeled factors and these factors are thought to represent the underlying processes that created the correlations between the variables. A major use of factor analysis is to develop psychometric tests to measure constructs such as personality traits or behaviors (Streiner & Norman, 2003). Principle component analysis is used to extract the maximum variance from the data set with each component. This technique is utilized to reduce a large number of variables into a smaller number of components (Tabachnick & Fidell).

For the purpose of this study, the factors with an eigenvalue greater than 1.0 were examined (Stevens, 2002). First, the correlation and inverse correlation matrices were examined for high levels of correlation between the items. Extraction using principle component analysis and rotation were then performed, with the goal of rotation being to maximize the high correlations and minimize the low correlations between the factors or components (Tabachnick & Fidell, 2007). The rationale for the use of a rotational technique is that the results improve the interpretability and scientific utility of the solution (Tabachnick & Fidell, 2007). The use of oblique rotational techniques is indicated in the PNAS because the latent variables correlate with each other and promax rotation allows for loading of these correlated factors into separate components (Nunnally & Bernstein, 1994).

Reliability

Reliability of PNAS was determined by calculating the reliability coefficient alpha, α (Cronbach's Alpha), using the SPSS (version 15.0) software package. Reliability refers to the degree to which the test scores are free from errors of measurement

(Pedhazur & Schmelkin, 1991). For this analysis, the internal consistency approach is used as an estimation of reliability of the items from the PNAS. Internal consistency, as measured by Cronbach's alpha, is considered to be an important measure of the homogeneity of the items within a scale (Pedhazur & Schmelkin, 1991), and is a widely-used method of calculating internal consistency (DeVellis, 2003). For a new instrument, coefficient alpha should be at least .70, which is considered minimally acceptable (DeVellis, 2003; Nunnally & Bernstein, 1994), although this number is thought of as a guideline rather than a rule (Knapp & Brown, 1995). Coefficient alpha is calculated for the entire scale. Item-scale correlations are examined using the magnitude of the corrected item-scale correlations, which has less chance of inflating α (DeVellis, 2003). The goal is to have items with higher correlations (DeVellis, 2003). Items will be considered for modification in future versions of the PNAS if the inter-item correlation of a single item affected the overall inter-item correlation for the scale (DeVellis, 2003).

In addition to analyzing the entire PNAS, reliability statistics for each component, or subscale, are analyzed using the method outlined in the previous paragraph. Subscale total scores are correlated to identify relationships between the subscales.

Validity

The validity of the PNAS is supported by the use of content and convergent validity. Content validity for the PNAS has been determined by having the instrument reviewed by content experts in the field of nursing advocacy (Nunnally & Bernstein, 1994) to support the content validity that items contained in the PNAS are actually measuring protective nursing. A panel of eight content experts was used to determine content validity (Soeken, 2005). Further discussion of content validity results are explicated the following Results chapter.

Convergent validity is supported by the use of the Nursing Professional Values Scale Revised (NPVSR) (Weis & Schank, 2000) and the Attitude toward Patient Advocacy Scale (APAS) (Bu, 2005). The NPVSR uses statements from the ANA Code of Ethics in the 26 items, including statements referring to advocacy. Reliability for the NPVSR is indicated by a published Cronbach's alpha of .94. Content validity for the NPVSR has been

supported an expert review of the instrument (Weis & Schank, 2000). For the purposes of this study, there is a predicted positive correlation between total scores on the PNAS and NPVSR, thus supporting convergent validity. The results of this correlation are discussed in the Results chapter.

The Attitude toward Patient Advocacy Scale (APAS) (Bu, 2005) is an additional support for convergent validity of the PNAS. The APAS measures three core attributes of advocacy: 1) safeguarding patients' autonomy; 2) acting on behalf of patients; and 3) championing social justice. Construct validity for the APAS has been supported with the use of confirmatory factor analysis (Bu & Wu, 2007). For the purpose of this study, there is a predicted positive correlation between total scores on the PNAS and APAS, thus supporting convergent validity, which is discussed in the following chapter.

CHAPTER 4: RESULTS

INTRODUCTION

This chapter presents the results of the Protective Nursing Advocacy Scale (PNAS) study. The specific aims of the PNAS study were to determine the psychometric properties and validity of the PNAS. The specific research questions included: 1) What are the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations?; and 2) What is the convergent validity by using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes toward Patient Advocacy Scale (APAS)? This chapter is organized in the following manner: a description of the study sample is provided, the results for each hypothesis are described, content validity is presented, and results of the narrative data are delineated.

SAMPLE CHARACTERISTICS

The mailed surveys in this study utilized a mailing database of 5,000 names obtained from Texas Nurses Association (TNA) with data originating from Texas Board of Nursing (BON). The 5,000 names contained in the mailing database were a randomized list of names from the total number of nurses that identified themselves as medical-surgical nurses on their license renewal forms. The number of registered nurses identifying themselves as medical surgical nurses was 22,722, or 14.5% of the total registered nurses in the State of Texas (BON, 2007b). The database used the most current data as of January 7, 2008. (B. Ritchey, personal communication, January 7, 2008).

A total of 5,000 surveys were mailed out via first class mail. From the 5,000 mailed surveys, 334 were returned with no forwarding address, 7 nurses had moved out-of-state, and 3 were deceased. Accounting for the non-forwarding addresses, locations out-of-state, and deceased nurses, an estimated total of 4,656 surveys reached the intended potential participants. A total of 16 potential participants refused participation in

writing; a total of 462 surveys were returned resulting in a 9.9% return rate. Of the 462 returned surveys, 419 had complete data leading to a total 9.0% return rate of completed surveys with complete data.

Gender

Of the 419 surveys analyzed, 417 indicated gender on the survey form indicating sample gender characteristics of 87.4% female and 12.2% male. According to the Texas Board of Nursing (BON, 2007d), the gender statistics for all registered nurses in Texas is 9.7% male and 90.3% female.

Age

The age range reflects the 415 participants that indicated their age on the mailed study survey. Participants ranged in age from 20 to 72 years with a mean age of 47 years. The Texas BON, however, classifies age data in categories by 10 year categories for the age range 25-64 and includes two broad age categories on the ends of the age spectrum: an under 25 and over 65 age category. However, even with the limitations of the categorical nature of the Texas BON data, the highest percentage of nurses in the Texas BON data fall into the 45-54 age range, or 30% of all nurses (BON 2007d). Using the same categorization as the Texas BON, the PNAS study results indicate 36% of the participants in the 45-54 age category.

Ethnicity

The ethnicity of the participants was indicated by all 419 participants. The majority of the participants were Caucasian at 69%, followed by Asian 12.9%, Hispanic 8.1%, African American 7.5%, and other 2.6%. These findings correspond with the Texas Board of Nursing (2007d) data in that 72.6% of Texas registered nurses are Caucasian, 8.0% African American, 8.0% Asian, and 9.5 % Hispanic. The Texas Board of Nursing includes an American Indian category, accounting for 0.3%, a category which was not included in this study. The Texas data indicated 1.7% categorized as “other”; however, for the PNAS study, participants that were American Indian may have indicated other on the PNAS survey, thus increasing the percentage of “other” in the PNAS study.

Entry Level

Entry level into nursing indicates the initial licensure program that participants completed upon entering into licensed nursing. The majority of the participants began as associate degree nurses (ADN) at 38.9% of the sample, followed closely by 37.5% entering licensed nursing as a baccalaureate of science in nursing (BSN). Diploma-prepared registered nurses, a hospital-based educational program, accounted for 14.6% of the participants in this study. Although not at the registered nurse level, 9.1% of the participants in this survey began licensed nursing as a licensed vocational nurse (LVN).

Current Level of Education in Nursing

The majority of the nurses that participated in this survey were currently at the BSN level of education at 41.8%, followed closely by a current level of ADN of 40.1%. Registered nurses currently at the diploma level of education accounted for 12.2% of the current education level in nursing. Higher levels of education in nursing were indicated by 4.8% at the master's of science in nursing (MSN), and 0.2% was at the doctoral level of education. The PNAS participants' current level of education closely mirrors the Texas Board of Nursing (BON, 2007c) data for currently practicing registered nurses, as the Texas BON data indicate current levels of education at ADN 39.4%, Diploma 10.0%, BSN 36.4%, MSN 6.2%, and doctoral prepared 0.3%.

Medical Surgical Certification

Certification is a process that recognizes specialty expertise in an area of practice such as medical surgical nursing (American Nurses Credentialing Center [ANCC], 2008). The certification process includes a defined number of practice hours and includes a written specialty examination (ANCC). In this study, the number of participants that are medical-surgical certified nurses is 22.4%.

Education in Other Areas

The registered nurses in this study indicated degrees held in fields other than nursing at 32% of the total number of participants, with 13.6% of participants holding a bachelor's degree. Additional degree levels included certificates (9.8%), associates

degree (6.4%), master's degree (1.9%), and doctorates (0.2%). The vast majority, 68% of participants, did not indicate a degree in a field other than nursing.

Ninety-eight participants indicated holding another degree in discipline other than nursing. The largest percentage was social sciences (33.7%), followed by health sciences (30.6%), humanities (24.5%), and basic sciences (11.2%).

Employment

The inclusion criteria of this study included one year of full-time experience or part-time equivalent as a medical-surgical nurse. The responding participants indicated 87.8% had full time experience in medical-surgical nursing. The vast majority of the participants, 81.5%, are employed full time, comparing with the Texas BON data indicating that 71.9% (BON, 2007b) of registered nurses are employed full time in nursing. The actual number of years in medical-surgical nursing for the respondents ranged from 1 to 54 years with a mean of 14.05 years; the total number of years in nursing ranged from 2-54 years with a mean of 18.8 years.

The majority of the participants (86.6%) worked in the hospital-based setting. Other employment sites indicated by the participants included clinics (4.1%), schools of nursing (1.4%), home health agencies (1.4%), long term care (1.2%), and staffing agencies (2.6%). The Texas Board of Nursing (BON, 2007e) data show that the majority of registered nurses in Texas are employed in hospital-based settings, either in the inpatient setting (58.3%) or hospital-based outpatient setting (5.8%). Registered nurse employment in the clinic setting for registered nurses in Texas is 8.5%, home health 6.2%, temporary staffing 0.8%, and nursing home/long term care 3.0%. However, the Texas BON data include all registered nurses, not exclusively those registered nurses identifying as medical-surgical nurses. National data indicate that the majority of inpatient hospital registered nurses, or 28% of the nursing workforce in hospital settings in the United States, are identified as medical-surgical nurses (U.S. Health and Human Services, 2004).

The preponderance (92.3%) of participants was employed under the staff nurse title. Additional work categories indicated by the participants included clinical educator

(2.0%), nurse managers (2.3%), nurse administrators (2.3%), and school of nursing faculty (1.3%). The Texas Board of Nursing data (BON, 2007e) indicate that for all registered nurses in Texas, 58.7% are identified as staff nurses, 2.3% as school of nursing faculty, 6% as nurse managers, 10% as administrators, and 0.6% as staff development nurses (clinical educators).

Previous Training in Assertiveness and Advocacy

Previous training in assertiveness and advocacy information was sought from the participants in the survey to ascertain if there was a difference in the mean total PNAS score. Of the 419 participants, 29.4% had previous assertiveness training and 24.3% had previous advocacy training. ANOVA analysis of the difference between participants that did have previous training in either assertiveness or nursing advocacy with those nurses that did not have training in these two areas did not differ significantly on total PNAS scores.

TOTAL PNAS SCORES COMPARED BY DEMOGRAPHIC DATA.

Statistical tests were performed to ascertain the relationship and differences between the demographic groups and the total PNAS score. Correlational analysis using Pearson's correlation were performed on the relationship between age and PNAS total scores; years in nursing and total PNAS scores; and years in medical-surgical nursing and PNAS total scores. None of the three correlational analyses resulted in significant correlations ($p < .05$).

The statistical procedure undertaken to analyze the difference between mean total PNAS scores and other demographic data are summarized in the following table, Table 4.1. One way analysis of variance (ANOVA) procedures were used with appropriate post hoc analysis. For the analyses that did not require a post hoc analysis, i.e., less than three groupings, the only significant difference in group means was certification in medical-surgical nursing had a significantly lower mean total PNAS scores ($p = .049$). Those analyses that required post hoc analysis are discussed in the post hoc analysis section.

Table 4.1: PNAS Demographic ANOVA Results

	N	%	Mean	SD	F	p
Gender						
Male	51	12.2	163.76	13.91	1.45	NS
Female	366	87.4	166.25	13.61		
Race						
African Am.	31	7.5	160.03	14.78	1.35	NS
Hispanic	34	8.1	167.29	12.37		
Caucasian	289	69.0	164.03	13.37		
Asian	54	12.9	163.52	16.43		
Other	11	2.6	167.82	13.75		
Entry Education level						
LVN	38	9.1	169.82	11.77	3.36	.019
ADN	163	38.9	163.74	13.20		
Diploma	61	14.6	160.85	14.99		
BSN	157	37.5	164.18	14.22		
Current Education						
ADN	168	40.1	164.86	13.60	1.896	NS
Diploma	51	12.2	159.57	15.78		
BSN	175	41.8	164.93	13.55		
MSN	20	4.8	161.20	11.474		
PhD	1	0.2	167.00	*1 case		
M/S Certified						
Yes	94	22.4	161.62	13.66	3.91	.049
No	318	77.6	164.82	13.82		
Other Degrees						
Certificate	41	9.8	165.34	11.77	1.11	NS
AD	27	6.4	165.48	14.11		
BSN	57	13.6	164.42	12.28		
MSN	8	1.9	155.38	16.11		
PhD	1	0.2	167.0	*1 case		
Employment Status in Medical/Surgical						
Part-time	49	12.2	164.84	14.07	.185	NS
Full time	368	87.8	163.93	13.88		

	N	%	Mean	SD	F	<i>p</i>
Employment Location						
Hospital	363	86.6	163.66	13.94	1.128	NS
Clinic	17	4.1	162.88	15.16		
School of Nursing	6	1.4	169.67	12.03		
Home Health Agency	6	1.4	168.17	16.50		
Long term care	5	1.2	162.60	9.63		
Staffing Agency	11	2.6	172.09	11.11		
Current Employment						
Part time	74	18.5	164.84	14.07	.185	NS
Full Time	326	81.5	163.93	13.88		
Employment Type						
Staff Nurse	368	92.3	164.33	14.17	1.348	NS
Clinical Educator	9	0.6	159.11	8.11		
Nurse Manager	9	2.3	157.56	10.42		
Clinical Nurse Administrator	9	2.3	160.11	13.24		
School of Nursing Faculty	5	1.3	171.60	12.36		
Previous Assertiveness Training						
Yes	123	29.4	164.54	13.53	.22	NS
No	294	70.6	163.85	14.03		
Previous Advocacy Education						
Yes	102	24.3	165.88	14.79	2.33	NS
No	312	75.7	163.47	13.51		

POST HOC ANALYSIS OF DEMOGRAPHIC DATA

The statistical procedure undertaken to analyze the difference between mean total PNAS scores and other demographic data are summarized in Table 4.2. One way analysis of variance (ANOVA) procedures were performed with appropriate post hoc analysis using Tukey's Honestly Significant Difference (HSD), as the HSD procedure is a more conservative approach to comparing the means (Norman & Streiner, 2000). The vast majority of ANOVA resulted in no significant differences between group mean total

PNAS scores. A significant difference in mean total PNAS scores were observed from the analysis comparing the difference between licensed vocational nurse entry into nursing and diploma entry into nursing ($p=.009$) with diploma entry nurses having a significantly lower total PNAS score.

Results for Each Research Question

In this section, each research question is presented followed by the associated hypotheses for each question. Each hypothesis concludes with a summary, as does each research question.

Research Question #1: Determine the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations.

Hypothesis 1: The exploratory factor analysis will load onto five predicted factors with factor loadings of $>.30$ and no secondary loads.

PNAS Level of Measurement

The PNAS consists of 43 items hypothesized to load onto 5 subscales. Each PNAS item uses a 5 level Likert scale ranging from “Not Important” to “Most Important”. The following table, Table 4.2, indicates the values for each level used in scoring the PNAS.

Table 4.2: PNAS Level of Measurement

PNAS Level of Measurement	
PNAS levels	Value
Strongly Disagree	1
Moderately Disagree	2
Neither Agree or Disagree	3
Moderately Agree	4
Strongly Agree	5

PNAS Frequencies

The initial step in analysis of the PNAS includes examination of the descriptive statistics of the items such as percentage response for each item (Table 4.3). The vast majority of the percentages for each item are in the “strongly agree” category of the five level Likert scale that is used in the PNAS. This preliminary examination of the percentages implies as skewness of the responses to the items, which is further described in the following table and paragraph.

Table 4.3: PNAS Item Frequencies and Percentages

PNAS Item Frequencies and Percentages						
PNAS Number	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
1	Patients need nurses to act on the patient’s behalf	5 (1.2%)	2 (0.5%)	11 (2.6%)	67 (16.0%)	334 (79.7%)
2	Nurses are legally required to act as patient advocates when patients are perceived to be in danger	4 (1.0%)	1 (0.2%)	4 (1.0%)	46 (11.0%)	364 (86.9%)
3	As the nurse, I keep my patient’s best interest as the main focus of nursing advocacy	3 (0.7%)	0 (0.0%)	1 (0.2%)	61 (14.6%)	354 (84.5%)

PNAS Number	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
4	Nurses who understand the benefits of patient advocacy are better patient advocates	2 (0.5%)	3 (0.7%)	10 (2.4%)	67 (16.0%)	337 (80.4%)
5	I am acting on my patient's behalf when I am acting as my patient's advocate	2 (0.5%)	1 (0.2%)	8 (1.9%)	74 (17.7%)	334 (79.7%)
6	I speak out on my patient's behalf when I am acting as my patient's advocate	3 (0.7%)	1 (0.2%)	15 (3.6%)	89 (21.2%)	311 (74.2%)
7	I am acting as my patient's voice when I am advocating for my patient	6 (1.4%)	4 (1.0%)	24 (5.7%)	105 (25.1%)	280 (66.8%)
8	I am acting as the patient's representative when I am acting as the patient's advocate	6 (1.4%)	3 (0.7%)	34 (8.1%)	101 (24.1%)	275 (65.6%)
9	I am advocating for my patient when I protect my patient's rights in the healthcare environment	3 (0.7%)	2 (0.5%)	5 (1.2%)	68 (16.2%)	341 (81.4%)
10	I am acting as a patient advocate when I am protecting vulnerable patients from harm	4 (1.0%)	0 (0.0%)	3 (0.7%)	48 (11.5%)	364 (86.9%)
11	I provide patient advocacy to protect my patients only when necessary in the healthcare environment	89 (21.2%)	72 (17.2%)	54 (12.9%)	102 (24.3%)	102 (24.3%)
12	Nurses that act on a patient's behalf are preserving the patient's dignity	4 (1.0%)	6 (1.4%)	29 (6.9%)	106 (25.3%)	274 (65.4%)
13	I scrutinize circumstances that cause me to act as a patient advocate	24 (5.7%)	27 (6.5%)	80 (19.1%)	128 (30.5%)	160 (38.2%)
14	I utilize organizational channels to act as a patient advocate	6 (1.4%)	10 (2.4%)	37 (8.8%)	142 (33.9%)	224 (53.5%)

PNAS Number	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
15	I would benefit from the advice of ethics committees to be a more effective patient advocate	6 (1.4%)	15 (3.6%)	58 (13.8%)	115 (27.4%)	225 (53.7%)
16	Lack of time inhibits my ability to act as a patient advocate	50 (11.9%)	58 (13.8%)	47 (11.2%)	151 (36.0)	113 (27.0%)
17	Nurses practice patient advocacy more when the nurse is working in a tolerant work environment	10 (2.4%)	22 (5.3%)	52 (12.4%)	120 (28.6%)	215 (51.3%)
18	Nurses who are supported by physicians are better patient advocates	4 (1.0%)	11 (2.6%)	30 (7.2%)	78 (18.6%)	296 (70.6%)
19	I am able to be a better patient advocate because I have more self confidence	1 (0.2%)	6 (1.4%)	51 (12.2%)	128 (30.5%)	233 (55.6%)
20	Nurses that are committed to providing good patient care are better patient advocates	4 (1.0%)	6 (1.4%)	14 (3.3%)	87 (20.8%)	308 (73.5%)
21	Increased dedication to nursing increases the nurse's ability to act as a patient advocate	7 (1.7%)	9 (2.1%)	48 (11.5%)	105 (25.1%)	250 (59.7%)
22	Increased nursing education enhances the nurse's effectiveness in patient advocacy	21 (5.0%)	32 (7.6%)	60 (14.3%)	118 (28.2%)	188 (44.9%)
23	I doubt my own abilities to provide advocacy for my patients	210 (50.1%)	117 (27.9%)	35 (8.4%)	47 (11.2%)	10 (2.4%)
24	Nurses do not provide advocacy for their patients in the clinical setting	12 (2.9%)	28 (6.7%)	40 (9.5%)	120 (28.6%)	219 (52.3%)
25	I am ethically obligated to speak out for my patients when my patients are threatened by harm	5 (1.2%)	4 (1.0%)	2 (0.5%)	49 (11.7%)	359 (85.7%)

PNAS Number	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
26	Nurses that provide information to patients about patient care are acting as patient advocates	3 (0.7%)	3 (0.7%)	21 (5.0%)	107 (25.5%)	285 (68.0%)
27	Patients have varying degrees of ability to advocate for themselves	5 (1.2%)	5 (1.2%)	23 (5.5%)	137 (32.7%)	249 (59.4%)
28	Vulnerable patients need my protection in harmful situations	3 (0.7%)	1 (0.2%)	8 (1.9%)	90 (21.5%)	317 (75.7%)
29	Increased nursing experience does not increase the nurse's ability to act as a patient advocate	53 (12.6%)	86 (20.5%)	64 (15.3%)	122 (29.1%)	94 (22.4%)
30	I may suffer risks to my employment when acting as a patient advocate	102 (24.3%)	85 (20.3%)	83 (19.8%)	99 (23.6%)	50 (11.9%)
31	Nurses that speak out on behalf of patients may face retribution from employers	86 (20.5%)	101 (24.1%)	86 (20.5%)	105 (25.1%)	41 (9.8%)
32	I may be punished for my actions by my employer when I inform my patients of their own rights	165 (39.4%)	97 (23.2%)	66 (15.8%)	58 (13.8%)	33 (7.9%)
33	Nurses that speak out on behalf of vulnerable patients may be labeled as disruptive by employers	106 (25.3%)	85 (20.3%)	80 (19.1%)	108 (25.8%)	40 (9.5%)
34	When nurses inform and educate patients about the patients' rights in the clinical setting, the nurse may place her/his employment at risk	169 (40.3%)	108 (25.8%)	72 (17.2%)	42 (10.0%)	28 (6.7%)
35	When nurses act as patient advocates, they are not supporting patients	7 (1.7%)	4 (1.0%)	13 (3.1%)	71 (16.9%)	324 (77.3%)

PNAS Number	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
36	Nurses can protect patients from harmful situations by physically barring a procedure to occur	76 (18.1%)	80 (19.1%)	129 (30.8%)	77 (18.4%)	57 (13.6%)
37	Nurses are acting as advocates when nurses protect the right of the patient to make his/her own decisions	10 (2.4%)	11 (2.6%)	20 (4.8%)	110 (26.3%)	268 (64.0%)
38	Nurses should not advocate for patients when treatments cause suffering without patient benefit	22 (5.3%)	23 (5.5%)	70 (16.7%)	91 (21.7)	213 (50.8%)
39	The more years that I work in nursing, the less effective I am at advocating for my patients	266 (63.5%)	96 (22.9%)	39 (9.3%)	11 (2.6%)	7 (1.7%)
40	I am less effective at speaking out for my patients when I am tired	76 (18.1%)	76 (18.1%)	55 (13.1%)	166 (39.6%)	46 (11.0%)
41	I am not an effective advocate because I am suffering burnout	168 (40.1%)	97 (23.2%)	61 (14.6%)	75 (17.9%)	18 (4.3%)
42	Because I don't like working as a nurse, I am less willing to act as a patient advocate	269 (64.2%)	54 (12.9%)	57 (13.6%)	21 (5.0%)	18 (4.3%)
43	I lack the dedication to the nursing profession to act as a patient advocate	304 (72.6%)	68 (16.2%)	25 (6.0%)	10 (2.4%)	12 (2.9%)

The descriptive statistics for each of the PNAS items is the subsequent step in analyzing the PNAS database. The following table, Table 4.4, provides the range, minimum value, and maximum value for each PNAS item. In addition, the measures of central tendency are shown as mean, median, and mode. Standard deviation, skewness and kurtosis for each PNAS item also are delineated in Table 4.4. According to DeVellis

(2003), there should be a relatively high variance for a scale item. The PNAS standard deviation for items ranges from .49 to 1.49, indicating that for some items there is inadequate variance, while other items have an adequate variance (Table 4.4). The item mean should be in the center of the range or the item might fail to detect certain values of the construct (DeVellis, 2003). For the PNAS, the item means ranged from 1.47 to 4.83, which may indicate that some items may be failing to detect values of the construct of advocacy. Measures of skewness indicate most items are rated toward the high end of the scale (Table 4.4), and this is reflected in the negative skewness of the majority of the items. Additionally, the majority of the PNAS items (Table 4.4) demonstrate a leptokurtic (Norman & Streiner, 2000) distribution, thus supporting the concept of high ratings for most items.

EXPLORATORY FACTOR ANALYSIS RESULTS

The analysis of the correlations between the items in the PNAS was performed using exploratory factor analysis combined with a principle component analysis condensation method. First the adequacy of the correlation matrix is presented, followed by the scree plot, eigen values, and results of rotation.

Adequacy of Matrix

An initial step was to perform a comparison of the correlational and inverse correlation matrices of the PNAS to ascertain if the data warranted factoring (Nunnally & Bernstein, 1994). The resulting matrices did not demonstrate significant high correlations between items, thus supporting the factorability of the matrix.

Table 4.4: Descriptive Statistics for PNAS Items

PNAS Item Number	Range	Min	Max	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
1.	4	1	5	4.73	5	5	.63	-3.25	13.03
2.	4	1	5	4.83	5	5	.54	-4.48	24.96
3.	4	1	4	4.82	5	5	.49	-4.23	26.00
4.	4	1	5	4.75	5	5	.58	-3.06	11.76
5.	4	1	5	4.76	5	5	.54	-3.00	12.75
6.	4	1	5	4.68	5	5	.63	-2.54	8.82
7.	4	1	5	4.55	5	5	.77	-2.19	5.82
8.	4	1	5	4.52	5	5	.79	-1.99	4.61
9.	4	1	5	4.77	5	5	.56	-3.50	16.41
10.	4	1	5	4.83	5	5	.52	-4.66	27.93
11.	4	1	5	3.13	3	4	1.49	-0.17	-1.43
12.	4	1	5	4.53	5	5	.77	-1.92	4.27
13.	4	1	5	3.89	4	5	1.16	-0.93	.12
14.	4	1	5	4.36	5	5	.85	-1.55	2.72
15.	4	1	5	4.28	5	5	.93	-1.30	1.23
16.	4	1	5	3.52	4	4	1.34	-0.64	-0.83
17.	4	1	5	4.21	5	5	1.01	-1.31	1.15
18.	4	1	5	4.55	5	5	.82	-2.05	4.13
19.	4	1	5	4.40	5	5	.77	-1.14	0.77
20.	4	1	5	4.64	5	5	.71	-2.58	7.97
21.	4	1	5	4.39	5	5	.89	-1.60	2.44
22.	4	1	5	4.00	4	5	1.16	-1.07	0.26
23.	4	1	5	1.88	1	1	1.11	1.16	0.29
24.	4	1	5	4.21	5	5	1.05	-1.37	1.18
25.	4	1	5	4.80	5	5	.61	-4.17	20.15
26.	4	1	5	4.59	5	5	.69	-2.08	5.64
27.	4	1	5	4.48	5	5	.76	-1.88	4.73
28.	4	1	5	4.71	5	5	.59	-2.83	11.63
29.	4	1	5	3.28	4	4	1.35	-0.28	-1.18

PNAS Item Number	Range	Min	Max	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
30.	4	1	5	2.79	3	1	1.36	0.10	-1.26
31.	4	1	5	2.79	3	4	1.29	0.09	-1.16
32.	4	1	5	2.28	2	1	1.32	0.67	-0.79
33.	4	1	5	2.74	3	4	1.34	0.09	-1.27
34.	4	1	5	2.17	2	1	1.25	0.82	10.22
35.	4	1	5	4.67	5	5	.74	-2.99	-0.38
36.	4	1	5	2.90	3	3	1.28	0.05	-0.98
37.	4	1	5	4.47	5	5	.89	-2.11	4.65
38.	4	1	5	4.07	5	5	1.17	-1.15	0.42
39.	4	1	5	1.56	1	1	.89	1.78	3.03
40.	4	1	5	3.07	4	4	1.32	-0.32	-1.21
41.	4	1	5	2.23	2	1	1.27	0.61	-0.94
42.	4	1	5	1.72	1	1	1.14	1.47	1.15
43.	4	1	5	1.47	1	1	.93	2.30	5.03

Two tests of the correlation matrix also are employed to determine the adequacy of the correlation matrix: the Kaiser-Meyer-Olkin Measure of Sample Adequacy (KMO) and the Bartlett Test of Sphericity (Table 4.5). The Bartlett's Test of Sphericity is cited by Tabachnick and Fidell (2007) as being sensitive to sample size, often resulting in significance even if correlations are very low. For this analysis, the Bartlett's Test of Sphericity is significant, but with 419 cases, this may be due to the sample size.

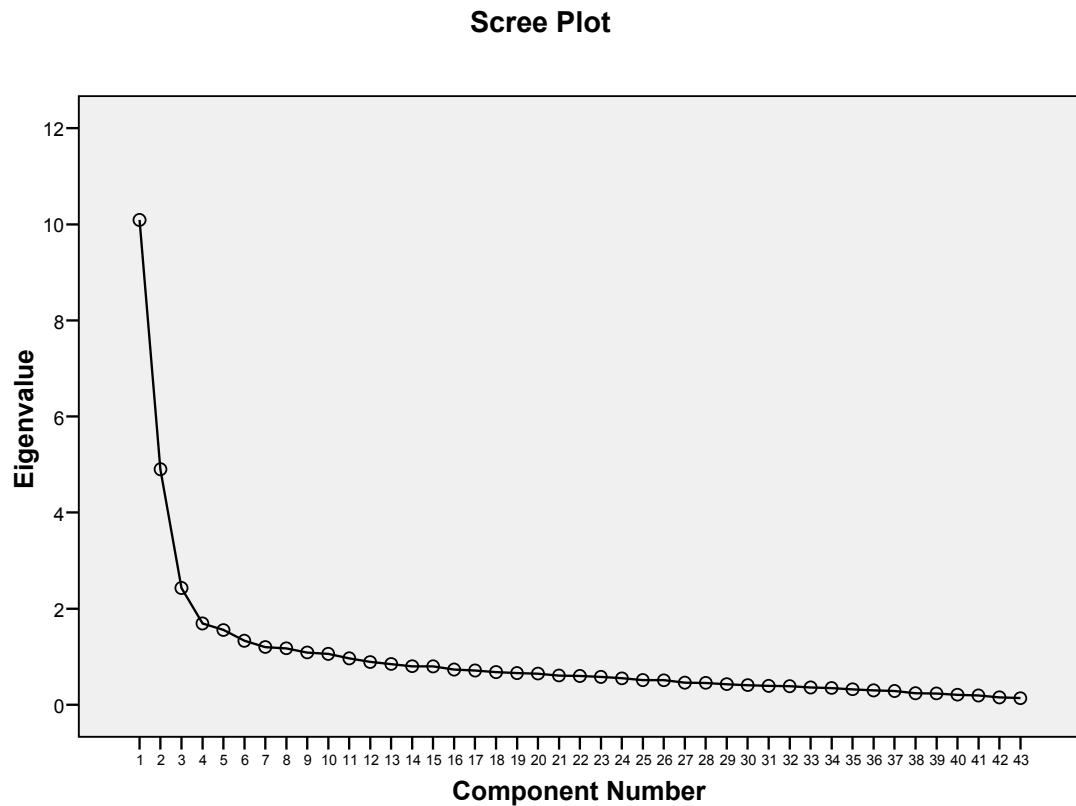
The KMO measure, however, is cited by Tabachnick and Fidell (2007) as a more sophisticated measure of the factorability of the correlation matrix; they state that "values of .6 and above are required for a good FA" (p.614). The KMO for this study is .9, thus exceeding the minimum criteria for factorability.

Table 4.5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	8168.656
	df	903
	Sig.	.000

An additional beginning step of the analysis was to examine the resulting scree plot for the PNAS. The scree plot is depicted in Figure 4.1. By using the scree plot and noting the area where the curve flattens, five components were selected for extraction (Stevens, 2002).

Figure 4.1: Scree Plot



The PNAS dataset was then analyzed using principle component analysis with oblique (promax) rotation. The choice of using an oblique rotation in this study was

based on premise that the components are somewhat correlated with each other (DeVellis, 2003), as all the components in the PNAS are measuring nursing advocacy. The specific use of promax was chosen because promax “seeks to maximize the spread (variance) of pattern element” (Nunnally & Bernstein, 1994, p. 507) to achieve an acceptable oblique solution.

In oblique rotations, both the pattern matrix and structure matrix are used for interpretation. Tabachnick and Fidell (2007) cite that most researchers interpret and report the pattern matrix, which is the matrix interpreted for this study. The pattern matrix represents the contribution of each component to the variance of each item (Tabachnick & Fidell). The resulting rotated pattern matrix is shown in the following table, Table 4.6. However, for the ease of reading the components, the rotated pattern matrix that is listed by size (Table 4.6) is used to display the component loadings. The pattern matrix for the PNAS demonstrates loading onto five components with component loadings of “about .40” as suggested by Stevens (2002, p. 394) and no secondary loadings greater than .30.

Table 4.6: PNAS Pattern Matrix

Item	Component				
	I	II	III	IV	V
1	.642	.026	-.101	.093	.189
2	.596	.054	-.028	.006	.207
3	.641	.059	.123	-.098	.123
4	.662	-.028	.126	.080	.015
5	.860	-.043	.000	.039	-.086
6	.865	-.033	.007	-.088	-.175
7	.784	.012	.029	-.199	-.278
8	.765	-.039	.065	-.187	-.367
9	.818	.010	.022	-.034	.042
10	.694	.017	.090	.058	.114
11	-.209	.021	.689	-.028	-.282
12	.559	-.050	.296	-.033	-.126
13	.063	.198	.494	.029	-.021
14	.291	.085	.415	-.105	.096

Item	Component				
	I	II	III	IV	V
15	.145	.077	.515	.100	-.025
16	-.104	-.028	.252	.614	-.054
17	.043	.013	.319	.512	.172
18	.230	-.081	.224	.453	.120
19	.203	-.034	.377	-.008	.153
20	.260	-.076	.396	.073	.134
21	.197	-.141	.536	.038	.007
22	.013	-.055	.567	.000	-.035
23	-.232	.044	.265	.409	-.232
24*	.121	-.118	-.211	-.217	.363
25	.580	.020	-.083	.175	.191
26	.693	.064	.012	.050	.026
27	.506	.042	-.147	.137	.286
28	.522	.027	.049	.054	.207
29*	-.074	-.088	.013	.026	.165
30	.063	.870	.024	-.024	-.013
31	.049	.904	-.019	-.012	.012
32	.023	.877	.023	-.001	-.084
33	-.005	.883	.011	.050	.010
34	-.031	.790	-.007	-.007	-.129
35*	.258	-.122	-.137	.061	.531
36	.087	.151	.058	-.074	-.021
37	.481	.055	-.144	.011	.271
38*	.243	.094	-.223	.006	.319
39	-.116	.069	-.086	.303	-.490
40	.107	.009	-.167	.696	-.150
41	.066	-.010	-.120	.709	-.391
42	.171	-.058	-.184	.454	-.598
43	-.006	.000	-.086	.418	-.624

*indicates a negatively worded item that was reverse coded for analysis

The original rotated pattern matrix is listed by size of the component loadings for ease of reading the pattern matrix (Norman & Streiner, 2000), resulting in the following table, Table 4.7, demonstrating the PNAS items loading onto five components.

Table 4.7: PNAS Pattern Matrix-Component Listed by Size

Item	Component				
	I	II	III	IV	V
6	.865	-.033	.007	-.088	-.175
5	.860	-.043	.000	.039	-.086
9	.818	.010	.022	-.034	.042
7	.784	.012	.029	-.199	-.278
8	.765	-.039	.065	-.187	-.367
10	.694	.017	.090	.058	.114
26	.693	.064	.012	.050	.026
4	.662	-.028	.126	.080	.015
1	.642	.026	-.101	.093	.189
3	.641	.059	.123	-.098	.123
2	.596	.054	-.028	.006	.207
25	.580	.020	-.083	.175	.191
12	.559	-.050	.296	-.033	-.126
28	.522	.027	.049	.054	.207
27	.506	.042	-.147	.137	.286
37	.481	.055	-.144	.011	.271
31	.049	.904	-.019	-.012	.012
33	-.005	.883	.011	.050	.010
32	.023	.877	.023	-.001	-.084
30	.063	.870	.024	-.024	-.013
34	-.031	.790	-.007	-.007	-.129
36	.087	.151	.058	-.074	-.021
11	-.209	.021	.689	-.028	-.282
22	.013	-.055	.567	.000	-.035
21	.197	-.141	.536	.038	.007
15	.145	.077	.515	.100	-.025
13	.063	.198	.494	.029	-.021
14	.291	.085	.415	-.105	.096
20	.260	-.076	.396	.073	.134
19	.203	-.034	.377	-.008	.153
41	.066	-.010	-.120	.709	-.391
40	.107	.009	-.167	.696	-.150
16	-.104	-.028	.252	.614	-.054
17	.043	.013	.319	.512	.172
18	.230	-.081	.224	.453	.120
23	-.232	.044	.265	.409	-.232
43	-.006	.000	-.086	.418	-.624
42	.171	-.058	-.184	.454	-.598
35*	.258	-.122	-.137	.061	.531
39	-.116	.069	-.086	.303	-.490
24*	.121	-.118	-.211	-.217	.363

Item	Component				
	I	II	III	IV	V
38*	.243	.094	-.223	.006	.319
29*	-.074	-.088	.013	.026	.165

*indicates a negatively worded item that was reverse coded for analysis

In addition, communalities are presented for each item in Table 4.8. The communalities explain the amount of variance accounted for by the five extracted components (Tabachnick & Fidell, 2007). Communalities for the PNAS items range from .033 to .806. There is no set criteria for communalities, but Norman and Streiner (2002) suggested that the communalities “should be above .60 or so” (p.166). It should be noted that the items with the lowest communalities (items 24, 29, 35, 36, and 38) have poor factor loadings, which is clarified further in the principle component analysis discussion

Table 4.8: PNAS Item Communalities

Item	Initial	Extraction
1	1.000	.471
2	1.000	.452
3	1.000	.564
4	1.000	.543
5	1.000	.705
6	1.000	.709
7	1.000	.621
8	1.000	.632
9	1.000	.710
10	1.000	.613
11	1.000	.427
12	1.000	.504
13	1.000	.315
14	1.000	.396
15	1.000	.376
16	1.000	.470
17	1.000	.496
18	1.000	.419
19	1.000	.322
20	1.000	.402
21	1.000	.453
22	1.000	.324
23	1.000	.353
24*	1.000	.269
25	1.000	.422

Item	Initial	Extraction
26	1.000	.493
27	1.000	.375
28	1.000	.413
29*	1.000	.037
30	1.000	.742
31	1.000	.798
32	1.000	.798
33	1.000	.806
34	1.000	.686
35*	1.000	.439
36	1.000	.033
37	1.000	.325
38*	1.000	.176
39	1.000	.429
40	1.000	.484
41	1.000	.611
42	1.000	.502
43	1.000	.563

*indicates a negatively worded item that was reverse coded for analysis

The structure matrix in oblique rotations represents two relationships: 1) the correlations between variables and components from the pattern matrix; and 2) the relationship between the items and overlapping variance among the components (Tabachnick & Fidell, 2007). In a structure matrix, the correlations between variables and components “can be inflated by any overlap between factors” (Tabachnick & Fidell, p. 627), making the structure matrix more difficult to interpret. Thus, for this study, the pattern matrix was selected as the primary matrix to interpret (Table 4.9).

Table 4.9: PNAS Structure Matrix

Item	Component				
	I	II	III	IV	V
1	.653	-.062	.231	.065	.374
2	.644	-.057	.274	.001	.383
3	.730	-.072	.409	-.083	.341
4	.721	-.091	.428	.064	.265
5	.835	-.122	.358	-.014	.201
6	.819	-.133	.328	-.141	.108
7	.713	-.092	.275	-.237	-.030
8	.687	-.120	.286	-.236	-.107
9	.841	-.109	.378	-.061	.308

Item	Component				
	I	II	III	IV	V
10	.766	-.074	.423	.053	.358
11	-.005	.088	.534	.084	-.206
12	.653	-.107	.504	-.030	.126
13	.243	.200	.520	.161	.070
14	.494	-.003	.543	-.023	.259
15	.345	.089	.588	.197	.122
16	-.036	.172	.293	.648	-.002
17	.212	.123	.456	.572	.274
18	.356	-.001	.421	.461	.278
19	.420	-.093	.497	.040	.306
20	.481	-.115	.549	.108	.321
21	.446	-.158	.630	.075	.215
22	.253	-.054	.566	.072	.102
23	-.215	.234	.180	.464	-.240
25	.596	-.037	.236	.151	.364
26	.696	-.012	.323	.042	.242
27	.523	-.033	.154	.117	.415
28	.605	-.061	.327	.057	.384
30	-.038	.858	.039	.230	-.152
31	-.066	.892	-.002	.247	-.146
32	-.103	.890	.009	.253	-.236
33	-.108	.896	.014	.310	-.152
34	-.173	.816	-.054	.218	-.289
36	.089	.122	.078	-.026	-.012
37	.500	-.051	.123	-.004	.386
39	-.332	.264	-.193	.293	-.545
40	-.044	.228	-.043	.661	-.123
41	-.141	.262	-.064	.667	-.363
42	-.114	.166	-.167	.375	-.552
43	-.262	.240	-.156	.378	-.626
24*	.171	-.263	-.115	-.274	.369
29*	-.005	-.103	.021	.013	.162
35*	.383	-.235	.099	.016	.610
38*	.238	.007	-.049	.002	.332

*indicates a negatively worded item that was reverse coded for analysis

Total Variance Explained

The total variance of the five extracted components is explicated in Table 4.10. The five components account for approximately 48% of the variance of the PNAS items. Although this is lower than the 70% criteria set forth by Stevens (2002), the contribution of successive components after component V explained less than 3.1% of the variance of the total variance.

Table 4.10: Total Variance of Extracted Components

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
I	10.091	23.468	23.468	10.091	23.468	23.468	9.519
II	4.903	11.401	34.869	4.903	11.401	34.869	4.536
III	2.431	5.653	40.522	2.431	5.653	40.522	4.851
IV	1.695	3.941	44.463	1.695	3.941	44.463	3.115
V	1.557	3.621	48.085	1.557	3.621	48.085	4.023

The extracted components from the PNAS were additionally analyzed for correlations between the components, as indicated in Table 4.11. The correlations between components in the PNAS ranged from a negative correlation of -0.188 between component II and V, to a moderate correlation of .431 between components II and III. The expectation is that the components will have some degree of correlation with each other, but will not be highly correlated, as this would indicate a single component rather than two separate components (DeVellis, 2003).

Table 4.11: PNAS Component Correlation Matrix

Component	I	II	III	IV	V
I	1.000	-.124	.431	-.042	.323
II	-.124	1.000	-.006	.291	-.188
III	.431	-.006	1.000	.159	.216
IV	-.042	.291	.159	1.000	.043
V	.323	-.188	.216	.043	1.000

Labeling Components

Based on the component loadings from the pattern matrix, four components were delineated and are listed in the following subheaders. In addition, the components were given labels that are descriptive of the items contained in the component (DeVellis, 2003). Further discussion of the individual PNAS components refer to the components as subscales of the PNAS.

Component I: Acting as Advocate

The items contained in this subscale reflect the actions taken by the nurse when advocating for the patient. Included in this subscale are the ethical and legal requirements to act as a nursing advocate for patients. Additional items support protecting the vulnerable patient, acting on the patient's behalf, and providing information to the patient. Table 4.12 includes the items included in the Acting as Advocate subscale.

Table 4.12: Acting as Advocate Subscale

1. Patients need nurses to act on the patient's behalf
2. Nurses are legally required to act as patient advocates when patients are perceived to be in danger
3. As the nurse, I keep my patient's best interest as the main focus of nursing advocacy
4. Nurses who understand the benefits of patient advocacy are better patient advocates
5. I am acting on my patient's behalf when I am acting as my patient's advocate
6. I speak out on my patient's behalf when I am acting as my patient's advocate
7. I am acting as my patient's voice when I am advocating for my patient
8. I am acting as the patient's representative when I am acting as the patient's advocate
9. I am advocating for my patient when I protect my patient's rights in the healthcare environment

10. I am acting as a patient advocate when I am protecting vulnerable patients from harm
12. Nurses that act on a patient's behalf are preserving the patient's dignity
25. I am ethically obligated to speak out for my patients when my patients are threatened by harm
26. Nurses that provide information to patients about patient care are acting as patient advocates
27. Patients have varying degrees of ability to advocate for themselves
28. Vulnerable patients need my protection in harmful situations
37. Nurses are acting as advocates when nurses protect the right of the patient to make his/her own decisions

Component II: Work Status and Advocacy Actions

The subscale Work Status and Advocacy Actions consists of five items related to advocacy actions and their effect on nurses' work status. Item number 36 did load on this component but at such a low level (i.e., .151 on the pattern matrix) that it was not included in the component. In addition, item 36 does not fit theoretically with the other items in this component, as this particular item reflects protecting the patient from harm: "Nurses can protect patients from harmful situations by physically barring a procedure to occur." Nunnally and Bernstein (1994) caution the researcher to avoid using results that do not match the underlying theoretical concepts. The items listed in Table 4.13 are contained in the Work Status and Advocacy Actions subscales:

Table 4.13: Work Status and Advocacy Actions Subscale

30. I may suffer risks to my employment when acting as a patient advocate
31. Nurses that speak out on behalf of patients may face retribution from employers
32. I may be punished for my actions by my employer when I inform my patients of their own rights
33. Nurses that speak out on behalf of vulnerable patients may be labeled as disruptive by employers
34. When nurses inform and educate patients about the patients' rights in the clinical setting, the nurse may place her/his employment at risk

Component III: Environment and Educational Influences

The third subscale measures the influencing environmental dynamics that are part of the nurse's advocacy action. This subscale additionally addresses the educational aspects and dedication required of the nurse advocate. The following table, Table 4.14, explicates the items contained in the Environment and Educational Influences subscale

Table 4.14: Environment and Education Influences Subscale

11. I provide patient advocacy to protect my patients only when necessary in the healthcare environment
13. I scrutinize circumstances that cause me to act as a patient advocate
14. I utilize organizational channels to act as a patient advocate
15. I would benefit from the advice of ethics committees to be a more effective patient advocate
19. I am able to be a better patient advocate because I have more self confidence
20. Nurses that are committed to providing good patient care are better patient advocates
21. Increased dedication to nursing increases the nurse's ability to act as a patient advocate
22. Increased nursing education enhances nurses' effectiveness in patient advocacy

Component IV: Support and Barriers to Advocacy

The fourth subscale measures the support and barriers that the nurse may encounter while being a nurse advocate. The concept of nurses suffering from fatigue and its effect on their ability to advocate is reflected in several items such as 40, 41, 42, and 43. The issue of time is reflected in item 16 and environmental and physician support is reflected in items 17 and 18, respectively. Table 4.15 elucidates the Support and Barriers to Advocacy subscale.

Table 4.15: Support and Barriers to Advocacy Subscale

16. Lack of time inhibits my ability to act as a patient advocate
17. Nurses practice patient advocacy more when the nurse is working in a tolerant work environment
18. Nurses who are supported by physicians are better patient advocates
23. I doubt my own abilities to provide advocacy for my patients
40. I am less effective at speaking out for my patients when I am tired
41. I am not an effective advocate because I am suffering burnout
42. Because I don't like working as a nurse, I am less willing to act as a patient advocate
43. I lack the dedication to the nursing profession to act as a patient advocate

Component V

The remaining five items appear to load onto a fifth component; however, theoretically they are not reflecting a unified concept. It is this lack of theoretical connectivity between the remaining five items that excludes these items from being included in a fifth subscale (Nunnally & Bernstein, 1994) and is best described as a method factor. Possible explanations for the loadings include that four of the items are negatively written items (numbers 24, 29, 35, and 38), and one, item 39, could have been

interpreted by participants to be a negatively written item. The items are explicated for the reader in the following table, Table 4.16.

Table 4.16: Component V Items.

24. Nurses do not provide advocacy for their patients in the clinical setting
29. Increased nursing experience does not increase the nurse's ability to act as a patient advocate
35. When nurses act as patient advocates, they are not supporting patients
38. Nurses should not advocate for patients when treatments cause suffering without patient benefit
39. The more years that I work in nursing, the less effective I am at advocating for my patients

Summary of Results for Hypothesis 1

The PNAS was projected to load onto five components in the principle component analysis based on the pilot testing (Appendix D). Examining the resulting pattern matrix did demonstrate five components; however, the fifth component is comprised of items that are not theoretically connected, thus violating a basic premise of factor analysis (Nunnally & Bernstein, 1994). Based on this analysis, the PNAS is composed of four components, which for the purposes of further discussion are referred to as subscales of the PNAS. The four subscales of the PNAS are: 1) Acting as Advocate; 2) Work Status and Advocacy Actions; 3) Environment and Educational Influences; and 4) Support and Barriers to Advocacy.

Hypothesis 2: The total reliability (Cronbach's alpha) will be > .90.

The reliability for the entire PNAS instrument is calculated by Cronbach's alpha for the entire scale, which in this case is .803. In addition, the four subscale reliabilities (Table 4.17) demonstrate reliabilities ranging from .70-.93. The literature is not consistent on the level of Cronbach's alpha that is considered adequate for scale reliability. Pedhazur and Schmelkin (1991) contend that while lower reliability coefficients are acceptable in the beginning stages of research, higher coefficients are

needed when comparing groups, and the highest coefficients are required when “making important decisions about individuals” (Pedhazur & Schmelkin, 1991, p.109). These two authors additionally point out that there have been various standards used for coefficients depending on the researcher, although an alpha of .7 is said to suffice.

Table 4.17: Reliability Coefficients of PNAS and Subscales

Scale	Cronbach’s Alpha
Entire PNAS	.80
Acting as Advocate	.91
Work Status and advocacy Actions	.93
Environment and Educational Influences	.73
Support and Barriers to Advocacy	.70

DeVellis (2003) refers to an alpha of .7 as a cited lower acceptable level; however, the author cites different ranges for alpha. According to DeVellis, an alpha of “.65 and .70 is minimally acceptable; between .70 and .80 respectable; between .80 and .90, very good; much above .90, one should consider shortening the scale” (p. 95-96).

Nunnally and Bernstein (1994) cite a more concise range of acceptability in Cronbach’s alpha. The authors state an alpha of .70 as acceptable for an early stage of research, and .80 as acceptable for established instruments for groups (Nunnally and Bernstein 1994). One can conclude that an alpha of .70 is acceptable for new instruments, and .80 is acceptable for established instruments.

The PNAS Cronbach’s alpha for the entire instrument is .803, which is acceptable for a newly developed instrument using Nunnally and Bernstein’s (1994) criteria, and “very good” using the criteria developed by DeVellis (2003, p. 95-96). Additionally, the alpha of .803 is consistent with the ranges suggested by Pedhazur and Schmelkin (1991) for beginning stages of research. Each of the subscale’s reliabilities would be considered at least adequate for a newly developed scale (DeVellis 2003; Nunnally & Bernstein, 1994; Pedhazur & Schmelkin, 1991).

Summary of Results for Hypothesis 2

The overall reliability as measured by Cronbach's alpha for the PNAS is .803, which is considered acceptable by many sources in the literature (DeVellis, 2003; Nunnally & Bernstein, 1994; Pedhazur & Schmelkin, 1991). As mentioned in the results for the first hypothesis of the PNAS study, the PNAS has four distinct components, labeled subscales, which have reliability coefficients ranging from .70 to .93 as depicted in Table 4.18. All of the subscale reliabilities would be considered acceptable for newly developed scales (DeVellis 2003; Nunnally & Bernstein, 1994; Pedhazur & Schmelkin, 1991). However, since the hypothesis stated a scale reliability of $>.90$, this hypothesis is not support for the entire PNAS instrument. Two of the subscales, Advocacy Actions and Work Status and Advocacy Actions, which had reliability coefficients $>.90$, would be considered supportive of this hypothesis.

Hypothesis 3: The scale alpha if item removed will not vary more than .05 from the total reliability.

The third hypothesis of the PNAS study relates the entire PNAS Cronbach's alpha and each item's effect on the PNAS reliability coefficient. The second hypothesis is supported in that the total Cronbach's alpha for the entire PNAS is .803. Further analysis of scale alpha if an item was removed resulted in a range of the scale-item alphas from .794 to .813, as depicted in Table 4.18. Using criteria set forth by DeVellis (2003), the scale if item deleted should not deviate more than .05, or specifically for the following table, .753 or greater than .853. None of the items are selected for revision or deletion based on the overall analysis of the entire PNAS. However, based on the principle component analysis loadings, items were selected for deletion, as discussed in the preceding section on exploratory factor analysis.

Table 4.18: PNAS Scale Alpha if Item Deleted

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
1	159.31	184.774	.388	.797
2	159.21	186.468	.359	.799
3	159.21	186.188	.424	.798
4	159.28	184.462	.462	.796
5	159.28	184.325	.506	.796
6	159.36	184.148	.444	.796
7	159.49	183.581	.378	.797
8	159.52	183.844	.353	.797
9	159.26	184.540	.472	.796
10	159.20	184.990	.483	.797
11	160.90	182.758	.176	.805
12	159.51	182.059	.455	.795
13	160.15	177.981	.413	.794
14	159.68	181.974	.409	.795
15	159.75	180.268	.437	.794
16	160.51	179.715	.295	.799
17	159.82	179.744	.418	.794
18	159.48	182.547	.402	.796
19	159.64	184.586	.327	.798
20	159.39	184.210	.384	.797
21	159.65	182.913	.346	.797
22	160.03	181.659	.289	.799
23	162.16	187.234	.118	.805
24*	159.83	195.195	-.144	.813
25	159.24	185.397	.379	.798
26	159.44	182.754	.476	.795
27	159.56	184.850	.322	.798
28	159.32	185.492	.390	.798
29*	160.75	191.258	-.027	.813
30	161.25	176.939	.367	.795
31	161.24	177.772	.367	.796
32	161.76	178.255	.343	.797
33	161.30	177.726	.352	.796
34	161.87	182.303	.244	.801
35*	159.36	189.677	.091	.804
36	161.13	186.183	.122	.806
37	159.57	184.796	.268	.799
38*	159.96	187.692	.094	.806

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
39	162.47	192.810	-.062	.809
40	160.96	181.422	.251	.801
41	161.80	183.148	.214	.802
42	162.31	187.565	.103	.805
43	162.57	189.973	.048	.806

*indicates a negatively worded item that was reverse coded for analysis

In addition to the entire PNAS reliability, reliability of each of the subscales was analyzed using the calculated Cronbach's alpha of the subscale. The Acting as Advocate subscale consists of 16 items and has a Cronbach's alpha of .91. The following table, Table 4.19, explicates the subscale alpha if item deleted. Based on the standard set forth by DeVellis (2003), none of the subscale items would be deleted or revised.

Table 4.19: Acting as Advocate Subscale Alpha if Item Deleted

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1	74.09	49.971	.578	.430	.899
2	73.99	50.816	.598	.458	.899
3	73.99	50.758	.679	.574	.898
4	74.06	49.848	.677	.503	.897
5	74.05	49.535	.773	.703	.895
6	74.13	48.729	.757	.711	.894
7	74.26	48.578	.610	.616	.898
8	74.30	48.520	.595	.562	.899
9	74.04	49.146	.794	.751	.894
10	73.98	50.162	.721	.658	.896
12	74.29	48.521	.618	.448	.898
22	74.81	50.082	.261	.132	.919
25	74.02	50.528	.555	.433	.900
26	74.22	48.985	.652	.481	.897
27	74.33	50.008	.479	.317	.902
28	74.10	50.537	.580	.398	.899
37	74.35	49.370	.445	.241	.905

The Work Status and Advocacy Actions subscale consists of 5 items and has a Cronbach's alpha of .93. Analysis of the subscale's alpha if item deleted demonstrated less than .05 variation. Similar to the Advocacy and Action subscale, no items are indicated for revision or deletion based on DeVellis' criteria (2003) for scale alpha if item deleted (Table 4.20).

Table 4.20: Work Status and Advocacy Actions Subscale Alpha if Item Deleted

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
30	9.98	21.330	.785	.656	.911
31	9.97	21.401	.835	.722	.901
32	10.49	21.179	.833	.702	.902
33	10.03	21.026	.833	.705	.902
34	10.60	22.772	.733	.563	.921

The Environment and Educational Influences subscale incorporates eight items. The Cronbach's alpha for this subscale is .70. The variation of the subscale's alpha if item deleted ranged from .655 to .720, which supported the third hypothesis (Table 4.21).

Table 4.21: Environment and Educational Influences Subscale Alpha if Item Deleted

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
11	29.96	16.111	.274	.126	.720
13	29.21	16.500	.403	.205	.667
14	28.74	17.603	.462	.259	.658
15	28.81	17.185	.461	.238	.655
19	28.70	18.421	.391	.219	.673
20	28.45	18.478	.436	.333	.668
21	28.71	17.350	.466	.369	.655
22	29.10	16.469	.403	.198	.667

Lastly the Support and Barriers to Advocacy subscale alpha if item deleted was analyzed. This subscale consists of eight items and has a scale alpha of .73. The deletion of one item, item 41, did cause a decrease in the subscale alpha if the item was deleted

(Table 4.22). However, due to the relatively high item-total correlation, the item was not selected for revision or deletion, as discussed in the following fourth hypothesis.

Table 4.22: Support and Barriers to Advocacy Subscale Alpha if Item Deleted

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
16	19.14	20.383	.473	.265	.685
17	18.45	23.549	.338	.361	.712
18	18.11	25.144	.254	.305	.724
23	20.78	22.812	.361	.171	.708
40	19.59	20.357	.486	.280	.682
41	20.43	19.528	.604	.448	.653
42	20.94	22.475	.382	.415	.704
43	21.19	23.228	.425	.380	.698

Summary for Hypothesis 3:

The criterion of the scale alpha if item removed not varying by more than .05 was applied to the entire PNAS (DeVellis, 2003). In review of the entire PNAS instrument, the hypothesis is supported as the scale alpha if item removed did not vary more than .05. Moreover, three of the subscales of the PNAS supported this hypothesis by demonstrating less than .05 variation in alpha if item deleted. However, it should be noted that one of the four subscales, Support and Barriers to Advocacy, did have variation of more than .05 on one item.

Hypothesis 4: The item-scale correlations will have a high correlation between item and entire scale.

Analysis was undertaken to determine the relationship between item and the entire PNAS instrument using item-scale correlations. Overall, the item-scale correlations for the PNAS have moderate correlations between the item and the entire PNAS scale, as depicted in Table 4.23 (Dawson & Trapp, 2004). The correlations ranged from negative correlation of -0.144 (item 24) to 0.506 (item 5). The negative correlations in the item-total correlations are associated with items that are negatively worded or, in the case of

item 39, could be interpreted as negatively written. Based on the overall PNAS instrument results for item-total correlations, the fourth hypothesis is not supported.

Table 4.23: PNAS Item-Total Correlations

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
1	159.31	184.774	.388	.797
2	159.21	186.468	.359	.799
3	159.21	186.188	.424	.798
4	159.28	184.462	.462	.796
5	159.28	184.325	.506	.796
6	159.36	184.148	.444	.796
7	159.49	183.581	.378	.797
8	159.52	183.844	.353	.797
9	159.26	184.540	.472	.796
10	159.20	184.990	.483	.797
11	160.90	182.758	.176	.805
12	159.51	182.059	.455	.795
13	160.15	177.981	.413	.794
14	159.68	181.974	.409	.795
15	159.75	180.268	.437	.794
16	160.51	179.715	.295	.799
17	159.82	179.744	.418	.794
18	159.48	182.547	.402	.796
19	159.64	184.586	.327	.798
20	159.39	184.210	.384	.797
21	159.65	182.913	.346	.797
22	160.03	181.659	.289	.799
23	162.16	187.234	.118	.805
24*	159.83	195.195	-.144	.813
25	159.24	185.397	.379	.798
26	159.44	182.754	.476	.795
27	159.56	184.850	.322	.798
28	159.32	185.492	.390	.798
29*	160.75	191.258	-.027	.813
30	161.25	176.939	.367	.795
31	161.24	177.772	.367	.796
32	161.76	178.255	.343	.797
33	161.30	177.726	.352	.796
34	161.87	182.303	.244	.801
35*	159.36	189.677	.091	.804

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
36	161.13	186.183	.122	.806
37	159.57	184.796	.268	.799
38*	159.96	187.692	.094	.806
39	162.47	192.810	-.062	.809
40	160.96	181.422	.251	.801
41	161.80	183.148	.214	.802
42	162.31	187.565	.103	.805
43	162.57	189.973	.048	.806

*indicates a negatively worded item that was reverse coded for analysis

In addition to the item-total correlations for the entire instrument, item-total correlations of each of the subscales were analyzed. The Acting as Advocate subscale consists of 16 items and has a Cronbach's alpha of .91. Table 4.24 explicates the item-total correlations for the items in this subscale. The majority of the items in this subscale had fair or moderate degree of relationship with only three items having a high degree of item-total correlation (Dawson & Trapp, 2004).

Table 4.24: Acting as Advocate Subscale Item-Total Correlations

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1	74.09	49.971	.578	.430	.899
2	73.99	50.816	.598	.458	.899
3	73.99	50.758	.679	.574	.898
4	74.06	49.848	.677	.503	.897
5	74.05	49.535	.773	.703	.895
6	74.13	48.729	.757	.711	.894
7	74.26	48.578	.610	.616	.898
8	74.30	48.520	.595	.562	.899
9	74.04	49.146	.794	.751	.894
10	73.98	50.162	.721	.658	.896
12	74.29	48.521	.618	.448	.898
22	74.81	50.082	.261	.132	.919
25	74.02	50.528	.555	.433	.900
26	74.22	48.985	.652	.481	.897

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
27	74.33	50.008	.479	.317	.902
28	74.10	50.537	.580	.398	.899
37	74.35	49.370	.445	.241	.905

The second subscale, Work Status and Advocacy Actions, consists of 5 items and has a Cronbach's alpha of .93. Four items in this subscale had high correlations that are supportive of the fourth hypothesis; with one item have a moderately high correlation. Table 4.25 explicates the item-total correlations for the Work Status and Advocacy Actions subscale.

Table 4.25: Work Status and Advocacy Actions Subscale Item-Total Correlations

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
30	9.98	21.330	.785	.656	.911
31	9.97	21.401	.835	.722	.901
32	10.49	21.179	.833	.702	.902
33	10.03	21.026	.833	.705	.902
34	10.60	22.772	.733	.563	.921

The Environment and Educational Influences subscale incorporates eight items with a reliability coefficient of .70. After review of the item-total statistics depicted in Table 4.26, it was determined that the item-total correlations indicate a fair degree of relationship, thus not supporting the fourth hypothesis.

Table 4.26: Environment and Educational Influences Subscale Item-Total Correlations

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
11	29.96	16.111	.274	.126	.720
13	29.21	16.500	.403	.205	.667
14	28.74	17.603	.462	.259	.658
15	28.81	17.185	.461	.238	.655
19	28.70	18.421	.391	.219	.673
20	28.45	18.478	.436	.333	.668
21	28.71	17.350	.466	.369	.655
22	29.10	16.469	.403	.198	.667

Lastly the Support and Barriers to Advocacy subscale was analyzed for reliability. This subscale consists of eight items and has a scale alpha of .73. Similar to the Advocacy Actions and Environment and Educational Influences subscales, these particular subscale item-total correlations demonstrate a fair degree of relationship, and do not support the fourth hypothesis. The following table, Table 4.27, displays the item-total correlations for the Support and Barriers to Advocacy subscale.

Table 4.27: Support and Barriers to Advocacy Subscale Item-Total Correlations

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
16	19.14	20.383	.473	.265	.685
17	18.45	23.549	.338	.361	.712
18	18.11	25.144	.254	.305	.724
23	20.78	22.812	.361	.171	.708
40	19.59	20.357	.486	.280	.682
41	20.43	19.528	.604	.448	.653
42	20.94	22.475	.382	.415	.704
43	21.19	23.228	.425	.380	.698

Summary for Hypothesis 4

The fourth hypothesis proposed that the item-total correlations between item and the entire PNAS would demonstrate a high level of correlation. The analysis of the entire

PNAS instrument indicated that this hypothesis was not supported. Further analysis of the four subscales denotes only one subscale (Work Status and Advocacy Actions) that is supportive of the fourth hypothesis.

Correlations between Subscales

In addition, correlations of the sum of the subscales were examined to determine the relationship between the subscales, as shown in Table 4.28. The highest correlation occurs between the Acting as Advocate and Environment and Educational Influences subscale with a correlation of .48 ($p=.000$). Other significant correlations occurred between: 1) the Work Status and Advocacy Actions and the Support and Barriers to Advocacy subscale (.328; $p=.000$); and 2) the Environment and Educational Influences subscale and the Support and Barriers to Advocacy subscale (.190; $p=.000$). A significant negative correlation exists between the Acting as Advocate and the Work Status and Advocacy Actions subscales (-.104; $p=.034$).

Table 4.28: PNAS Subscale Correlations

		SUM I	SUM II	SUM III	SUM IV
SUM I	Pearson Correlation	1	-.104(*)	.484(**)	-.082
	Sig. (2-tailed)		.034	.000	.094
	N	419	419	419	419
SUM II	Pearson Correlation	-.104(*)	1	.051	.328(**)
	Sig. (2-tailed)	.034		.294	.000
	N	419	419	419	419
SUM III	Pearson Correlation	.484(**)	.051	1	.190(**)
	Sig. (2-tailed)	.000	.294		.000
	N	419	419	419	419
SUM IV	Pearson Correlation	-.082	.328(**)	.190(**)	1
	Sig. (2-tailed)	.094	.000	.000	
	N	419	419	419	419

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Summary for Research Question #1

The first research question determined the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations. After analysis of the descriptive characteristics of the PNAS, the dataset was analyzed using principle components analysis with oblique promax rotation. Five components were extracted; however, only four of the components were sufficiently theoretically linked to be considered for further analysis, indicating that the first hypothesis was not supported. Each of the four components is considered to be subscales of the PNAS.

Further analysis of the PNAS and the four subscales was conducted to support the second, third, and fourth hypotheses. The overall PNAS instrument Cronbach's alpha indicated a reliability coefficient of .80, thus not supporting the second hypothesis. However, two of the subscales had alpha coefficients greater than .90 that would indicate support for the second hypothesis. The third hypothesis related to scale item if alpha removed was supported for the entire PNAS instrument and for three of the subscales when the subscales were examined individually. The fourth hypothesis regarding item-total correlation was not supported for the entire PNAS instrument; nonetheless, the Work Status and Advocacy Actions subscale reflect relatively high item-total correlations.

Research Question #2: Determine convergent validity by using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes toward Patient Advocacy Scale (APAS).

Hypothesis 5: The NPVSR total score will significantly correlate with total PNAS score.

Convergent validity examines the relationship between two independent methods of measuring an attribute by correlating the two measures (Nunnally & Bernstein, 1994). In this particular case, the NPVSR and PNAS total scores are correlated to support convergent validity (Nunnally & Bernstein). For this study, a positive correlation between PNAS and NPVSR total scores is predicted. The first step in analyzing the correlation between the NPVSR and PNAS total scores included examining the

scatterplot to exclude the possibility of a curvilinear relationship (Dawson & Trapp, 2004). In this case, the scatterplot appears linear. Next, the Pearson correlation coefficient of total PNAS and total NPVSR scores was calculated, and for this study it is .256, which is significant at the 0.01 level (Table 4.29). This demonstrates a fair amount of relationship between the PNAS and NPVSR scales (Dawson & Trapp, 2004). The size of relationship between the PNAS and the NPVSR may be reflective of the differing scope of each instrument. The PNAS is measuring protective nursing advocacy, whereas the NPVSR is measuring nursing professional values derived from the American Nurses Association (ANA) Code of Ethics (1995).

Table 4.29: NPVSR-PNAS Total Score Correlations

		PNAS Total	NPVSR Total
PNAS Total	Pearson Correlation	1	.256(**)
	Sig. (2-tailed)		.000
	N	419	418
NPVSR Total	Pearson Correlation	.256(**)	1
	Sig. (2-tailed)	.000	
	N	418	418

** Correlation is significant at the 0.01 level (2-tailed).

Hypothesis 6: The APAS total score will significantly correlate with total PNAS score.

As in the examination of the relationship between the PNAS and NPVSR total scores, the PNAS and APAS total scores were correlated provide evidence of convergent validity. A positive correlation between the PNAS and APAS total scores was predicted. After examining the scatterplot for curvilinearity (Dawson & Trapp, 2004), the correlations were calculated. The resulting Pearson correlation between total PNAS and total APAS scores indicated a Pearson correlation coefficient of .310 significant at the 0.01 level. Analogous to the PNAS and the NPVSR, the degree of correlation coefficient reveals a fair degree of relationship between the PNAS and the APAS scores (Dawson & Trapp, 2004). The PNAS and APAS correlation may share aspects similar to the relationship between the PNAS and the NPVSR in that the APAS is a broad instrument measuring attitudes to many aspects of nursing advocacy, not specifically protective

nursing advocacy. In addition, the APAS is an attitudinal measure (Bu, 2005), while the PNAS is measuring protective nursing advocacy from a belief and action perspective (Table 4.30).

Table 4.30: APAS-PNAS Total Score Correlations

		APAS Total	PNAS Total
APAS Total	Pearson Correlation	1	.310(**)
	Sig. (2-tailed)		.000
	N	409	409
PNAS Total	Pearson Correlation	.310(**)	1
	Sig. (2-tailed)	.000	
	N	409	419

** Correlation is significant at the 0.01 level (2-tailed).

Total APAS-NPVSR-PNAS subscale correlations

Further comparisons of the correlations between the total scores of the four subscales of the PNAS and the total APAS and NPVSR scores were additionally examined for relationships (Table 4.31). The Acting as Advocate (Factor I) and Environment and Educational Influences (Factor III) subscale totals had moderate positive correlations with total APAS and NPVSR total scores. Support and Barriers to Advocacy subscale (Factor IV) scores had a small negative correlation with total NPVSR scores, but did not significantly correlate with total APAS scores. Factor II, the Work Status and Advocacy Actions subscale, did not significantly correlate with either the NPVSR or APAS total scores.

Table 4.31: APAS-NPVS-R-PNAS Subscale Score Correlations

		NPVS-R Total	APAS Total
Factor I	Pearson Correlation	.325(**)	.349(**)
	Sig. (2-tailed)	.000	.000
	N	418	409
Factor II	Pearson Correlation	-.029	.046
	Sig. (2-tailed)	.560	.356
	N	418	409
Factor III	Pearson Correlation	.354(**)	.308(**)
	Sig. (2-tailed)	.000	.000
	N	418	409
Factor IV	Pearson Correlation	-.106(*)	-.090
	Sig. (2-tailed)	.031	.070
	N	418	409

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Summary of Research Question #2

The second research question related to the correlation of the PNAS total scores with two other instrument total scores: the NPVS-R and the APAS. The NPVS-R and APAS total score correlations with PNAS were analyzed to provide evidence of convergent validity for the PNAS. The resulting Pearson correlations between the NPVS-R, APAS, and PNAS total scores were not highly correlated, which may be related to broad scope of the NPVS-R and APAS compared to the PNAS.

Content Validity

The convergent validity of the PNAS was examined by the use of the NPVS-R and APAS. Content validity for the PNAS was measured by the methodology put forth by Lynn (1986) in which a panel of experts rate each scale item in relevance to the proposed

factor using a four point Likert scale, creating the Content Validity Index (CVI). In this study, a panel of 8 nurses that are considered experts with protective nursing advocacy was surveyed. The actual wording of the Likert scale is based on the recommendation from Soeken (2005) and includes the levels of not relevant, somewhat relevant, quite relevant, and very relevant. The actual factor level CVI calculation used in this study is based on work by Polit and Beck (2006) and similarly reflected in the subsequent publication by Polit et al. (2007). CVI is calculated for each component and the entire PNAS in Table 4.32.

Table 4.32: Content Validity Index

Content Validity Index for Each Component of the PNAS						
Expert	Component I CVI	Component II CVI	Component III CVI	Component IV CVI	Component V CVI	Entire PNAS CVI
1	100.0%	100.0%	100.0%	85.7%	83.3%	93.8%
2	100.0%	75.0%	83.3%	71.4%	0.0%	65.9%
3	100.0%	100.0%	100.0%	92.9%	100.0%	98.6%
4	100.0%	50.0%	50.0%	57.1%	0.00%	51.4%
5	87.5%	75.0%	83.3%	71.4%	50.0%	73.4%
6	87.5%	75.0%	66.7%	64.3%	33.3%	97.9%
7	100.0%	50.0%	66.7%	71.4%	83.3%	74.3%
8	87.5%	75.0%	66.7%	71.4%	83.3%	76.8%
Average CVI All Experts	95.3%	75.0%	77.1%	73.2%	54.1%	79.0%

The component level content validity indexes ranged from 54.1% (Component V) to 95.3% (Component I) with an overall PNAS CVI of 79.0%. The most often cited minimum CVI cited is .80 (Polit & Beck, 2006); however, there has been recent literature

to suggest a more stringent .90 level be used (Polit & Beck, 2006; Polit et al., 2007). For the purpose of this study, content validity for only one component, Component I, would be considered valid using the criterion of .80 or .90. The overall scale CVI, at 79%, would not be considered valid using the .80 criterion. As noted in the exploratory factor analysis, component V did load onto one component, but was not theoretically connected. The CVI for this component is .54. Removal of the fifth component from the content validity analysis would result in a scale CVI of .80.

Construct Validity

Construct validity is demonstrated using exploratory factor analysis, the results of which are discussed previously in this chapter. Factor analysis and rotation can reduce the correlations between items to a simpler, meaningful structure (Norman & Streiner, 2000). The resulting pattern and structure matrix interpretation is left to the researcher (Tabachnick & Fidell, 2007). In this study, the proposed five component solution was reflected in the results of the principle components analysis with promax rotation. However, the fifth factor was composed entirely of negatively written items, or in the case of item 39, could be interpreted as negatively written. Therefore, the four component solution was selected, and the items contained in each of the subscales were congruent with the dimension they were measuring.

OTHER FINDINGS OF THE PNAS STUDY

PNAS and Self-Esteem Total Score Comparisons

The Rosenberg Self-Esteem Scale (SES) (1989) was used in this study as a measure of social acquiescence to rating the PNAS items (Z. Wu, personal communication, May 16, 2007). The relationship between total SES scores and total PNAS scores were analyzed using the bivariate correlational method. The correlation of total PNAS scores and total SES scores was $-.129$, indicating a low level of negative correlation between the two scores (Dawson & Trapp, 2004). This finding was significant at the $p=.009$ level. This would indicate little relationship between PNAS total scores and SES total scores, indicating that social acquiescence to answering the PNAS items is unlikely.

PNAS Narrative Portion

In addition to the actual Protective Nursing Advocacy Scale, three open-ended narrative questions were posed to participants to provide narrative support for the items of the PNAS. The three narrative questions included in the study are:

Narrative question one: When I am acting as an advocate for my patient(s), I am performing the following actions:

Narrative question two: When I am acting as an advocate for my patient(s), support for my patient advocacy at my workplace can be described as:

Narrative question three: When I am acting as an advocate for my patients(s), I ensure that I am following the patient's wishes by:

Although the surveys with completed PNAS scale items were used in the PNAS analysis, not all participants chose to participate in the open-ended question section of the PNAS study. Of the 419 participants, 325 completed the narrative portion either fully or partially. The frequency of response for each question is summarized in the following tables. Due to the open-ended nature of the questions, the participants could write as much as the participant desired, often resulting in multiple frequency counts for a single

participant on a single question. The categories of narrative data used for the frequency counts were verified by an outside reviewer.

For the first narrative question, the most frequent actions the nurses indicated that they performed as an advocate were educating patients and families, followed by communicating with other members in the healthcare team. Other significant actions included: 1) questioning and ensuring adequate care, meeting needs; 2) assessing health, needs, wishes and desires of patients; 3) communicate with patient and family; 4) ensuring safety of patient; 5) respecting and protecting patient rights; and 6) speaking and acting on behalf of patient and acting as voice of patient. Less frequent citations of actions are summarized in table 4.33.

Although the majority of the frequencies for the first narrative question do not support the PNAS items, the responses related to ensuring safety of the patient indicate support for the following PNAS items related to protection:

I am acting as a patient advocate when I am protecting vulnerable patients from harm

Vulnerable patients need my protection in harmful situations

Nurses can protect patients from harmful situations by physically barring a procedure to occur

Narrative responses related to respecting and protecting patient rights are additionally supportive of these two PNAS items:

I am advocating for my patient when I protect my patient's rights in the healthcare environment

Nurses are acting as advocates when nurses protect the right of the patient to make his/her own decisions

Table 4.33: Narrative Question One Response Categories and Frequencies

When I am acting as an advocate for my patient(s), I am performing the following actions:	
Category	Frequency
Advocating for legal change	1
Assess health/needs/wishes/desires of patient	59
Building trust	2
Caring	4
Collaborating/mediating	18
Communicate with others in healthcare team	94
Communicate with patient and family	54
Confidentiality	11
Educating patient and family	105
Educating self	2
Encouraging patient and encouraging self help	13
Ensuring and improving outcomes	6
Following patient wishes, advance directives	30
Informed decision	16
Intervening and assisting/helping	7
Looking out for patient, best interest	9
Professional legal duty	10
Questioning and ensuring adequate care, meeting needs	80
Respect, support dignity	28
Respecting and protecting patient rights	36
Ensuring safety	51
Self evaluation	1
Speaking and acting on out/on behalf of/voice of patient	31
Staffing hinders	1

The responses related to speaking/acting on behalf of the patient and acting as voice of patient assist to corroborate the ensuing PNAS items:

Patients need nurses to act on the patient's behalf

I am acting on my patient's behalf when I am acting as my patient's advocate

I speak out on my patient's behalf when I am acting as my patient's advocate

I am acting as my patient's voice when I am advocating for my patient

Nurses that act on a patient's behalf are preserving the patient's dignity

The second narrative question asks for responses regarding the workplace support for the nurses' advocacy actions. The majority of the frequency responses fell into three broad categories: 1) supportive; 2) minimal support; and 3) fair support. Additional indications of support for nursing advocacy are contained in table 4.34. The PNAS items reflective of the narrative response of minimal support for advocacy actions include:

I may suffer risks to my employment when acting as a patient advocate

Nurses that speak out on behalf of patients may face retribution from employers

I may be punished for my actions by my employer when I inform my patients of their own rights

Nurses that speak out on behalf of vulnerable patients may be labeled as disruptive by employers

When nurses inform and educate patients about the patients' rights in the clinical setting, the nurse may place her/his employment at risk

Table 4.34: Narrative Question Two Response Categories and Frequencies

When I am acting as an advocate for my patient(s), support for my patient advocacy at my workplace can be described as:	
Category	Frequency
Available	1
Caring	2
Carrying out advance directive	3
Collaborate/liaison/buffering	14
Communicating	19
Documenting	3
Educate	11
Ethical	1
Ethics committee/institutional advocate	12
Excellent/strong/high regard/very supportive/very good	23
Fair/Acceptable/variable/not always supported/tolerable/ moderate/satisfactory/adequate	26
Following patient wishes	3
Institution more focused on money	4
Keep patient happy/satisfied	3
Peer review	1
Plan of care	1
Poor/weak/minimal/mediocre/resistant unwelcome/challenged/difficult/non-existent/ going beyond scope of practice/trouble maker/ intolerant/passive aggressive/ physicians supported/ difficult/frustrating/pitiful/needs improvement/hard/disruptive	45
Positive/good/receptive/supportive/expected/encouraged/beneficial/ easy/acknowledged/well received/favorable/participatory	88

Category	Frequency
Priority	1
Professional/nurse responsibility/IMPLIED	18
Protect patient/safety	7
Patient activist	1
Patient rights	6
Speaking up patient	4
Support for patient	2
Thanks from MD	1
Understanding needs and needs met/best care by team	11

The last open-ended narrative question involved following the patient's wishes while acting as a nurse advocate. The five major responses, in order of frequency, were: 1) interacting and communicating with patient and family; 2) assessing and reviewing wishes and desires of the patient; 3) acting on and following wishes and desires of patients; 4) interacting and communicating with other healthcare professionals; and 5) following advance directives. An additional category that had a moderate amount of frequencies was education of patient and family. The remaining, less-frequent categories are summarized in table 4.35.

Even though the third narrative question has a broad range of responses by the participants, the connection between PNAS items and the responses are related in only one category: interacting and communicating with patient and family. This category is reflected in the following PNAS item.

Nurses that provide information to patients about patient care are acting as patient advocates

All three of the narrative questions presented with a wide range of variability on responses, which is most likely reflective of the open-ended questions. Participants may have interpreted the open-ended questions differently in regards to their own experiences with nursing advocacy and this may explain the high degree of variation in categories.

Further discussion relating the narrative responses, PNAS items, and the theoretical framework is discussed in the subsequent chapter.

Table 4.35: Narrative Question Three Response Categories and Frequencies

When I am acting as an advocate for my patients(s), I assure that I am following the patient's wishes by:	
Category	Frequency
Acting on behalf of patient/protecting rights	6
Acting on/following desires/wishes of patient	58
Adequate care	15
Advance directives	41
Appropriate	1
Assessing and reviewing wishes/desires	113
Comfortable	1
Confidentiality	4
Documenting	15
Education	35
Encourage participation by family and patient and collaborating with patient	8
Encouraging self advocacy by patient	1
Interacting and communicating with other healthcare professionals	50
Interacting and communicating with patient and family	127
Keeping update with literature	1
Obtain management support	1
Safety	5
Speaking up	5
Their gratefulness	1

Chapter Summary

In summary, the results of the PNAS provide the basis of the evidence of reliability and validity for the newly developed instrument. Comparisons of demographic data and total PNAS scores did not indicate significant differences between groups of participants for the majority of the demographic data. Notable differences in mean total PNAS scores were revealed between those participants that did have medical-surgical certification and those that did not. Additional significant differences in mean total PNAS scores were found between the licensed vocational nurse entry level and the diploma nurse entry level to nursing practice.

Exploratory factor analysis was used to reduce the PNAS items into more meaningful components using principle factor analysis. Since the components were theoretically related, oblique rotation, specifically promax, was utilized, resulting in five factors. However, one component contained items that were not theoretically connected, and the items contained in this component were selected for deletion or revision. This resulted in four components used as subscales of the PNAS instrument.

The entire PNAS reliability indicates an acceptable level of reliability for a newly developed instrument with a Cronbach's alpha of .80. In addition, each of the four subscales has a satisfactory level of internal consistency with coefficients of .93, .90, .73, and .70.

Convergent validity evidence was supported by the positive correlation of total PNAS and NPVSR scores. Additional convergent validity support was found in the positive correlation of total PNAS and APAS scores. Content validity, as measured by a panel of medical-surgical nursing experts, indicated an overall acceptable level of agreement for the PNAS when the items in the four subscales were rated. Construct validity, demonstrated by the use of exploratory factor analysis, supported significant component loadings onto five components, four of which are congruent with the preconceived theoretical framework.

The findings from this study help to support the psychometric properties of the PNAS. The PNAS instrument will add to the few existing nursing advocacy scales to

improve advocacy actions with practicing nurses. The relationship of the PNAS findings to the theoretical framework, along with implications for nursing, is discussed in the following chapter.

CHAPTER 5: CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

INTRODUCTION

In this chapter, the purpose of this study is reviewed along with the major findings. The results from the PNAS study are related to the underlying theoretical framework and existing, significant advocacy literature. The chapter concludes with a discussion of the limitations of this study, the implications for nursing, and recommendations for further research.

OVERVIEW OF THE RESEARCH PURPOSE

The purpose of this study was to determine the psychometric properties and support validity of the PNAS using a descriptive correlational design. A representative sample of 419 registered nurses with experience in medical-surgical specialty participated in this study. The two research questions that guided this study were: 1) What are the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, Cronbach's alpha if item removed, and item-scale correlations?; and 2) What is the convergent validity when using the Nursing Professional Values Scale-Revised and the Attitudes Toward Patient Advocacy Scale? The psychometric properties of the PNAS were analyzed using exploratory factor analysis techniques. Reliability of the entire PNAS, subscales, and scale items was evaluated. Convergent validity was supported using the NPVSR, and APAS total scores correlated with PNAS total scores. In addition, demographic data were analyzed using analysis of variance statistical techniques and appropriate post hoc analysis when indicated to determine differences of total PNAS scores in regard to demographic categories.

PRESENTATION OF MAJOR FINDINGS AND CONCLUSIONS

This section presents the major finding of the PNAS study. The sample characteristic findings are presented first. Secondly, the findings related to each of the research questions are discussed.

Sample Characteristics

The sample in the PNAS study consisted of 462 registered nurses from the State of Texas with a minimum of one year's experience in the medical-surgical specialty. Of the 462 participants, 419 participants fully completed the PNAS study packet, and for the purposes of this discussion, the 419 participants are indicated as the sample of this study.

The vast majority of the participants were female, had a mean age of 47 years, and the majority of participants indicated they were Caucasian. These findings match the Texas BON data, which indicate the highest percentage of nurses are in the 45-54 age range and are Caucasian females (BON 2007d). Most of the participants in this study entered nursing at the associate degree or baccalaureate degree level, and the majority currently hold a baccalaureate degree. This finding of current level of education differs slightly from the BON data on current level of education of registered nurses, which indicate that the majority has a current level of associate's degree (BON, 2007c). Most of the participants did not have medical-surgical specialty certification, nor did they hold a degree in another discipline. The predominate number of participants worked in hospital-based settings full time as a staff nurse, had been in nursing practice for 19 years, had 14 years of experience in the medical-surgical nursing specialty, and did not have previous assertiveness or advocacy training. Comparable employment statistics are found in the Texas BON data in that the prevalent employment setting and title for Texas registered nurses are hospital-based staff nurses (2007e).

Evaluation of the difference in total PNAS scores based on demographic data was performed through the use of appropriate correlational analysis or analysis of variance analysis. Overall, there were no significant correlations between total PNAS scores and the following interval demographic data: age, years in nursing, and years in medical-surgical nursing. Significant differences of mean PNAS scores between groups, as

analyzed by analysis of variance, demonstrated a significant difference in the medical-surgical certified nurses and those nurses that did not hold a certification in medical-surgical nursing. In the case of three or more groups in the demographic data, only one significant difference was found in the post hoc analysis of differences in the mean total PNAS scores between the licensed vocational nurse entry level and the diploma entry level.

RESEARCH QUESTIONS

The PNAS study was guided by two research questions: 1) What are the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlations?; and 2) What is the convergent validity when using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes Toward Patient Advocacy Scale (APAS)? The following discussion is presented for each research question and the associated hypotheses.

Research Question One

The following hypotheses were tested from the first research question using principle components analysis and reliability statistical techniques: Determine the psychometric properties of the PNAS including exploratory factor analysis factor loadings, reliability coefficient, scale alpha if item removed, and item-scale correlation.

Hypothesis One: The exploratory factor analysis will load onto five predicted factors with loadings of .30 and no secondary loadings.

The first hypothesis of the PNAS study predicted five factors, or components, with loadings of .30 and no secondary loadings. This prediction was based on the pilot testing of the instrument (Appendix D). However, it should be noted that the pilot sample size, at 108 participants, was not a sufficient size for factor analysis (Tabachnick & Fidell, 2007). The sample for this study (the PNAS) did provide an adequate sample size of 419 participants (Stevens, 2002).

The frequencies of each item in the PNAS were first examined in regard to descriptive statistics. The highest percentage of responses in the PNAS results consisted

of the “strongly agree” category for the PNAS items, followed by the “mostly agree” category. This is further reflected in the relatively high mean for each item, combined with an overall negative skew for the PNAS items.

The results of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Barlett’s Test of Sphericity indicated that the correlation matrix was adequate for principle components analysis. Additional examination of the communalities showed a range of .033 to .806; however, the lowest communalities were associated with items that were selected for deletion or modification in further versions of the PNAS.

The principle component analysis was used as the extraction technique, along with oblique rotation, specifically promax. The choice of the oblique rotation was theoretically indicated as the component or factor that would be correlated to some degree. The resulting pattern and structure matrix were analyzed for actual loadings of the components.

Using the pattern matrix for interpretation, the PNAS items loaded onto five components. However, the fifth component contained items that were not theoretically connected. In addition, four of the items in the fifth component were negatively written and the remaining item could be interpreted as a negative item. Due to this lack of theoretical connectivity between the items in the fifth factor, it was decided by the PI to use the first four components of the pattern matrix for further analysis of the components.

In addition, one item, number 36, appeared to weakly load, at .151, onto the second component. Furthermore, this particular item was not theoretically connected to the other five items in the second component. Due to the weak loading and the lack of theoretical relationship to the other items in the component, item number 36 was deleted from the analysis.

The resulting four components were labeled according to the general descriptive content of the components. The resulting components are: Acting as Advocate, Work Status and Advocacy Actions, Environment and Educational Influences, and Support and Barriers to Advocacy. As indicated by the correlations of the component scores with each other, the components are not highly correlated, thus indicating the components are

measuring separate constructs (DeVellis, 2003). For the purposes of further discussion, it was decided by this PI to call the components subscales.

Hypothesis Two: The total reliability (Cronbach's alpha) will be $> .90$.

The reliability for the entire PNAS instrument is indicated by the Cronbach's alpha for all the 43 items, which in this case is .803. Although there are no set criteria for reliability coefficients, this level of reliability is considered acceptable for new instruments (DeVellis, 2003; Nunnally & Burstein, 1994; Pedhazur & Schmelkin, 1991). In addition, each of the subscale's reliability coefficients was further analyzed, resulting in the following coefficients listed in Table 5.1

Table 5.1: PNAS Subscale Reliability Coefficients

Scale	Cronbach's Alpha
Acting as Advocate	.91
Work Status and advocacy Actions	.93
Environment and Educational Influences	.73
Support and Barriers to Advocacy	.70

The Cronbach's alpha for each of the four subscales ranges from .93 to .70. Even with this range of coefficients, the alpha level for each is considered acceptable, particularly for newly developed instruments (DeVellis, 2003; Nunnally & Burstein, 1994; Pedhazur & Schmelkin, 1991).

Hypothesis Three: The scale alpha if item removed will not vary more than .05 from the total reliability.

Further examination of the reliability included the effect on the PNAS Cronbach's alpha if an item were deleted. DeVellis (2003) suggests a criterion for revising or deleting an item based on a variation of more than .05 in the alpha. A thorough review of the entire PNAS instrument revealed that the alpha ranged from .794 to .813 when the alpha was calculated for the PNAS when the item was deleted. The overall reliability of the PNAS was .803, indicating that alpha coefficients greater than .853 or less than .753

would be considered for deletion or revision based on DeVellis' criteria. However, when applying this criterion, none of the items was selected for deletion or revision. It should be noted that item numbers 24, 29, 35, 36, 38, and 39 were selected for deletion or revision based on the component loadings and theoretical connections, which is discussed in the principle components analysis section of this chapter.

Hypothesis Four: The item-scale correlations will have a high correlation between item and entire scale.

The item-scale correlations were analyzed to ascertain the correlation between each PNAS item and the entire PNAS instrument. DeVellis (2003) suggests that "each individual item should correlate substantially" (p.93) with the other items in the instrument using the corrected item-scale correlation. It should be noted that DeVellis does not set forth a numerical definition for a substantial correlation. An extensive review of the item-total correlation demonstrated correlations ranging from -0.144 to 0.506. Item numbers 24, 29, and 33 had low negative item-scale correlations. Overall, the majority, i.e., 70%, of the correlations between the item and entire PNAS were in the fair range (Dawson & Trapp, 2004). Correlations that reflected little relationship between the item and scale account for 30% of the correlations and 2% of the correlations were moderate (Dawson & Trapp).

Based on the results demonstrating that the majority of the correlations between items and the entire PNAS instrument were in the fair range as defined by Dawson and Trapp (2004), this hypothesis is not fully supported. Although there is a lack of clear definition of a numerical value of a high correlation, the results of this study only indicate one correlation that is greater than .5, with the most item-scale correlations being in the .25-.5 range.

Research Question Two

The second research question postulated two hypotheses that were tested using correlational statistical techniques: Determine convergent validity by using the Nursing Professional Values Scale-Revised (NPVSR) and the Attitudes toward Patient Advocacy Scale (APAS). The ensuing discussion explicates the findings for each hypothesis.

Hypothesis Five: The NPVSR total score will significantly correlate with total PNAS score.

The Nursing Professional Values Scale-Revised (NPVSR), developed by Weis and Schank (2000), is a 26-item scale measuring professional nursing values based on the ANA Code of Ethics. The NPVSR measures caregiving and activism according to the authors, and includes items related to advocacy (Weis & Schank, 2000). The total scores of the PNAS and the NPVSR were correlated in this study to provide convergent validity evidence for the PNAS in the form of a predicted positive correlation of total scores for each scale. The calculated Pearson correlation coefficient of total PNAS and NPVSR scores is .256 ($p=.01$), which indicates a fair degree of relationship between the two scales (Dawson & Trapp, 2004).

Hypothesis 6: The APAS total score will significantly correlate with total PNAS score.

The correlation of APAS total scores and PNAS total scores were analyzed to support convergent validity. The APAS and PNAS are both measures of nursing advocacy, and there was a predicted positive correlation between total scores. The correlation of the APAS and PNAS total scores correlate at .31 ($p=.000$), thus indicating a fair level of correlation. This lower level of correlation may be reflective of the narrow theoretical focus of the PNAS, which is measuring protective nursing advocacy, as opposed to the APAS, which is measuring attitudes towards advocacy from the perspective of safeguarding patients' autonomy, acting on behalf of patients, and championing social justice in providing healthcare.

Content Validity

Content validity for the PNAS was determined by the use of an eight-member expert panel to review the items contained in the PNAS. The content validity index (CVI) for each item and component was calculated along with the entire PNAS CVI. The generally agreed upon lower limit for CVI is .80 (Polit & Beck, 2006). The PNAS CVI for the four components structure was .80, which did not include the fifth component. When all five original components are included, the CVI for the PNAS is .79.

Construct Validity

Construct validity is supported by the use of exploratory factor analysis to reduce the PNAS item combinations into a meaningful structure (Tabachnick & Fidell, 2007). The items in the PNAS loaded significantly onto five components; however, the fifth component was composed of negatively written items or items that could be interpreted to be negatively written. The four components that were internally congruent were then relabeled as subscales of the PNAS.

FINDINGS RELATED TO FRAMEWORK AND LITERATURE REVIEW

As discussed in the Review of Literature chapter, nursing advocacy lacks a substantial nursing theory. The underlying framework of the PNAS is related to the nursing advocacy literature of Cho (1997), Ingram (1998), and Hanks (2005), in which protective aspects of the authors' conceptual models were selected for the theoretical framework for this study. Two statements from Cho's model were selected as they related to protective nursing advocacy: 1) acting on behalf of clients; and 2) speaking on behalf of clients. Ingram's work resulted in four domains, of which the two are used as constructs in the PNAS due to the protective qualities: 1) the advocate as guardian of patient's rights; and 2) the advocate as protector of the patient's autonomy. The Sphere of Advocacy (SNA) model lent three statements to the theoretical framework of the PNAS items that related to protecting the patient using nursing advocacy. Additional nursing advocacy literature was used for the development of additional PNAS items that reflected educational preparation, support, barriers, and employment influences on the nurse advocacy role.

The first subscale of the PNAS, Acting as Advocate, had salient component loadings on the pattern matrix ranging from .481-.865, with no secondary loads greater than .30. This subscale has a high degree of internal consistency as indicated by a Cronbach's alpha of .91. The majority of the items for the Acting as Advocate subscale were derived from the work of Cho (1997), Ingram (1998), and Hanks (2005). Item four reflects education and experience as influential on the ability to advocate and reflects findings in the literature from several authors (Altun & Ersoy, 2003; Foley et al., 2002;

Mallik, 1997; Pankratz & Pankratz, 1974; Perry, 1984).

In addition to the component loadings, supportive data for the PNAS items were indicated from the narrative responses from the PNAS participants. The narrative responses to the first narrative question, “When I am acting as an advocate for my patient(s), I am performing the following actions,” are supportive of the items in the Acting as Advocate subscale in that respondents indicated that ensuring safety, communicating with patient and family, communicated with other healthcare team members, and questioning and ensuring adequate care were part of the advocacy actions. Additional responses supportive of this subscale were indicated by the frequencies of speaking and acting out on behalf of patients, respecting and protecting patients rights, and following patient wishes and advanced directives.

The second subscale, Work Status and Advocacy Actions, consists of five items that loaded onto the pattern matrix with loadings of .790-.904. In addition, this subscale has a reliability coefficient of .93. The items in this subscale reflect the interaction between advocacy and the workplace setting similar to that which is found in the literature. Particular items in this subscale reflect possible punishment and lowering of status, as found by Mallik (1998) and Segesten (1993). The subscale items additionally correspond with the literature in that the act of being an advocate has been considered to be risk-taking (Mallik, 1997), and can result in the nurse being labeled as disruptive, echoing the finding by Sellin (1995).

Responses from the second narrative PNAS question correspond to some of the items in the Work Status and Advocacy Actions subscale. Although the second narrative PNAS question lends support to the Environment and Educational Influences subscale, there were many responses (45) that indicated a weak support from the institution in regards to the nursing advocacy actions of the participants, including the label of disruptive or troublemaker, similar to Sellin’s (1995) finding.

The third subscale, Environment and Educational Influences, had less impressive component loadings, from .377 to .689, with no salient secondary loadings on the pattern matrix. This subscale consists of eight items with a subscale reliability of .70. The items in

this subscale reflect findings of using personal experience to act as advocate, similar to Foley et al. (2002). Additional items in this subscale that loaded include those items reflecting the internal environment of the nurse. These same intrinsic characteristics are found in the nursing research as being supportive in the nurse's ability to act as an advocate including confidence, personal values, and beliefs (Chafey et al., 1998; Foley et al., 2002; Perry, 1984). The narrative PNAS responses were not directly related to the Environment and Educational Influences subscale, but this may be due to nature of the three PNAS narrative questions, i.e., the questions are not asking the participants about their intrinsic characteristics.

The fourth subscale, Support and Barriers to Advocacy, consisted of eight items and had pattern matrix loadings of .454-.709. The subscale reliability, as measured by Cronbach's alpha, was .73. The support for nursing advocacy from the external working environment is expressed in this subscale and is related to previous research findings such as the influence of physician support on advocacy (Chafey et al., 1998; Hellwig et al., 2003). Similar to the Environment and Educational Influences subscale, the Support and Barriers to Advocacy subscale reflects those internal nurse characteristics that contribute to the nurse's ability to advocate, such as confidence (Chafey et al., 1998; Foley et al., 2002; Perry, 1984). The work environment has been found to be an influential factor on the effectiveness of nursing advocacy actions (Chafey et al., 1998; Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995), which is mirrored in this subscale.

The narrative PNAS responses for question two, "When I am acting as an advocate for my patient(s), support for my patient advocacy at my workplace can be described as..." illuminated a broad range of responses. The majority of the narrative responses (a total of 88) indicated a positive institutional response; however, the category of minimal institutional support was the second largest response category for this question with 45 responses. It should additionally be noted that the excellent and fair categories had respectable response frequencies. The items contained in the Support and Barriers to Advocacy subscale measure this work environment and support, and the narrative responses reflect the influence of the work environment on advocacy (Chafey et al., 1998;

Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995).

DISCUSSION OF THE IMPLICATION FOR NURSING

The importance of advocacy for patients for nursing is evident not only in the historical philosophical literature of Curtin, Gadow, Kohnke, and Benner, but has been supported by its inclusion in nursing code of ethics (ANA, 2005) and educational competencies (BON, 2002). This importance is further reflected by the continuing nursing research in this aspect of nursing practice. However; there are few quantitative nursing advocacy studies found in the literature. Additionally, there have been few advocacy research studies conducted with a medical-surgical sample (Hanks, 2008), and no quantitative studies have been conducted using an exclusive sample of US medical-surgical nurses. The PNAS is novel in that it used a sample of Texas registered nurses that self-identified as medical-surgical nurses, which comprise the largest number of practicing nurses in hospital settings (BON, 2007f).

However, despite the importance of advocacy to nursing, there are few existing measures of nursing advocacy. There have been notable nursing advocacy instruments developed, namely Hatfield's (1991) Nursing Advocacy and Beliefs and Practices (NABP) scale, the NABP-derived Patient Advocacy Scale (Ingram, 1998), and Bu's Attitudes Toward Patient Advocacy Scale (2005). The NABP and subsequent PAS are measuring autonomy and agency support for the nurse's advocacy action rather than direct advocacy actions taken by the nurse. The APAS is measuring attitudes toward patient advocacy from a broad stance, including a social justice component that is weakly supported with research findings. The theoretical premise of the PNAS is to measure nursing advocacy from a protective aspect, and the PNAS adds another quantitative measure to the existing nursing advocacy instruments.

The PNAS items have shown to have salient loadings onto four subscales that each has sufficient reliability for a newly developed instrument (DeVellis, 2003; Nunnally & Bernstein, 1994; Pedhazur & Schmelkin, 1991). The four subscales assist to measure nursing from a protective perspective. This instrument will add a more focused measure of protective nursing advocacy than the currently existing nursing advocacy

instruments. Additionally, the PNAS can be used for education purposes of either newly graduated nurses or practicing nurses as a measure of improvement after an education intervention. Indeed, the value of measuring nursing advocacy may result in improved patient outcomes.

Recently, concern in nursing about the ability of nurses to communicate effectively has been implicated as a quality and safety issue in the US health care system (Cronenwett et al, 2007). Communicating effectively includes the ability for nurses to advocate effectively and consistently for their patients to ensure patient safety within the health care system (Quality and Safety Education for Nurses [QSEN], 2008). The PNAS provides a quantitative measure that allows nurses to evaluate their advocacy actions and beliefs, with the goal being to improve the nurse's protective advocacy skills, thus potentially improving patient safety.

RECOMMENDATIONS FOR FURTHER RESEARCH

The major revision to the PNAS includes the revision of the negatively worded items that loaded onto the fifth component in this study. Although negatively worded items are indicated by some leading authors in scale development to prevent response bias (DeVellis, 2003), there has been literature to support not using negative items (Barnette, 2000). In addition, item 36, which refers to physically barring a procedure from taking place, did not significantly load and will be revised. This PI intends to rewrite the poor performing items and pilot test the newly revised items with the other four existing PNAS subscales to determine the psychometric performance of the newly revised items. Additional support for reliability will be supported with determining the test-retest reliability of the PNAS. Construct validity will be further enhanced for the PNAS with the use of confirmatory factor analysis techniques (Nunnally & Bernstein, 1994) to support the existing constructs of the PNAS.

Furthermore, the PNAS in this study was administered to a sample of self-identified medical-surgical nurses in the State of Texas. Comparisons between the PNAS total scores of medical-surgical nurses can be compared to other readily identifiable

groups of practicing registered nurses, such as pediatric nurses or critical care nurses, to ascertain the relationship of the total PNAS scores between different groups of nurses.

The PNAS will lend a measure to nursing education in that the instrument could be used as a measure of education progress for either the new graduate nurse or the experienced practicing nurse. Further examination of the use of PNAS for nursing educational programs will need to be undertaken, as the current instrument is written for the registered nurse that is already experienced in clinical practice.

An addition use of the PNAS to be examined is the use in improving the quality of nursing advocacy in line with the QSEN initiative. Further research is indicated to ascertain if using the PNAS as a measure of advocacy will increase the level of safety for patients in the health care setting

Chapter Summary

This chapter presented a brief review of the findings of the PNAS study and related the findings to the underlying theoretical framework and nursing advocacy research literature. Implications for nursing practice from this study were explicated, and the chapter concluded with recommendations for further research using the PNAS.

Appendix A: Biodemographic Data Collection Form

Completion and return of this biodemographic data collection form implies consent to participate in this study.

1. Participant Code _____
2. Date _____
3. Gender: 1=female _____ 2= male _____
4. Age _____
5. Ethnicity: 1 = Hispanic _____ 2 = African Amer. _____ 3 = Caucasian _____
4 = Asian _____ 5 = Other _____
6. Entry level to nursing at completion of first preparatory program: 4 = BSN _____
3 = Diploma _____ 2 = ADN _____ 1 = LVN/LPN _____
7. Highest level of nursing degree earned: 5 = PhD _____ 4 = MSN _____ 3 = BSN _____
2 = Diploma _____ 1 = ADN _____
8. Medical/Surgical certification: 1 = yes _____ 2 = no _____
9. Additional degree(s) held in other disciplines (not nursing) 5 = PhD _____ 4 = MS/MA _____
3 = BS/BA _____ 2 = AA/AS _____ 1 = Certificate _____
10. Discipline of other degree(s): 4 = Health Sciences _____ 3 = Social Sciences _____
2 = Basic Sciences _____ 1 = Humanities _____
11. Specific Discipline of other degree(s) held (write in): _____
12. Years of practice in nursing (round up to nearest year): _____
13. Years of practice in medical/surgical specialty (round up to nearest year): _____
14. Majority of practice time in medical/surgical specialty: 1 = part time _____ 2 = full time _____
15. Current primary employer: 1 = hospital _____ 2 = clinic _____
3 = school of nursing _____ 4 = home health agency _____ 5 = long term care _____

6 = temporary staffing agency____

16. Current employment status: 1 = Part time____ 2 = Full time____

17. Current employment title: 1 = Staff nurse____ 2 = clinical educator____

3 = nurse manager____ 4 = clinical nurse administrator ____

5 = school of nursing faculty____

18. Previous assertiveness training? 1 = Yes____ 2 = No____

19. Previous advocacy education? 1 = Yes____ 2 = No____

Appendix B: Protective Nursing Advocacy Scale-Part I

Please indicate your rating using strongly disagree, moderately disagree, moderately agree, and strongly agree for each of the following statements. Please indicate your rating using a √ in the box to the right of each statement. Completion and return of the Protective Nursing Advocacy Scale form Part I implies consent to participate in this study.

Item #	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
1.	Patients need nurses to act on the patient's behalf					
2.	Nurses are legally required to act as patient advocates when patients are perceived to be in danger					
3.	As the nurse, I keep my patient's best interest as the main focus of nursing advocacy					
4.	Nurses who understand the benefits of patient advocacy are better patient advocates					
5.	I am acting on my patient's behalf when I am acting as my patient's advocate					
6.	I speak out on my patient's behalf when I am acting as my patient's advocate					
7.	I am acting as my patient's voice when I am advocating for my patient					
8.	I am acting as the patient's representative when I am acting as the patient's advocate					

Item #	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
9.	I am advocating for my patient when I protect my patient's rights in the healthcare environment					
10.	I am acting as a patient advocate when I am protecting vulnerable patients from harm					
11.	I provide patient advocacy to protect my patients only when necessary in the healthcare environment					
12.	Nurses that act on a patient's behalf are preserving the patient's dignity					
13.	I scrutinize circumstances that cause me to act as a patient advocate					
14.	I utilize organizational channels to act as a patient advocate					
15.	I would benefit from the advice of ethics committees to be a more effective patient advocate					
16.	Lack of time inhibits my ability to act as a patient advocate					
17.	Nurses practice patient advocacy more when the nurse is working in a tolerant work environment					
18.	Nurses who are supported by physicians are better patient advocates					

Item #	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
19.	I am able to be a better patient advocate because I have more self confidence					
20.	Nurses that are committed to providing good patient care are better patient advocates					
21.	Increased dedication to nursing increases the nurse's ability to act as a patient advocate					
22.	Increased nursing education enhances the nurse's effectiveness in patient advocacy					
23.	I doubt my own abilities to provide advocacy for my patients					
24.	Nurses do not provide advocacy for their patients in the clinical setting					
25.	I am ethically obligated to speak out for my patients when my patients are threatened by harm					
26.	Nurses that provide information to patients about patient care are acting as patient advocates					
27.	Patients have varying degrees of ability to advocate for themselves					
28.	Vulnerable patients need my protection in harmful situations					

Item #	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
29.	Increased nursing experience does not increase the nurse's ability to act as a patient advocate					
30.	I may suffer risks to my employment when acting as a patient advocate					
31.	Nurses that speak out on behalf of patients may face retribution from employers					
32.	I may be punished for my actions by my employer when I inform my patients of their own rights					
33.	Nurses that speak out on behalf of vulnerable patients may be labeled as disruptive by employers					
34.	When nurses inform and educate patients about the patients' rights in the clinical setting, the nurse may place her/his employment at risk					
35.	When nurses act as patient advocates, they are not supporting patients					
36.	Nurses can protect patients from harmful situations by physically barring a procedure to occur					
37.	Nurses are acting as advocates when nurses protect the right of the patient to make his/her own decisions					

Item #	Statement	Strongly Disagree	Moderately Disagree	Neither Agree or Disagree	Moderately Agree	Strongly Agree
38.	Nurses should not advocate for patients when treatments cause suffering without patient benefit					
39.	The more years that I work in nursing, the less effective I am at advocating for my patients					
40.	I am less effective at speaking out for my patients when I am tired					
41.	I am not an effective advocate because I am suffering burnout					
42.	Because I don't like working as a nurse, I am less willing to act as a patient advocate					
43.	I lack the dedication to the nursing profession to act as a patient advocate					

Protective Nursing Advocacy Scale Part II

Please consider the next three statements and then write in your response to the following three statements. To assure anonymity of your response, please do not include any identifying information in your answers. Please be as detailed as possible and use as much space as you like. Completion and return of the Protective Nursing Advocacy Scale Part II implies consent to participate in this study.

1. When I am acting as an advocate for my patient(s), I am performing the following actions:

2. When I am acting as an advocate for my patient(s), support for my patient advocacy at my workplace can be described as:

3. When I am acting as an advocate for my patients(s), I assure that I am following the patient's wishes by:

Appendix C: Script for Recruitment Announcement by Mailed Letter

To the Registered Professional Staff Nurses in Medical-Surgical Nursing:

I am sending you this booklet to ask your help in a study of nursing advocacy that I am conducting as a student in the Nursing PhD Program at the University of Texas Medical Branch under the direction of Dr. Regina Lederman, Professor at UTMB Graduate School of Biomedical Sciences and the School of Nursing. This study is an effort to develop an instrument to measure nursing advocacy for patients.

It is my understanding that you identify yourself as a medical-surgical nurse. I am contacting a random sample of medical-surgical registered nurses in the State of Texas to complete the booklet and provide valuable data to determine the properties of the Protective Nursing Advocacy Scale, which is included in this booklet.

Results from this booklet will be used for my dissertation study and subsequent publications. The development of a reliable and valid measure of protective nursing advocacy can possibly help to enhance patient outcomes and provide for better education to nurses about advocacy for patients. In addition, there is a lack of information about nursing advocacy specific to the medical-surgical nurse.

Your answers are completely confidential and will be presented only in a summary format with all other participants. This booklet does not include any direct participant identifiers. The return of this booklet is voluntary and completion of the booklet implies consent to participate.

If you have any questions about this study, I would be happy to provide you with more information. You can call me at (409) 789-1547, email me at rghanks@utmb.edu, or mail me at the address below.

Thank you very much for helping with this important study. Please accept the enclosed bookmark as a token of my appreciation for your participation in this study.

Sincerely,

Robert G. Hanks, MSN, RN
Nursing PhD Student UTMB Graduate School of Biomedical Sciences
UT Arlington School of Nursing
Box 19407
Arlington, TX 76019-0409

P.S. Please return the booklet within three weeks of receipt of the booklet. Please return using the postage paid envelope.

Appendix D: Preliminary Instrument Development

PROTECTIVE NURSING ADVOCACY BEHAVIOR SCALE PILOT

In this appendix, the development of the Protective Nursing Advocacy Behavior Scale (PNABS), the precursor scale to the Protective Nursing Advocacy Scale, is discussed. The background advocacy literature and existing nursing advocacy instruments are outlined. Item development and the psychometric pilot testing of the PNABS are described. The subsequent analysis led to the current form of the PNAS.

BACKGROUND AND SIGNIFICANCE

Nursing has valued the concept of advocacy, and in fact, it is explicated in current nursing ethics codes (Hamric, 2000). The historical development of nursing advocacy for patients has a philosophical rather than empirical base. One of the earliest articles on nursing advocacy by Curtin (1979) stated that the nurse advocate provides a supportive atmosphere for the client's decision-making process, and it is the creation of the supportive atmosphere that is the basis of all other nursing activities. Similarly Gadow (1980) describes advocacy as the nurse assisting patients to exercise their right of self-determination, and the nurse should provide judgments that recognize the complexity of the patient's values. Gadow (1980) warns that only the patient can decide what is in patient's best interest, and warns against paternalism in a succeeding article (1983). Another prominent philosophical stance was put forth by Kohnke (1980) suggesting re-orientating the nurse to have faith in patients' ability to determine their own decisions. Kohnke (1982a) further delineated the pragmatic role of nurse advocate as two main functions: that of an informer to the patient and as a supporter of the patient's decision.

Although nursing advocacy is not a new role for nursing, the research regarding nursing advocacy is relatively sparse. The preponderance of nursing research conducted has used exploratory qualitative design. The lack of quantitative advocacy research may be linked to the dearth of nursing advocacy instruments available.

The concept most frequently cited as a component of nursing advocacy research involves acting on the behalf of a patient. A study by Chafey et al. (1998) revealed that nurses defined advocacy as intervening on behalf of a patient within a system, resulting in actions by the nurse of speaking, fighting, and standing up for patients. Foley et al.'s (2000) study of nursing advocacy among military nurses resulted in a theme in which advocacy was enacted with the nurse being the patient's voice. Similar findings of protecting patients and speaking for patients as a component of nursing advocacy are cited in Sellin's (1995) qualitative study of nurses. Other salient findings in this study include advocacy as meaning protecting the client and advocacy as preserving personhood (Sellin, 1995). O'Connor and Kelly (2005) defined advocacy as using expert knowledge to advocate effectively, challenging traditional healthcare power structures, and bridging a perceived gap between the patient and other professions and the healthcare system. In addition, empowerment of patients as a nursing advocacy theme is found in two studies (Chafey et al., 1998; Lindahl & Sandman, 1998).

Additional components of advocacy include relationships and communication. In a study of nurse case managers, nursing advocacy included relationship building with other healthcare professionals (Hellwig et al., 2003). Similarly, Lindahl and Sandman (1998) described advocacy as building caring relationships with patients, and a similar finding in Snoball's (1996) study indicated that nursing advocacy involved developing a therapeutic relationship between the nurse and patient.. An analogous theme of improving communication as a part of nursing advocacy emerged in Mallik's (1998) qualitative research with United Kingdom nursing leaders.

The concept of caring as a component of nursing advocacy was found in Millette's (1993) study and Sellin's (1995) study. Respecting patients and their rights was found by Watt (1997) to be a part of nursing advocacy. Vaartio et al.'s (2006) study of nurses and patients found that nursing advocacy was defined as exceptional care that went beyond good care, although good care was not clearly defined by the researchers. Lastly, educating the patient is an element of nursing advocacy (Chafey et al., 1998) that can empower the patient (Hellwig et al., 2003).

Several influences factor into the nurse's decision to advocate. Internal characteristics of the nurse are cited as one of the critical factors in the nurse's ability to act as a nursing advocate (Penticuff, 1989; Sellin, 1995), including that the nurse's self-concept, personal values, confidence, and beliefs positively influence the nurse's ability to advocate (Chafey et al., 1998; Foley et al., 2002; Perry, 1984). Additional spurring factors that compelled the nursing to advocate include emotional and moral distress (Penticuff, 1989; Sundin-Huard & Fahy, 1999), moral obligation (McGrath & Walker, 1999), and vulnerable clients with unmet needs (Mallik, 1998; O'Connor & Kelly, 2005; Segesten, 1993).

The work setting is cited as important in nurse advocacy, including positive physician support and behavior being a supportive component of nursing advocacy actions (Chafey et al., 1998; Hellwig et al., 2003). The work environment can be an influential factor in nursing advocacy and determining the effectiveness of the advocacy (Chafey et al., 1998; Kubsch et al., 2003; Penticuff, 1989; Sellin, 1995). However, the consequences of nursing advocacy can result in a career dilemma and is viewed by some study participants as risk-taking (Mallik, 1997). Effective advocacy is thwarted by frustration (Hellwig et al., 2003; Mallik, 1998), anger (Mallik, 1998), punishment, lowering of status (Mallik, 1998; Segesten, 1993), disrupting relationships (Sellin, 1995), and being labeled when nurses act as advocates for their patients.

One of the dominant themes in several studies focusing on nursing advocacy for clients was teaching, learning, and education about advocacy. Researchers Altun and Ersoy (2003) found that nursing ethics courses are effective in developing the role of patient advocate in nursing students. Additional studies indicate education in practicing nurses affected perceived assertiveness leading to advocacy (Kubsch et al., 2003) and higher degree attainment and specialization are thought to be liberating forces (Mallik, 1997; Pankratz & Pankratz, 1974; Perry, 1984). Vaartio et al.'s (2006) study indicated that participants felt that the ability to act as a nurse advocate was not related to the level of nursing education, formal advocacy education, or the amount of nursing experience.

Foley et al.'s (2002) study of military nurses indicated that nursing advocacy was not effectively taught in nursing programs attended by the participants.

PNABS ITEM DEVELOPMENT

Although three nursing advocacy instruments existed in the literature (Hatfield, 1991; Ingram, 1998; Bu 2005), none of the three measured nursing advocacy from the protective aspect. The PNABS items were derived from the protective aspects from the writings of Cho (1997), Ingram (1998), and Hanks (2005) and an extensive review of the existing nursing literature resulting in 38 items measuring four proposed factors:

1. Nursing advocacy exists and is provided by nurses in practice
2. Nursing advocacy is speaking and acting on behalf of patient, but not paternalistically
3. Nurses act as guardian and protector of patient autonomy
4. Nursing advocacy is dependent on education, peer and administrative support, and risk-taking

The actual items developed for a Likert scale with item responses ranging from “strongly disagree” to “strongly agree”. There is not a neutral choice in the items to reduce the chance of equivocation in selection of answers (DeVellis, 2003). Both positively and negatively stated items were included to avoid response set (DeVellis). The reading level for these items, in consideration of the target population of practicing registered nurses, is college level. A panel of expert practicing nurses in the medical-surgical specialty reviewed the items and agreed that the items were measuring the four proposed factors (Ghiselli, Campbell, & Zedeck, 1981). The finalized PNABS items are found in the following table (Table G.1).

Table D.1: Finalized PNABS

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
1	1	Nurses do not provide advocacy for their patients in the clinical setting				
2	1	Nurses are ethically obligated to provide advocacy for their patients				
3	1	Nurses doubt their own abilities to provide advocacy for patients				
4	1	Patients need nurses to act as patient advocates				
5	1	Nurses are legally required to act as patient advocates when patients are perceived to be in danger				
6	1	Nurses act in the patient's best interest when advocating for them.				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
7	1	Nurses who understand the benefits of patient advocacy usually are better patient advocates				
8	2	Nurses should allow patients to advocate for themselves				
9	2	The nurse and patient can simultaneously act as advocates for the patient				
10	2	Nurses act on the patient's behalf when they advocate for them				
11	2	Nurses speak out on the patient's behalf				
12	2	Most patients are able to adequately advocate for themselves				
13	2	When nurses act as patient advocates, they are not supporting patients				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
14	2	Nurses that provide information to patients about patient care are acting as patient advocates				
15	2	Nurses that act as a patient advocate are acting as the patient's voice				
16	2	Nurses act as representatives for the patient when they are patient advocates				
17	3	Nursing professionals protect patients' rights in the healthcare environment				
18	3	Nurses cannot protect patients from harmful situations by advocating for them				
19	3	Nurses acting as patient advocates are protecting vulnerable patients from harm.				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
20	3	Patients have varying degrees of ability to advocate for themselves				
21	3	Nurses acting as patient advocates protect patients when necessary				
22	3	Vulnerable patients need protection by nurses in harmful situations				
23	3	Nurses protect the right of the patient to make his/her own decisions				
24	3	Nurses that act as a patient advocate are preserving the patient's dignity				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
25	3	Nurses should not advocate for patients when treatments cause suffering without patient benefit				
26	4	Nurses should scrutinize circumstances that cause them to act as patient advocates				
27	4	Nurses should utilize organizational channels to act as patient advocates				
28	4	Nurses would benefit from the advice of ethics committees to be more effective patient advocates				
29	4	Lack of time may inhibit a nurse's ability to act as a patient advocate				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
30	4	Nurses may suffer risks to employment when acting as a patient advocate				
31	4	Nurses practice patient advocacy more when the nurse is working in a tolerant work environment				
32	4	Nurses who are supported by physicians are better patient advocates				
33	4	When nurses act as patient advocates, they place their employment at risk				
34	4	Nurses with more self confidence are able to be better patient advocates				
35	4	Nurses that are committed to good patient care are better patient advocates				

Item #	Factor #	Statement	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly Agree
36	4	Increased nursing experience does not increase the nurse's ability to act as a patient advocate				
37	4	Increased dedication to nursing increases the nurse's ability to act as a patient advocate				
38	4	Increased nursing education enhances the nurse's effectiveness in patient advocacy				

DATA COLLECTION METHODS

Sample and Setting

The Protective Nurse Advocacy Behavior Scale was administered to a convenience sample of registered nurses in Texas recruited via an Institutional Review Board (IRB) approved recruiting letter and packet. A total of 500 surveys were distributed with 110 being returned in the time frame of the pilot analysis, resulting in a response rate of 16.4%.

RESULTS

Sample Characteristics

A total of 110 adult registered nurses with experience in medical-surgical nursing participated in the pilot testing of the PNABS. The PNABS pilot sample ages ranged from 26 to 75 years old with a mean of 46 years. Consistent with the general nursing population, the majority of the pilot sample was female (92.5%). The ethnicity of the pilot participants was primarily Caucasian (72.9%), with less frequent representation of the other ethnic categories: African-American (14.0%), Asian (7.5%), Hispanic (4.7%) and other (0.9%). The majority of participants entered nursing as associate degree (37.9%) or baccalaureate degree nurses (37.9%). The current level of education in nursing was master's level (33.9%) and most were employed in the hospital setting (50.5%). The mean number of years in medical-surgical nursing for the pilot participants was 13.6 years.

Analysis was conducted only on surveys with no missing responses to PNABS items for a total sample size of 108. Two surveys were not included due to incomplete responses on the PNABS items. The PNABS is a 4-item Likert scale ranging from "strongly disagree" (coded 1) to "strongly agree" (coded 4). For this particular factor analysis, all 38 items were analyzed using SPSS, Version 14.0 for Windows. Further analysis of the PNABS included frequencies, reliability, and factor analysis.

Descriptive Statistics

The initial step in analysis of the PNABS includes examination of the descriptive statistics of the items such as percentage response for each item and standard deviation

and means for each item. In the examination of the frequencies, the PNABS item means tend to be at the higher end of the 4 point scale. In general, the mean is centering around 3. In addition, the standard deviation for the items is less than 1, with only 2 items with a standard deviation greater than 1. According to DeVellis (2003), the mean for an item should be in the middle of the scale range and failure to achieve this can result in low variation in responses. This skewing of responses may be due to the wording of the item (DeVellis). In addition, item means that do not fall into the middle of the Likert scale may indicate that the items are not capturing the entire construct (DeVellis, 2003, p. 94.). However, this skewness could indicate agreement with the majority of the items regarding advocacy.

According to DeVellis (2003), there should additionally be relatively high variance for a scale item. The PNABS standard deviation for items ranged from .441 to 1.05, indicating that for some items there is inadequate variance, while other items have an adequate variance. The item mean should be in the center of the range or the item might fail to detect certain values of the construct (DeVellis, 2003). For the PNABS, the item means ranged from 2.16 to 3.91 which may indicate some items are failing to detect values of the construct of protective advocacy.

Reliability

The PNABS Cronbach's alpha is .72, which is acceptable for a newly developed instrument using Nunnally and Bernstein's (1994) criteria, and respectable using the criteria developed by DeVellis (2003). Additionally, the alpha of .72 is consistent with the ranges suggested by Pedhazur and Schmelkin (1991) for beginning stages of research.

Item Total Analysis

According to DeVellis (2003), if the standardized and raw alpha scores differ by .05 or more, at least one item has a variance that differs from the variances of the other items. Based on this, "Alpha if Item Deleted" was compared with "Alpha" for the entire PNABS. None of the items in the PNABS were selected to be deleted based on this analysis.

Factor Analysis

The sample size, at 108 participants, is not considered adequate for the number of items analyzed using a factor analysis method (Tabachnick & Fidell, 2007). A general rule of five to ten research participants per item is considered acceptable for factor analysis (DeVellis, 2003). However, due to the time limitations, this author decided to analyze the surveys that were returned during the pilot study. For the purpose of the pilot study, exploratory factor analysis was performed on all of the 38 items from the PNABS using SPSS version 12.0 for Windows.

Rotation

The exploratory factor analysis resulted in a rotated component matrix using a varimax rotation, a type of orthogonal rotation technique. The rotation resulted in a loading of five major factors with eigenvalues of greater than 1.0. This author chose to use factor V as the end point of the factors with an eigenvalue of 1.266, which is close to the “elbow” on the scree plot (DeVellis, 2003, p. 114). Reanalysis using five factors was then undertaken using principle axis factoring and varimax rotation. The loading matrix correlations were compared and factors were clustered according to meaningful correlation as suggested by Tabachnick and Fidell (2007) and Norman and Streiner (2000). Additionally, there were no secondary loadings greater than .40.

In addition, an oblique rotation was performed using five factors for extraction. Different methods of rotation can result in similar results if the patterns of correlations are fairly clear (Tabachnick & Fidell, 2007). The pattern matrix for the PNABS after an oblique rotation resulted in similar, but not identical, factors to the varimax rotation. This finding indicates that the factors may not be closely related (DeVellis, 2003). Based on the varimax rotation, the five factors were delineated and factor labels were derived from the actual wording of the items.

The factor analysis results in five factors with eigenvalues greater than 1.0. In addition, factor V is close to the “elbow” of the scree plot, and factors I-V contain 44.05% of the total variation. The discontinuity in eigenvalues is left to the judgment of the research (or in this case, this author) (Tabachnick & Fidell, 2007). In further

delineating the factor loadings Factor I has loadings of .179 to .531; Factor II .192 to .476; Factor III .113 to .512; Factor IV .655 to .757; and Factor V .181 to .543.

This author believes that with the PNABS factor analysis, the items do adequately reduce to five subscales that are meaningful. Factor I subscale has the highest Cronbach's alpha of all of the subscales at .81. The Cronbach's alphas for the remaining five subscales are as follows: Factor II .65; Factor III .55; Factor IV .788; and Factor V .48. The reliability of Factor II was improved by deleting item number 8, as was the reliability of Factor V by deleting items 9 and 12.

Factor I, Acting as Advocate, would be considered to be the most important subscale since the items in this scale account for the most variance observed in the factor analysis (12.73%). Factor I, as a subscale, is the most internally consistent of all four factors at .81. The remaining factors account for the following variance percentages: Factor II-8.96%; Factor III-7.90%; Factor IV-7.52%; and Factor V-6.94%.

APPENDIX SUMMARY

The analysis of the 38 items of the PNABS resulted in minimally acceptable internal consistency (Cronbach's alpha: .72). The resulting exploratory factor analysis of the PNABS resulted in five factors that were labeled: 1) Acting as Advocate; 2) Environment and Advocacy; 3) Protecting Patients through Advocacy; 4) Work Status and Advocacy Actions; and 5) Supporting Patients through Advocacy. These five factors accounted for about 44% of the variance in the items of the PNABS. The five factors could be considered as subscales with Factor I having the highest internal consistency and accounting for the greatest amount of variation in the factor analysis.

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Vita

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Robert Hanks is a registered nurse and is currently recognized as a certified family nurse practitioner. Robert was born in Spokane, Washington in 1966 to Robert Gordon Hanks Sr. and Maryanne Hanks. His professional work experience includes primary care settings as a family nurse practitioner, an instructor for baccalaureate nursing schools, and medical-surgical registered nurse in hospital settings. Robert currently lives in Dallas, Texas where he is a Clinical Instructor at the University of Texas at Arlington School of Nursing.

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Summary of Dissertation

Nursing advocacy for patients is considered to be an important function of nursing practice. The research surrounding nursing advocacy is relatively new, with few psychometric instruments developed to measure nursing advocacy. The purpose of this study was to determine the psychometric properties of the Protective Nursing Advocacy Scale (PNAS) and provide measures to support validity.

The study design was a descriptive correlational design using a randomly selected sample of 419 medical-surgical registered nurses in the State of Texas. The data were collected using a mailed survey and the mailed survey included demographic data, the PNAS, a nursing ethics instrument, the NPVSR, and an existing nursing advocacy instrument, the APAS. In addition, narrative responses to three open-ended questions were analyzed for category response frequency. The resulting dataset of PNAS items was analyzed for significance of PNAS scores among the demographic groups. The PNAS items were further analyzed using an exploratory factor analysis along with other psychometric descriptions of the data.

The PNAS analysis resulted in the items loading onto four significant and theoretically connected components, subsequently referred to as subscales. The overall reliability of the PNAS demonstrated an acceptable level of reliability, as did the four subscales. No significant differences between mean total PNAS scores and the majority of the demographic data were noted. Construct validity evidence was provided by exploratory factor analysis. Convergent validity evidence was supported by correlations of the total PNAS scores and the APAS and NPVSR total scores. Content analysis by an expert panel demonstrated an acceptable level of validity index for the four subscales. Narrative responses to open ended questions help provide support for the items from the PNAS. The six PNAS items that did not load onto components or that were not theoretically connected need revision and piloting in a future version of this instrument.

Implications for nursing include using with practicing nurses to improve their advocacy skills, which may help improve patient outcomes. Additional versions of the PNAS could be written to be used in the education of nursing students.