

MULTIGENERATIONAL NURSING WORKFORCE VALUE DIFFERENCES AND
WORK ENVIRONMENT: IMPACT ON RNS' TURNOVER INTENTIONS

By

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Multigenerational Nursing Workforce Value Differences and Work Environment:
Impact on RNs' Turnover Intentions

Abstract

by

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Despite ongoing nursing retention efforts, the national turnover rate continues to climb as high as 21% annually. Creating a climate that supports retention is among the many responsibilities of first line nurse manager. This task is challenged by the presence of multigenerational nursing workforce. Nurses from different age cohorts come to the work environment with different set of professional and generational (terminal and instrumental) values. Values are enduring beliefs about what constitutes desirable and acceptable behavior; values play a fundamental role in both decision making and meaning formation processes. Nursing literature suggested that nurses from different age cohorts may perceive aspects of their unit environment (e.g. nurse managers' leadership style and climate) differently. However, the current literature lacks of empirical data to support this assumption, as well as the proposed influence of values on nurses' behaviors (e.g. turnover intentions).

Therefore, the main purposes for the study were to describe and compare values (professional and generational) among nurses from different age cohorts, and to examine the direct, indirect, and total effects of nurses' work environment and values on nurses' turnover intentions. Maehr and Breskamp's Personal Investment Theory (PIT) guided the study. To answer the study research questions a cross sectional descriptive correlational

study was conducted in three non-magnet community hospitals. The study sample comprised of 429 conveniently selected RNs, who met the study inclusion criteria and voluntarily completed the study survey. The data collection period lasted from March 15, 2007 to June 15, 2007. To answer the study research questions descriptive statistics, independent samples t-test, and path analyses were conducted.

In contrary to what was assumed, with the exception of the two climate dimensions (warmth and belonging and administrative support), the study results did not show any statistical significance differences between the examined age groups (Silent and Boomers vs. Gen-Xers and Millennials) in their generational values and their perceptions to their nurse managers' leadership style. In consistence with what was hypnotized nurses did not differ in their professional values. The overall turnover model explained about 29% of the variance on nurses' intent to leave. The study was the first nursing study to examine nurses' values both professional and generational and compare them between nurses from different age cohorts. The results of the study present empirical evidence to disprove the idea of generational value differences.

Chapter 1

Introduction

Today's healthcare environment can be characterized as complex and uncertain (American Association of Colleges of Nursing, 2002). The uncertainty is intensified by nursing workforce shortage (Cowin & Jacobson, 2003). Over the past several decades, the RN shortage has been cyclical; reasons for it are plentiful (Atencio, Cohen & Gorenberg, 2003). However, the current RN shortage has been attributed to factors, such as an aging and diverse workforce (American Association of College of Nursing, 2002; Atenico, et al, 2003; Kupperschmidt, 2000) that have not been instrumental in prior shortages (Goodin, 2003). Therefore, the current shortage requires assessment from a more comprehensive perspective.

The American Association of Critical Care Nurses (AACN) proposed that a healthy work environment plays a key role in addressing the current nursing shortage (AACN, 2004). Two important dimensions of the work environment are the climate in which nurses work and the leadership style of the first line manager (Aiken, Clarke, & Stone, 2002; AONE, 2005). The Joint Commission specified that creating a healthy work environment, which fosters a climate of effective staff interactions, may improve patients and nurses outcomes (e.g. nurses retention); this task is one of the main responsibilities of unit-level nurse managers (JCAHO, 2005).

However, in the context of the unique structural configurations of the current workforce, fulfilling this responsibility may represent a challenge for the nurse manager. For the first time in the American history, the workforce is composed of nurses who represent four generational cohorts working side by side (Kupperschmidt, 2000). At one

end of the continuum are nurses who are getting ready to retire, and at the other end are the youngest nurses, who are graduating from traditional as well as innovative nursing programs (Duchscher & Cowin, 2004; Stuenkel, Cohen & Cuesta, 2005).

Each one of these generational cohorts grew up in a different socio-economic, political and cultural era that existed at a particular time and shaped the ways in which persons from each generation think, behave, and approach work and authority figures (Cane, Gonzalez & Stewart, 1999; Kupperschmidt, 1998). The prevailing socio-cultural and economic forces have not only shaped the perspectives of each generational cohort; they have also shaped the common set of values of persons within each generation (Kupperschmidt, 1998). Today, when nurses come to the work setting, they bring not only professional values, but also their own set of generational values.

Values, regardless of their origin, are a relatively enduring set of beliefs that determine which of a certain set of behaviors are more socially acceptable and desirable than others (Rokeach, 1973). Values are developed from sources that are external to the individual and contain both cognitive and affective components (Omery, 1989; Weis & Schank, 1991). Values, on a conscious or unconscious level (Omery, 1989), act as a filter through which individuals can make decisions and prioritize their actions (McNeese-Smith & Crook, 2003). Once values are internalized, they act as standards for performance and direct behavior (Weis & Schank, 1991).

Values have a strong motivational power. Individuals may be motivated to choose certain behaviors over others based on what they value most, or based on which set of behaviors are more consistent with their values (Rokeach, 1973). Furthermore, Rokeach (1973) assumed that: (1) each individual possesses a relatively small number of values;

(2) values are organized within an individual on a hierarchy that is based on their relative importance, and this hierarchy is called *value system*; (3) all individuals have mainly the same set of values, yet these values do not have the same level of importance for all individuals, and finally, (4) the antecedents of values could be traced to the individuals' socio-cultural environment, while the consequences of these values include a broad spectrum of behaviors.

Based on Rokeach's (1973) assumptions and in contradiction with other writings (e.g Kupperschmidt, 1998), it could be concluded that most nurses, despite their age differences, may possess similar values. However, differences that may exist among different generational cohorts are related to the relative importance of each value, not to the presence or absence of certain values. Differences in the importance of values are attributed to differences in the socio-cultural and political environment in which nurses from each generational cohort have been raised. Based on this conceptual distinction, nurses' perceptions, expectations, behaviors and decisions about the work environment may vary among generational cohorts (Kupperschmidt, 2000). The proposed differences, regarding the relative importance of values across nursing generational cohorts, however, have been taken for granted without any empirical support. Hart (2006) proposed that it is important to empirically examine generational differences as it is found in the nursing population in order to structure the work environment more effectively.

In addition to nurses' generational values, nurses come to the work environment with a second set of values that arise from being a nurse. Nurses are professionals who are socialized into the profession through exposure to similar educational preparation, and they share the same practice standards and code of ethics (Weis & Schank, 1991).

Thus, regardless of whether nurses come from different generational cohorts, their common exposure to the norms of the profession might help nurses in sharing a common frame of reference for professional values. These professional values serve to guide and direct nurses' professional decisions and behaviors as well as how nurses develop standards for practice (Weis & Schank, 2002).

Similarities in professional values among different generational cohorts are attributed to the assumption that professional values are internalized by nurses through the same mechanism. Consequently, nurses across different generational cohorts may come to similar conclusions, meanings, decisions, and behave similarly in different situations. Similarities of professional values across the different nursing generational cohorts were supported by Martin, Yarbrought and Alfred's (2003) research that found nurses, regardless of their ages, similar nursing professional values (Martin et al., 2003).

Generational and professional values help nurses make sense of their work environment, form meanings, and decide whether they are willing to stay or to leave their job. The nurse manager, as an advocate for her staff, has to acknowledge and understand similarities and relative differences across nurses' values; the manager then needs to translate this understanding into managing nurses effectively and creating a work climate that supports retention (Weston, 2001; Hu, Herrick & Hodgins, 2004).

The importance of the nurse manager's leadership style and work climate have been identified as being instrumental to retention (Anthony et al., 2005; Boyle, Bott, Hansen, Woods & Taunton, 1999; Kleinman, 2004a; Ribelin, 2003); yet the national turnover rates in acute care settings remain high (Cline, Reilly & Moore, 2003b). Thus, it might be hypothesized that nurses' values, professional and generational, affect the

relationship between the nurse manager's leadership style, work climate, and nurses' intent to leave. Therefore, the purposes of this study were: *first*, to describe and compare nurses' values – professional and generational – as they represent different generational cohorts; and *second*, to evaluate the direct effect of the work environment (nurses' perceptions of their nurse managers' leadership style and climate) on nurses' values (professional and generational); and *finally* to evaluate the direct, indirect, and total effect of nurses' perceptions of their nurse manager's leadership style and work climate, and nurses' professional and generational values on nurses' intent to leave.

Background

Generational Values

Generational values develop as a result of different societal, political and economic forces that exist at a particular point in time and affect the thinking and behavior of individuals living at a particular point in time (Kupperschmidt, 2000). For the most part, generational values shape nurses' perspectives in relation to general aspects of work and life. Examples of these aspects include how nurses value work, rewards, authority, motivational activities, and technology (Kupperschmidt, 2000). Although values are relatively enduring (Rokeach, 1973) and develop from sources external to individuals (Omery, 1989); values are subject to change as a result of individuals' interactions with their peers and supervisors in their work environment. Change in values over time was empirically supported by Garvin & Kluznik, (1985), and Smola & Sutton (2002).

The current workforce is composed of the following four generational cohorts: the silent or veterans, Baby Boomers, Gen Xers, and the Millennial generations (Duchscher & Cowin, 2004; Dunn-cane, Gonzalez& Stewart, 1999; Hu, et al., 2004; Kopperschmidt, 1998; Weston, 2001, 2006). Nurses in the silent generation were born between 1925 and 1945; they encompass 52 million people (Summers, 2004) and comprise about 24% of the nursing workforce (Hu, et al. 2004). These nurses have either left the work place or are about to leave it (Duchscher & Cowin, 2004). Silent generation nurses tend to respect authority as well as chain of command and teamwork, and they look forward to being rewarded for hard work (Duchscher & Cowin, 2004; Hatfield, 2002). Most nurses from the silent generation are primarily in leadership positions (Duchscher & Cowin, 2004) and they tend to practice management with an autocratic leadership style (Duchscher & Cowin, 2004). Having a manager from the silent generation can create dissatisfaction among nurses from younger generations, such as Gen-Xers, who prefer to participate in decision making. Furthermore, silent generation nurses have not been exposed to an ethnically and culturally diversified workforce, and therefore may not appreciate these aspects of the current workforce (Gerke, 2001; Duchscher & Cowin, 2004). Therefore, it might be beneficial for nurse managers from the silent generation to acknowledge not only their own value biases, but also to acknowledge that nurses from different generational cohorts may value the importance of each value differently.

The second nursing cohort is the Baby Boomers. Nurses from this generation were born between 1946 and 1964 (Duchscher & Cowin, 2004). In general, there are about 73.2 million Boomers (Summers, 2004), representing nearly 47% of the current

nursing workforce (Hu et al, 2004), and many of them are expected to retire within the next 15 years (Cooper, 2003). Boomers value their work and place it over their personal life; for them work is their identity (Kupperschmidt, 1998; Stuenkel, et al., 2005). In the workplace, nurses from this generational cohort value managers' recognition and acknowledgment of their personal contribution, even when working within a team (Stenkel, et al., 2005). Boomers, however, can function effectively as a team (Ulrich, 2001). Nurses in the Baby Boomers' age cohort are concerned with their performance, positions, titles and promotions (Hu, et al., 2004) and prefer to work in a challenging, dynamic and humanistic environment in which their efforts contribute to the benefit of society (Kupperschmidt, 1998).

Nurses who are Gen-Xers, the third generational cohort, were born between 1965 and 1980 (Duchscher & Cowin, 2004). Gen-Xers constitute about 70.1 million people (Summers, 2004) and represent about 21% of the nursing workforce (Hu et al, 2004). Nurses from this generation are more competent than nurses from the previous generations in using computers and new technology (Duchscher & Cowin, 2004). They seek balance between their work and personal lives (Duchscher & Cowin, 2004; Kupperschmidt, 1998; Weston, 2001). Gen-Xers are more outcome- and goal-oriented; they prefer to be informed about the desired goals and then to develop their own plans and implementation methods (Kupperschmidt, 1998; Raines, 2002); they are self-directed (Ulrich, 2001). Members from this generation appreciate cultural diversity and are self-confident and pragmatic (Notter, 2002; Rines, 2002; Zemke, 2004). Managers are mentors for Gen-Xers, so nurses from this generation are more satisfied when working

with a knowledgeable, visionary, and creative manager (Kupperschmidt, 1998; Weston, 2001).

Santo and Cox (2000) asserted that Boomers perceive Gen-Xers as being self-centered, lacking in commitment, and arrogant. Having these negative perspectives may predispose Baby Boomers to approach Gen-Xers with negative attitudes that can be reflected in their way of interacting. The presence of negative attitudes among some segments of the workforce can create an unhealthy work climate that increases the likelihood of nurses deciding to leave or change jobs.

The youngest generational cohort is the millennial generation, whose members were born after 1980. Millennials constitute 69.7 million people (Summers, 2004) and represent only 8% of the general workforce (Hu et al, 2004). Members of millennial generation are similar to Gen-Xers in seeking balance between their personal lives and their work, and technology is integrated to the Millennial's life style (Duchscher & Cowin, 2004). Unlike Gen-Xers, Millennials appreciate centralization of authority, and they appreciate having supervision and guidance in their work (Duchscher & Cowin, 2004). Teamwork and having a sense of cohesion and diversity among the team members are required for the millennial generation (Gerke, 2001). Change does not frighten them; on the contrary, they become excited and consider change an adventure (Duchscher & Cowin, 2004).

Professional Values

Professional nursing practice contains a set of values that constitute a shared belief system about practice (Hoffart & Woods, 1996). Specific professional values distinguish a profession from other professions and are defined as “standards for action

that are accepted by the practitioner and/or professional group and provide a framework for evaluating beliefs and attitudes that influence behavior” (Weis & Schank, 1997, p.366). The American Association of Colleges of Nursing (AACN) and the American Nurses Association (ANA) have proposed codes of ethics to reflect the required values and behaviors for nursing practice (Weis & Schank, 1997).

Nurses are introduced to nursing professional values through the socialization process, which takes place during their basic nursing preparation (Fahrenwald et al., 2005; Garvin & Kluznik, 1985; Weis & Schank, 2002; Weis, Schank, Eddy & Elfrink, 1993). The socialization process, however, does not stop after nurses’ graduation, instead it continues after they enter the work place (Weis & Schank, 2002). Thus, it could be inferred that, similar to nurses’ generational values, nurses’ professional values may be influenced by their interaction with their peers, nurse managers and work climate.

Despite the vital role of professional values, other than Martein, et al.’s (2003) study, there is no empirical evidence to support the prevailing and implicit assumption that there are similarities in professional values across the different generational cohorts. The relative generational value differences among the four nurses’ age cohorts can also be assumed to affect nurses’ professional values. For example, nurses from the Silent generation, who feel comfortable with centralization of decisions (a generational value), may value autonomy (a professional value) as less important than nurses from a younger generation, such as Gen-Xers, who do not appreciate the centralization of decisions. However, this idea has not been tested empirically.

Work Environment

The influence of the work environment in shaping individuals' behaviors has been recognized both theoretically and empirically within and outside of nursing (Aiken, et al., 2002; Bandura, 2001; Carr, Schmidt, Ford & DeShon, 2003; Hayburst, Saylor & Stuenkel, 2004; Mc Murry, 2003). In light of the current concern about RN turnover, the work environment has become particularly important in assessing nurses' behaviors related to retention. According to both Merriam-Webster's and the American Heritage dictionaries, environment is defined as the collection of physical, cultural and social conditions that surround individuals or groups. Homans (1950), in his classical writings about human groups, conceptualizes the work environment as a collection of physical, technical and social components that interact together and affect group members' behaviors. He added that for any group, certain environmental components may be more important than others in determining behavior (Homans, 1950).

The social component of the environment is concerned with the reciprocal activities, interactions and sentiments (feeling) among the group members within a certain environment (Homans, 1950). Using nursing as an example, the daily activities that occur within a specific nursing unit require frequent interaction among nurses as well as between nurses and their nurse manager. As a result of these interactions, nurses form a perception regarding their nurse manager's leadership style as well as what it feels like to work on that unit (climate).

Empirically, the work environment has been shown to have an effect on nurses' behaviors in terms of productivity, job satisfaction, turnover rates, work place violence and quality of care (Dendaa, 2004; Heath, Johanson & Blake, 2004, Aiken et al., 2002;

Barnnon, Zinn, Mor & Davies, 2002). Most notably, magnet hospitals studies (Buchan, 1999; Fuszard, Green, Kujala & Talley, 1994; Kramer, 1990; Kramer & Hafner, 1989), as well as other studies (Leveck & Jones, 1996; Hayburst, et al., 2000), have found that the nurse manager's leadership style and work climate were associated with improved quality of patient care and improved nurse retention. Thus, this study focused on investigating the role played by nurses' perceptions of their nurse manager's leadership style and climate in affecting nursing intent to leave.

Nurses' perceptions about their nurse manager's leadership style

The direct contact between the nurses and their nurse managers, specifically first line manager, plays an instrumental role in creating a positive work climate and retaining nurses (Shirey, 2004). Because of healthcare environmental uncertainty, the nurse manager assumes a primary role in leading the nursing staff toward achieving high-quality care (Cassidy & Koroll, 1994). Additionally, the first line nurse manager, is responsible for transmitting organizational goals and values to the nursing staff (Murdoch, 2001). In doing so, the nurse manager may play a significant role in reshaping nurses' values. This assumption, however, has yet to be examined.

Ribelin (2003) asserted that "nurses do not leave hospitals, they leave managers" (p.18). Ribelin's statement suggests that, compared with structural aspects of the work, interactions with the nurse manager may be a stronger force in nurses' decisions about leaving their jobs. This conclusion was supported by findings of magnet hospitals studies (Buchan, 1999; Fuszard, et al., 1994; Kramer, 1990; Kramer & Schmalenberg, 1988). These studies found that a nurse manager's leadership style was influential in retention,

through creating a climate that supported professional practice and nurses retention (Scott, Sochalski & Aiken, 1999).

The term “leadership” has been used frequently across the different disciplines (Rost, 1994). In general, leadership could be defined generally as “a process of influencing personnel toward achieving a common goal” (Huber et al., 2000, p 253). Rost (1994) proposed a universal definition for leadership that is consistent with Homan’s (1950) conceptualization of the social component of the environment. Rost (1994) defined leadership as an influential relationship between the leader and the followers toward implementing changes designed to achieve common goals. Rost (1994) asserted that four main components are required for leadership: a mutual relationship between leader and followers; a non-coercive relationship; the presence of significant change, e.g. behavior or performance; and finally, that the intended change is directed toward achieving a common goal.

Whereas leadership is a process for leading followers to achieve a common goal, leadership style is the approach as well as the behaviors by which a leader/manager directs his/her followers toward achieving that designated goal (Huber et al., 2000). However, the presence of a workforce with diverse generational cohorts that value the importance of each value relatively different may present opportunities and challenges to the nurse manager (Gerke, 2001). Given the relative differences in how nurses from diverse age cohorts evaluate the importance of each value, the effective first line manager should be able to understand the value system of each age cohort (Sherman, 2005; Weston, 2001). Furthermore, the manager should be able to use a leadership style that is targeted to the needs of each generational cohort (Arsenault, 2004; Yu & Miller, 2005).

Morden (1997) argued that there is no single effective leadership style, but rather a leader's style should be based on characteristics of the leader and her/his subordinates, as well as the situation and tasks at hand. This conceptualization is consistent with the classical Fiedler (1967) contingency theory. Morden (1997) explained that employees' perceptions about effective leadership style develop when the tasks', leaders', and groups' characteristics fit together adequately within the overall practice environment. Achieving this satisfactory fit, however, requires a clear understanding of individuals' values and expectations. Arsenault (2004) asserted that one of the criticisms toward today's management is an overall sense of ignorance with regard to generational diversity in the work place. Identifying the values of each generation is essential to understanding the behaviors and expectations of each generation.

Bass (1985) conceptualized three main leadership styles; proposed leadership styles are transformational, transactional and non-transactional or laissez-fair. Nursing and management studies, however, primarily emphasize transformational and transactional styles of leadership. In a transactional leadership style, followers agree about achieving the required goals and objectives in exchange for rewards or praise (Bass, Avolio, Jung & Berson, 2003). Once goals are achieved, rewards are provided (Bass, 1985). By contrast, the transformational leader is visionary and charismatic, and his/her employees are often motivated by their leader's charismatic traits (Cassidy & Koroll, 1994). Furthermore, transformational leaders achieve the desired goals through motivating and empowering their staff toward understanding those desired goals (Cassidy & Koroll, 1994).

According to Bass (1985), transformational and transactional leadership styles are not two opposite leadership styles; instead, they are two separate styles. The manager usually uses both of them interchangeably during everyday activities (Bass, 1985). The positive effect of a transformational leadership style on employees' performance was supported in a meta-analytical review conducted by Lowe, Kroeck, and Sivasuramian (1996). In a year-long longitudinal study, a transformational, not a transactional style, was found to be related to staff performance (Howell & Avolio, 1993).

The positive effect of a transformational leadership style, as reported in magnet studies (Buchan, 1999; Scott, et al., 1999) was associated with lower nurses' turnover and a healthier work climate. Results of the magnet hospital studies reported that the transformational leaders of the magnet hospitals were visionary, supportive, influential and empowering (Upenieks, 2003) and thus had a positive impact on retention. The magnet hospital studies, however, did not investigate the impact of the transformational leadership style on nurses' values. The magnet studies also did not examine the total effect of leadership style and nurses' values (both professional and generational) on nurses' turnover intentions.

The current workforce is composed of nurses from diverse generational cohorts that emphasize the importance of each value differently. Differences in appraising each value make nurses from different age cohorts value the important nurse managers' leadership characteristics differently. Differences across nursing generations regarding their perceptions about what constitutes effective leadership characteristics were empirically supported by Wieck, Pryndun & Walsh, (2002). Nurses' perceptions of their nurse managers' leadership style drive their decision about whether to stay or to leave

their jobs. Because values play a pivotal role in directing nurses' behaviors and decisions, nurses' intentions about whether to stay or to leave their jobs may be influenced not only by their perceptions of their nurse managers' leadership style, but also could be influenced by their values as well as by both their perceptions of their nurse managers' leadership style and their values. However, this assumption has to be empirically evaluated.

Nurses' perceptions about their work climate

Work climate is the second important dimension of the work environment that influences nurses' behaviors. Work climate is a multidimensional construct that is defined as "a set of measurable properties of the work that [is] perceived directly or indirectly by people who live and work in this environment, and it is assumed to influence their motivation and behavior" (Litwin & Stringer, 1968, p1.). For Litwin and Stringer, the concept of an organizational climate emerged as an attempt to incorporate motivational theories with organizational behavior. They argued that individuals are motivated to display favorable behavior if the work climate is consistent with their values (Litwin & Stringer, 1968). Additionally, they identified several dimensions of climate that influence what it is like to work in an environment. These dimensions are *structure, responsibility, reward, risk, warmth, support, standards, conflict* and *identity* (Litwin & Stringer, 1968). Conceptual definitions for these dimensions will be presented later in chapter three.

Climate has often been described as "what it feels like to work" in a particular setting (Snow, 2002). Schneider, Gunnarson, and Niles-jolly (2001) purported that work climate is developed based on individuals' interactions and observations of the daily unit

as well as the organizational activities that take place around them. Based on individuals' observations, they develop a conclusion not only about organizational goals and priorities (Schneider & Reichers, 1983), but also about the overall organizational culture (Gershon, Stone, Bakken & Larson, 2004; Jones, Guberski & Soeken, 1990). Through evaluating their perceptions about their work climate, individuals tend to develop their own priorities and directions, determine ways in which they should invest themselves, and behave in accordance with this conclusion (Schneider, et al., 2001).

However, Schneider, et al.'s (2001) suggestion is arguable; individuals do not behave solely based on how they perceive their work climate. Carr, et al., (2003) suggested that perceptions about work climate influence behavior indirectly through their effect on individuals' cognitive and affective status. Values could be conceptualized as cognitive and affective components that direct individual behaviors (Rokeach, 1973). Values are a major motivator for behavior; thus, both individuals' perceptions about their work climate as well as their values play a pivotal role in directing and guiding behavior. The relationship between individuals' values and perceptions about their work climate, though, are not clear and has not been empirically evaluated.

For instance, Gen-Xers value a motivating and challenging climate (Weston, 2001) while Baby Boomers emphasize a more stable and caring climate that contributes to social well-being (Weston, 2001, 2006). On the other hand, Millennials, the youngest generation, enjoy a fast-changing environment (Weaston, 2001, 2006). Therefore, a climate that is satisfying for one generational cohort may not be satisfying for another. Consequently, individuals from each generation will behave not only based on how they

perceive their work climate, but also based on whether their values are supported and met through their work climate or not.

In both nursing and management literature, climate was found to have significant effects on organizational commitment, productivity, and performance (Cullen, Parboteeah, & Victor, 2003; Snow, 2002; Brown, Leight, 1996). Climate was also reported to have a significant relationship with safe behavior (Neal, Griffin & Hart, 2000), needle stick injuries and near-misses (Clark, Sloane, Aiken, 2002; Clarke, Rockett, Sloane, Aiken, 2002), as well as individuals' work attitude, motivation and performance (Parker, et al., 2003). Additionally, climate has been found to significantly affect nurses' job satisfaction (e.g., Duxbury, Henly, Armstrong, 1982), turnover intentions (e.g., Hart, 2005), and empowerment (e.g., Mok & Au-Yeung, 2001). Although it was theoretically assumed that through nurses' interactions within their work environment and with their colleagues, their values can be affected (Omery, 1989). This theoretical assumption has not been empirically examined, as none of the previous climate studies have examined the influence of work climate on nurses' values, or how both of them affect nurses' intent to leave.

Nurses' Intent to Leave

Despite ongoing retention efforts, the national turnover rates are reported to be as high as 21% per year (Ohio Hospital Association, 2006). According to the Ohio Hospital Association, registered nurses' turnover rates in Ohio are at 13.1%, and the nursing shortage is expected to be as high as 29% by the year of 2020 (Ohio Hospital Association, 2006). High turnover rates adversely affect patients' healthcare outcomes (Starchota, Normandin, O'Brien, Clary & Krukow, 2003), staff morale (Manion, 2004),

and quality of care (ANA, 2001). Kosel and Oliver (2002) reported that costs for replacing a medical/surgical nurse amount to \$46,000, while replacing a critical care nurse amounts to \$64,000. Kosel and Oliver (2002) added that given the present numbers and with 20% turnover rates, an organization with 600 nurses may spend about \$5.52 million in nurse replacement costs. Consequently, high turnover rates have negative financial, nursing and organizational implications.

Turnover is conceptualized as a “multistage, attitudinal, decisional and behavioral process” (Irvine & Evans, 1995, p. 246). These stages were described by Irvine and Evans (1995) as follows: first, factors are derived from whether nurses are satisfied in their jobs and have a commitment to the organization; second, the decisional dimension of turnover relates to the one’s intention to leave his/her job; and lastly, the behavioral dimension represents the actual behavior. The intent to leave (decisional) was empirically reported to be a strong predictor of actual turnover (Alexander, Lichtenstein, Oh & Ullman, 1998; Hinshaw, Smeltzer & Atwood, 1987; Irvine & Evans, 1995; Price & Mueller, 1981; Shader, Broome, Broome, West & Nash, 2001).

Among the predictors of turnover that have been examined, dimensions of work environment such as leadership style and climate have repeatedly been identified as being important for nurse retention (Hayburst, et al., 2004; Health, et al., 2004; Kleinman, 2004; Smith, Hood, Waldman & Smith, 2005). Most recently, the existing evidence provided by the series of magnet studies supports the idea that leadership style and climate are important factors in reducing turnover. Given the current pattern of high turnover rates it is important to pay attention and work in retaining younger nurses; as compared with older nurses, younger nurses are more likely to frequently change their

jobs, with an average of every 3.5 years (Kupperschmidt, 1998). Older nurses often interpret younger nurses' high turnover rates as a lack of commitment and loyalty values.

In order to manage high turnover rates, most organizations have directed their efforts toward recruitment and retention (Starchota, et al., 2003). However, recruitment and retention efforts are "quick fixes" for the problem; these efforts just sedate the problem, but they do not address the reasons behind the problem (Starchota, et al., 2003). Addressing the turnover problem requires investigating its causes. Once causes are identified, creative and effective strategies can be implemented (Starchota, et al., 2003). As nurses' intent to leave has been found to be a strong predictor of turnover, intent to leave will be the focus of this study.

In conclusion, the contemporary health care environment has become more challenging. The nursing shortage, along with diverse nursing generational cohorts that evaluate the importance of values differently, has added another layer of complexity to the changing environment. Managing nursing personnel who encompass relative value differences requires a savvy manager who has the ability to understand and acknowledge these relative differences while creating a healthy work climate with the capacity to embrace and meet the needs of nurses from diverse age cohorts and thereby retain them.

The impact of leadership style and work climate on nurse retention has been empirically supported; nurses' turnover rates, however, are still high. The progressive increase in nurses' turnover rates necessitates examining nurses' turnover from a different perspective. As there is a growing interest in studying and examining nurses' values and investigating how nurses from diverse generations behave based on their relative value system differences, this study empirically examined the direct and indirect,

as well as the total, effect of values, together with nurses' perceptions of their nurse manager's leadership style and work climate, on nurses' turnover intentions.

Theoretical Framework:

Personal Investment Theory (PIT) was utilized to guide this study. This theory was developed as a result of work in the field of motivation and motivational theories (Maehr & Braskamp, 1986). PIT emphasized the pivotal role of meaning in directing behavior. Maehr and Braskamp (1986) asserted that individuals' subjective meanings about self and situation antecede individuals' behaviors and choices (Maehr & Braskamp, 1986; Maehr & McInerney, 2004). Furthermore, PIT suggested that individuals from different cohorts or cultural backgrounds may develop different meanings about the same situation, and consequently may behave differently (Maehr & Braskamp, 1986; Maehr & McInerney, 2004). Thus, it might be assumed that nurses from different age cohorts may come to different meanings and behave differently in the same situation.

Maehr and Braskamp (1986) affirmed that motivation can be studied by analyzing factors related to *person* and *situation*. Personal factors represent aspects inherent to the person and help in predicting how he/she will behave in a particular situation. Examples of personal factors include: past experience, cultural background, and age (Maehr & Braskamp, 1986). However, a person's age per se is not a major predictor of behavior; instead, other variables, such as values and socioeconomic status, which are pertinent to each age cohort, are the main predictors of a given behavior (Maehr & Braskamp, 1986). The second factor that influences motivation is the situation. Situational factors represent the different factors external to the person that could impact his/her motivation (Maehr &

Braskamp, 1986). Examples of situational factors include task design, available options and incentives, as well as prevailing social norms (Maehr & Braskamp, 1986).

Maehr and Braskamp (1986) suggested that in addition to the previously presented factors affecting meaning formation, there are enduring beliefs that are brought by individuals to the situation and influence meaning formation. The authors did not clarify details as to what could be considered an enduring belief. However, individuals come to their work environment with sets of professional and generational values, and values by definition are an “enduring beliefs...,” it could be argued that individuals’ values (professional and generational) could be considered the enduring belief that is brought to the situation and affects behavior.

Despite the relative importance of personal and situational factors in determining individuals’ behaviors, Maehr and Braskamp (1986) argued that motivational research suggests that it is not the person or the situation per se that drives behavior; instead, it is the different thoughts, perceptions and individuals’ subjective meanings given to a particular situation that direct behavior. Maehr and Braskamp (1986) added that different thoughts and feelings are artifacts of both the person and situation, and based on these thoughts, the person derives *meanings* about the situation, and behaves in accordance with these meanings. A core aspect of personal investment theory is the idea of meaning and the process of meaning formation. It is the *meaning* of a particular situation that will determine the individual’s willingness to invest themselves in a particular situation (Maehr & Braskamp, 1986). Meaning is generally used to describe thoughts, goals, perceptions and purposes (Maehr & Braskamp, 1986).

Maehr and Braskamp (1986) specified that meaning is composed of three interrelated facets: 1) perceptions about self, 2) perceptions about available alternatives in a given situation, and 3) personal incentives related to performance in a given situation. Because values act as a lens through which individuals make judgments and make decisions, values help in shaping perceptions. Thus, it is through values that the individual can develop a meaning about a particular work situation, and then behave in accordance with that meaning. The assignment of meaning to a situation is an abstract process, yet meaning drives motivation, which, in turn, directs behavior.

Because motivation is not an observable process, personal investment theory focuses on studying *behavior* as the visible aspect of motivation (Maehr & Braskamp, 1986). So if, for instance, a nurse chose to stay at her job, this behavior could indicate that this nurse was motivated by certain reasons to stay and work in her/his current position. The nurse's behavior is understood in terms of her decision to stay at her/his work, and this is the observable interpretation of his/her motivation. The main assumptions underlying personal investment theory are: 1) individual's motivation starts and ends with studying individual's behavior; 2) motivation can be identified through studying a person's choices in different situations; 3) personal investment efforts will be determined based on the meanings given to the different situations; 4) origins and meanings of different situations can be identified and assessed, and finally 5) motivation is an ongoing process that is manifested in behaviors (Maehr & Braskamp, 1986).

Conversely, an individual does not tend to invest themselves (behave) the same way, even if they are in the same situation (Maehr & Braskamp, 1986; Maehr & McInerney, 2004). This is because a person in the same situation may perceive and assign

meanings to situations differently (Maehr & Braskamp, 1986; Maehr & McInerney, 2000). Maehr and Braskamp (1986) proposed that because individuals work and interact within a wide socio-cultural context, in this context members from different cultures may perceive, define, and give meanings to situations differently (Maehr & Braskamp, 1986). Based on the differences in meanings, individuals may subsequently invest themselves (behave) differently (Maehr & Braskamp, 1986). Differences among individuals' perceptions might be attributed to the differences in their values (Maehr & Braskamp, 1986).

The main components of the personal investment theory are illustrated in Figure (1). By applying personal investment theory to the proposed study, the situational factor is represented by environmental factors, with its main components being leadership style and climate. As a result of nurses' daily interactions within their work environment, the values that they bring to the situation are likely to be influenced by aspects of the work environment, such as leadership and climate. These values serve as guides in the process of meaning formation, which is the direct antecedent to nurses' behavior and decisions about whether to stay or not (invest themselves or not). Further, because the relative value importance varies by nurses from different generations; the influence of the environmental impact may also vary. Consequently, nurses' behaviors might be relatively different. This assumption has not yet been empirically examined. The final part of the theory, personal investment, is represented in this study by nurses' intent to leave. Having a high percentage of nurses deciding to leave indicates that nurses are no longer motivated to invest themselves in their work place. Personal investment theory's

suggestion about the influential role of meaning in directing behavior has limited empirical testing within nursing (Manojlovich, 2005).

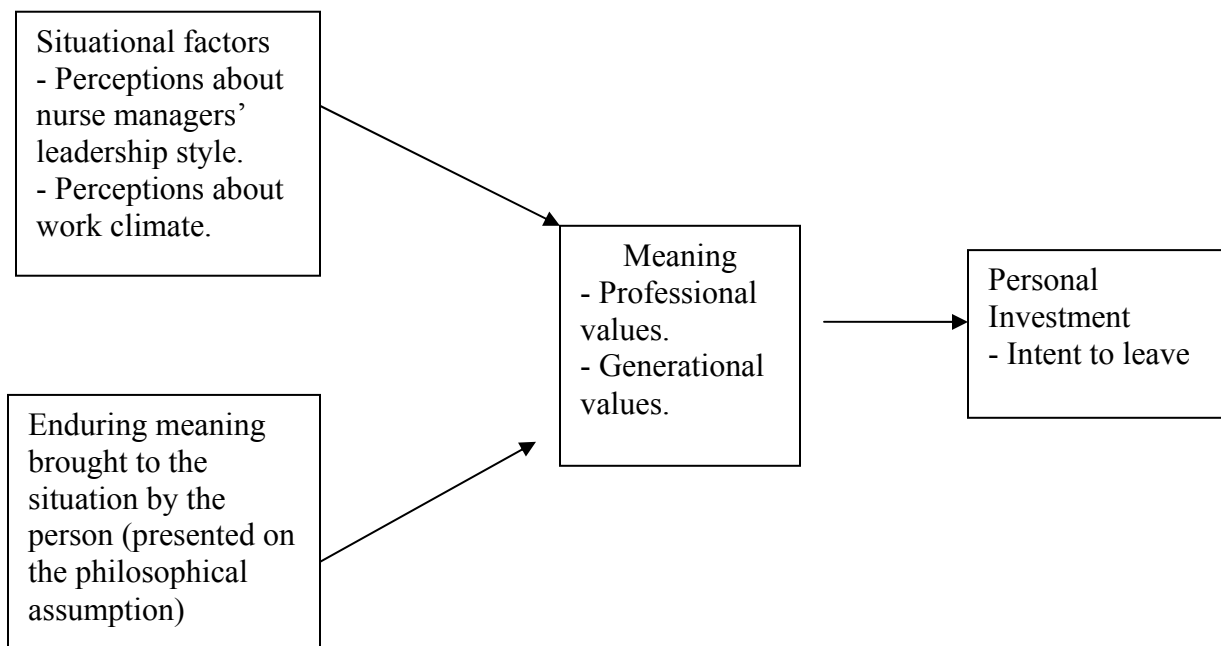


Figure 1. Personal Investment Theory and the Related Study Variables

Theoretical and Conceptual Definitions

Values: are enduring beliefs that a certain behavior is more socially desirable and acceptable than others (Rokeach, 1973). Values are instrumental in assigning meaning that guides behavior.

Generation: is a collection or group of people (cohort) who share both birth years and socio-economic and political incidences that existed during a particular era. Sharing the same era impacts the ways in which individuals from the same age cohort behave and approach life in general and work in particular (Kupperschmidt, 2000). For this study,

four generations of Silent, Baby Boomers, Gen-Xers and Millennials represented the main generations in the current nursing workforce.

Generational Values: are relatively enduring beliefs of nurses from different generations about lifestyle and work life that are derived from historical, social and political contexts that encompass a particular set of birth years (Kupperschmidt, 1998). Generational values have two components: instrumental values, which include independence, loyalty, and honesty; and terminal values, which include inner harmony, pleasure, and sense of belonging (Rokeach, 1973).

Professional Values: are the nurses' enduring beliefs about the practice of professional nursing. Professional values also act as the standard for professional practice, by providing a framework for evaluating performance, and distinguishing nursing from other professions (Weis & Schank, 1997, p.366).

Both generational and professional values are conceptualized as determinants for the meaning that nurses impose on decisions and behaviors related to whether they stay at their jobs.

Leadership style: is a situational factor, external to the nurse that specifies a relational component between the nurse manager leader and the registered nurse that influences achievement towards a common goal (Maehr & Braskamp, 1986; Huber, et al., 2000; Bass & Avolio, 1997). For purpose of this study, leadership style was conceptualized as a perception of whether the nurse manager has a transformational, transactional or lassie-fair style.

Work Climate: is a multidimensional and situational factor of the work environment, which represents how a nurse feels about her/his work environment. It

includes nine dimensions of *structure, responsibility, reward, risk, warmth, support, standards, conflict* and *identity* (Litwin & Stringer, 1968).

Intent to leave: is a decisional process that ends with nurses' voluntary termination of their work. It represents the degree to which nurses are motivated and willing to invest themselves in a particular work environment.

The study model with the study variables are presented in Figure (2).

Significance of the study

To Nursing Discipline

A discipline is a domain of inquiry that is characterized by shared belief among its members regarding its reason for existence (Newman, Sime & Corcoran-Perry, 1991). A discipline also represents a unique and distinctive perspective toward understanding a phenomenon, in a way that defines the limits and nature of its inquiry (Donaldson & Crowley, 1978). The focus of the professional discipline is derived from the shared values about social commitment, responsibilities for enhancing the discipline's body of knowledge and the expected services of the profession (Newman, et al., 1991). As nursing is moving toward building its own and unique body of knowledge, it is important to focus on understanding different phenomena from a nursing perspective (Donaldson & Crowley, 1978).

Furthermore, nursing is a newly emerged discipline, and throughout the process of building its body of knowledge, nursing borrowed its content from other disciplines such as medicine, sociology, psychology, and physiology. As the theory for the present study is borrowed from behavioral science, Chinn and Kramer (2004) asserted that although borrowing theories from other discipline(s) might be helpful, these theories

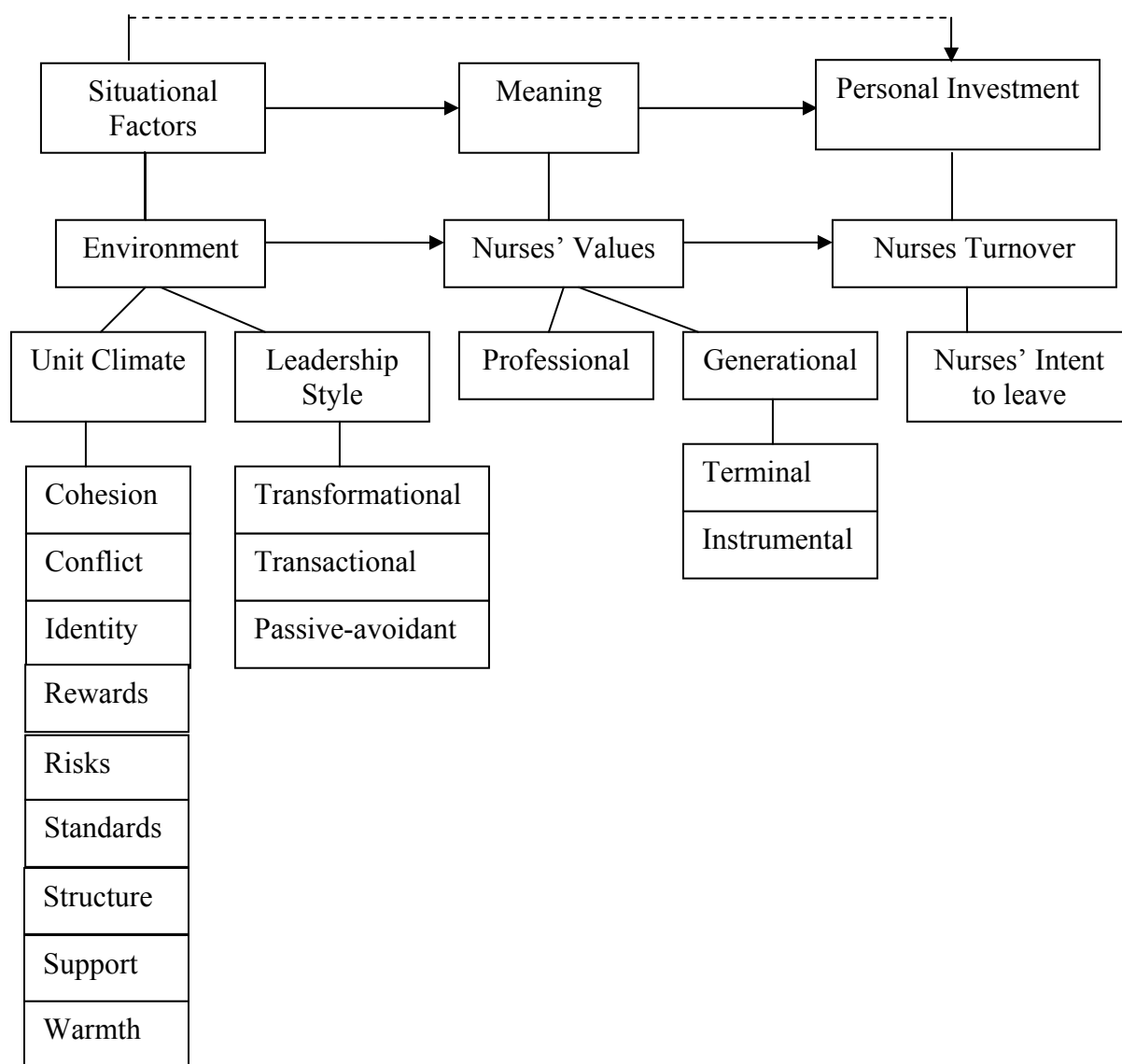


Figure 2. The Study Conceptual Model.

should be applied with caution because the borrowed theory may not fit within the unique nursing practice. Within the same context, Walker and Avant (1995) added that the usefulness and applicability of any borrowed theory in nursing is conditional until its usefulness is supported in nursing. Thus, empirically testing PI theory in nursing will

provide evidence to support or to oppose the applicability of the theory in nursing. The results in both cases will help in expanding the nursing body of knowledge.

The proposed study contributed to the nursing discipline through focusing on two of the main nursing metaparadigms. The first paradigm was the “*Environment*”. The concept of *Environment* is a fundamental concept in nursing since Florence Nightingale, and it remains an essential concept for nursing (Chinn & Kramer, 2004). In a contemporary conceptualization for the paradigm of environment, Patricia Benner did not use the word “environment”; instead she used the word “situation” to represent the social environment that helps individuals in developing meaning as a result of their interaction within their environment (Brykczynski, 2002). Benner also asserted that individuals come to the situation with their past as well as present experiences, which help them in developing meaning for a particular situation. Benner’s perspective is consistent with the study conceptualization to environment.

The second paradigm that was addressed by this study was the “*Person*”. Philosophically, the concept of *Person* could be conceptualized to refer to the notion of ‘*Wholeness or Wholism*’ (Chinn & Kramer, 2004); for this study, the nurse was conceptualized as the person. By conceptualizing the nurse as the person, studying nurses’ values is consistent with the idea of wholism. So values that are an integral part of the nurse as a whole was among the main influential variables for the study.

Additionally, nurses bring their values to the work place, which influence their perceptions, goals and performance. This idea is consistent also with Benner’s proposition that individuals bring their experiences, perceptions and attitudes to the situation, and that these perceptions, experiences and attitudes will help in the process of

meaning formation (Brykczynski, 2002). This conceptualization is similar to the proposed assumption that nurses come to the work place with values (professional and generational), and that these values will help nurses in the process of meaning formation. Identifying these values could help in understanding nurses' behaviors and in designing ways to align performance goals with nurses' values.

Finally, Patricia Benner was influenced by the concepts of "embodiment", which reflect the ability to react to situations based on the meanings placed on that situation (Brykczynski, 2002). Similarly, the proposed study examined how nurses react (intent to leave) based on the meaning they place on a given situation.

To Nursing Science

In order for nursing to move toward professionalization, development of nursing science is essential (Peplau, 1987). It is important for nursing practitioners to use scientific knowledge to analyze and understand different phenomena as related to their scope of practice (Peplau, 1980). Thus, it is important for nurses to understand the different phenomena such as values, turnover and environment from a scientific perspective that is consistent with nursing practice.

Chinn and Kramer (2004) outlined two main aspects that they considered essential for the development of nursing theory and knowledge: values and resources. Individual, profession and society constitute the three main components for values and resources (Chinn & Kramer, 2004). This study will empirically examine both professional and individual (generational) values. Having empirical evidence about nurses' values (professional and generational) will be an addition to the nursing body of knowledge and will help in theory development.

Conducting a study to empirically examine the relationship between such environmental factors as nurses perceptions to their nurse managers' leadership style and work climate in particular, nursing values both professional and generational as related to turnover intentions considered a new perspective for approaching turnover phenomenon, which will add to the scientific body of knowledge. Understanding the interrelationship between work environment variables and nursing values as related to turnover is helpful for designing interventions to address nursing turnover. The study data will be helpful for future Studies.

To Nursing Practice

The focus of nursing practice is directed toward improving quality of care and meeting the practice standards mandated by the regulating agencies. Meanwhile, the problem of the nursing shortage imposes a tremendous barrier to achieve these goals. Consequently, studying the interrelationship between work environment, nurses' values and turnover is essential for managing the problem of nursing shortage from a more social perspective that emphasizes the social aspect of the work environment.

Identifying nurses' perceptions toward their nurse managers' leadership style and work climate is essential. Having this information could help nurse managers in identifying areas that require some modifications in their way of interacting with nursing personnel as well as areas that require improvements in the health care climate. More importantly, nurses from different age cohort come to the work environment with relatively different values and demands. Hence, the nurse manager should identify these values and work on bringing nurses together as a team. Furthermore, the nurse manager

should create a suitable work environment that benefits from and appreciates individual nurses' contributions.

The presence of empirical data about the impact of study variables on nurse turnover may help in designing more specific interventions based on the values of each age cohort. More importantly, the study data will help to discover the values pertinent to each age cohort that, in turn, will enhance the understanding and narrowing the gap across the four nursing age cohorts. Clarifying the relative value differences to the different age cohorts is essential because some studies reported that some generations have negative attitudes toward their colleagues who represent different age cohorts. Thus identifying the relative value differences and orienting nurses to these concerns/issues may help to create a healthy work environment that will attract and retain nurses.

Philosophical Assumptions

1. Nurses come to the work environment with two sets of values (professional and generational). These values may be subjected to change as a result of nurses' daily interaction within their work environment.
2. Nurses from different generational cohorts may evaluate the importance of each value relatively different, due to differences in their upbringing circumstances. i.e. nurses from the same age cohort evaluate the relative importance of each value similarly. Nurses from different generational cohorts, however, may have similar professional values as they are professionals and socialized into the profession similarly.

Research Questions:

1. What are the professional and generational values of the four nursing generational cohorts currently in the workforce?
2. What are the differences across nursing generations in their perceptions of their work environment (leadership style and work climate)?
3. What are the differences across nursing generations regarding their professional and generational values?
4. What is the direct, indirect and total effect of work environment (nurses' perceptions of their nurse managers' leadership style and the work climate) and nursing values (professional and generational) on nurses' intent to leave?

Chapter 2

Review of the Literature

The purposes of the study were the following: *first*, to describe and compare nurses' values – professional and generational – as they represent different generational cohorts; *second*, to evaluate the direct effects of nurses' work environment dimensions (nurses' perceptions of their nurse managers' leadership styles and climates) on nurses' values (professional and generational) ; and *finally* to evaluate the direct, indirect, and total effects of nurses' perceptions of their nurse managers' leadership styles and work climates, and nurses' values (professional and generational) on nurses' intent to leave. Maehr and Braskamp's (1986) personal investment theory was used to guide the study.

This review of literature is organized as follows: nurses' values (professional and generational), nurses' perceptions of their work environment (nurse manager's leadership styles and climates), and finally, nurses' behaviors / personal investment (intent to leave). This was the first known study that empirically explored the role of values (professional and generational) in directing nurses' decisions about leaving their jobs, directly and in combination with the work environment variables (leadership style and climate). Therefore, the literature review starts with a focus on nurses' values (generational and professional)..

Values – Generational values

The current nursing workforce is composed of four nursing generational cohorts: namely: Silent, Baby Boomers, Gen-Xers and Millennials. These generational cohorts have relatively different value systems. Nurses' values influence the ways in which they approach their work climate and how they prefer to be managed (Duchscher & Cowin,

2004; Kupperschmidt, 2000). The impact of relative value differences on how employees approach their work, authority figures, and direct their behavior (satisfaction, productivity and commitment) was supported empirically in nursing (Mc Neese-Smith & Crook, 2003; Mc Neese-Smith & Van Servellen, 2000; Stuenkel, et al., 2005; Wieck, et al., 2002) as well as in non-nursing studies (Rodriguez, Green & Ree, 2003; Yu & Miller, 2005). Thus, it might help managers to understand and acknowledge the relative differences in nurses' value systems and to create a work climate that meets the needs of each age cohort (Duchscher & Cowin, 2004; Hu, et al., 2004; Kupperschmidt, 2000; Stuenkel, et al., 2005; Weick, et al., 2002)

Reviewing the literature showed that generational values studies are classified as either descriptive for the values held by each age cohort, or explanatory in terms of how nurses from different age cohorts approach their work environment and authority figures. The current review of literature is arranged based on these study classifications.

Descriptive studies for values/ characteristics held by each age cohort.

In order to maximize multigenerational team effectiveness, Hu, et al., (2005) suggested that identifying differences among nurses from diverse generational cohorts is an essential tool that could help nurse managers in managing multigenerational teams effectively. Based on this premise, the researchers surveyed 42 RNs, 16 nurse technicians and 4 nursing secretaries working at medical, surgical and critical care departments at a Southeastern hospital. Because there were not a sufficient number of nurses in either the Silent (only 6.5%) or Millennial (only 1.6%) age cohort, Hu and her colleagues combined the Silent generation and Baby Boomers (group 1); and Generation X and the Millennials (group 2).

To describe the characteristics of each generation, one of the research teams developed the Generational Employee Survey Tool. The study results indicated the presence of statistically significant differences between nurses in the two age groups in relation to how they perceive the generational characteristics of each age cohort, how they prefer to be managed, and how they appreciate assuming authority positions. Nurses did not differ only in these areas they also significantly differed in their work performance and feed back preferences.

The results of Hu, et al., outlined what nurses from diverse age cohorts wanted from their leaders and climate; if nurses perceived that neither their leaders nor climate were supportive of such values, nurses considered leaving their work place. Despite the results of Hu et al.,(2004) being beneficial in describing the characteristics of nurses in the two main age cohorts, Hu and her colleagues did not specify whether these characteristics were a reflection of nurses' values. Additionally, the researchers did not clarify whether these characteristics were influential in guiding some of nurses' decisions as intent to leave.

Based on assumptions that generational differences effect the ways in which nurses approach authority figures, as well as their perceptions of what constitutes effective leadership behaviors, Wieck, et al., (2002) conducted a study to identify the most desirable and undesirable leadership characteristics of nurse managers. The study sample comprised of 108 subjects in the emerging workforce (nursing students or new nurses) ages 18 to 35; and 126 nurses already in the workforce aged 35 and above.

By using the developed instrument that contained mainly a list of essential leadership characteristics, the study participants were asked to indicate the three most

desired leadership characteristics, and then to rank them based on their importance, and finally to specify the least desired leadership characteristics. The study results indicated that both groups ranked “*honesty*” as the most desirable characteristic. Those in the emerging and entrenched workforces differed, however, in their ranking of other characteristics; the younger generation desired a nurse manager who is a “*team player*” with “*good social skills*” and who is “*approachable*,” “*supportive*” and “*knowledgeable*” while the older generation desired a nurse manager that who is “*fair*,” “*empowering*” and with “*high integrity*.”

Although both generations reached 80% consensus on the least desirable leadership characteristics, they differed on some of them. Furthermore, the study results showed that participants’ ranking of the different characteristics was consistent with the theoretically presented values for each generation to a great extent. For instance, younger generations viewed their leaders as mentors, and they liked to work in an environment that supports their desire for learning; thus, having a knowledgeable leader was essential. By contrast, the older generations liked to work – they were workaholics – and for them, work was their life. They liked their contributions to be rewarded; therefore, having a fair and empowering leader is important to retain and satisfy them.

Wieck and her colleagues, however, admitted that their study has limitations in terms of having utilized a convenience sample, a small sample size, and the cultural homogeneity of the sample; moreover, their use of the ranking method limits the generalizability of the results. Finally, some words were vague, such as “*honesty*” and “*integrity*.” In addition to the previously presented limitations, the researchers did not provide a rationale for the utilized age interval criteria, and more importantly there was

inconsistency and overlapping between the age ranges that they utilized and the widely known four generations age classification. The researchers also did not provide sufficient descriptions of the setting or the study sample characteristics.

Explanatory in terms of how nurses from different age cohorts approach their work environment.

To explore how nurses from different age cohorts perceive their work environment, and whether their perceptions of their work environment are related to their retention, Stuenkel, et al.,(2005) surveyed 272 nurses (39% response rate) at a large acute care hospital. Stuenkel et.al, (2005) utilized Moos's Work Environment Scale (WES) to measure nurses' perceptions of their work environment. Data about nurses' retention was obtained by reviewing hospital census data for a two-year period. As there were not any nurses of the Millennial age cohort and only 10 nurses from the Silent generation. The data analysis was performed by using the two main age cohorts of Boomers and Gen-Xers.

A t-test was done to compare mean score differences between the two groups. The results of the study showed statistically significant differences between Gen-Xers and Boomers in five out of the ten WES subscales. Generally, Gen-Xers scored significantly higher than Boomers in all of the subscales. Differences between the two groups were related to the subscales of *involvement*; younger nurses perceived a higher degree of involvement (M= 6.8, vs. 6.1, p=.02), *supervisor support* (M=5.2, vs. 4.3, p=.01), *autonomy* (M=5.7, vs.4.9, p=.00), *task orientation* (M=7.1, vs. 6.5, P=.03), and *innovation* (M= 4.3 vs. 3.5, P= .02) (Stuenkel, et al., 2005). The researchers did not report data about nurses' retention.

The results of this study clearly highlighted the differences between nurses from different age cohorts with regard to how they perceived their work environment. Based on these findings, different strategies should be utilized to retain nurses from different generational cohorts. Work environment is reported to influence nurses' outcomes: e.g. turnover, job satisfaction and productivity; thus, based on nurses' differences in their perceptions, differences in outcomes may be expected. Although Stuenkel et. al. (2005) suggested several implications based on the study findings; they provided partial explanation for these findings.

Based on the assumption that nurses' age, developmental stage, and job stage may influence nurses' job satisfaction and nurses' outcome (productivity and commitment) McNeese-Smith and Van Servellen (2000) conducted a study to examine this assumption. The researchers randomly sampled registered nurses from three church affiliated hospitals with bed capacities ranging from 350 to 550 beds; the obtained response rate was 52%. The mean age of the studied sample was 41 years. For the purpose of this study, only results related to nurses' ages will be presented.

A statistically significant positive relationship was found between nurses' age and job satisfaction ($\rho=0.11$, $p=.03$), perceived productivity ($\rho=0.25$, $p=.001$) and commitment ($\rho=.30$, $p=.0001$). These results indicated that older nurses were more satisfied, perceived themselves as being more productive and have more organizational commitment. These results were consistent, in part, with the findings of an earlier qualitative study (Wheeler, 1994) which examined stereotyping about older women in general, and the notion that older women are less productive in particular.

In this study, the researcher interviewed eight nurses with a mean age of 57 years and with 15 to 40 years of work experience. Most of the study sample reported high satisfaction with their jobs and felt that although they are older, they are still clinically competent and productive. Furthermore, the majority of the study participants reported that they perceived higher patient satisfaction under the care of older nurses. The results of Wheeler's study should be interpreted with caution, because she interviewed older nurses about their performance. The researcher did not interview other nurses or nurse managers to have more objective opinions regarding the clinical competence of the older nurses. Furthermore, the researcher did not interview younger nurses to know how younger perceived their competence.

The results of both McNeese-Smith and Van Servellen (2000), and Wheeler (1994) are contradictory with the two studies conducted by Santos: the first by Santos and Cox (2000) and the second by Santos et al. (2003). The results of both studies reported that Baby Boomers were more stressed, and strained, and lack coping skills as compared with their colleagues from the Silent generation and Generation X (Santos et al., 2003; Santos & Cox, 2000). In the first study, Santos and Cox conducted a multi-method study, in which they surveyed 413 nurses working at a large Midwest pediatric hospital. About 4% of the sample was from the Silent generation; 43% were Boomers, and 41% were Gen-Xers.

The Occupational Stress Inventory (OSI) was conducted, followed by a two month follow-up semi-structured interview with 44 nurses. The scores of the OSI indicated that Boomers were significantly more stressed compared with nurses in the other age cohorts; this result was indicated by significantly higher scores in the stress

subscales of role overload ($p=.018$), and conflicting demands ($p=.041$). Boomers also scored significantly higher in the strain subscales of interpersonal strain ($p=.020$) and strain at the work place ($p=.017$). Meanwhile, Gen-Xers had significantly higher mean scores (more negative) on the work physical environment scale ($p=.040$). In terms of the coping scales, nurses from the Silent generation had significantly higher scores (more positive) regarding activities to cope with stress, such as social support ($p=.001$) and personal activities ($p=.010$).

Almost the same results were obtained in the second study that was conducted by Santos and her colleagues (2003). The researchers attributed the obtained results to the fact that Boomers assume multiple roles in their lives as well as their work. Additionally, nurses from this generation are accustomed to working hard, being supportive of their colleagues, and not asking for help if they needed it (Santos et al., 2003). On the other hand, the rationale for the Gen-Xers' negative perceptions about their physical environment was attributed to the presence of Gen-Xers in a transitional period from being in a student role, in which they are used to providing care for a limited number of patients, to the employee role in which they have more responsibility and a greater work load; thus, the physical environment may be perceived as being more exhausting to them (Santos et al., 2003).

As job stress and strain are considered the main reasons for burnout and eventually turnover, the results of both of Santos's studies highlighted that in the studied settings, Boomers may decide to leave their jobs as a result of their stress and strain, while Gen-Xers may make the same decisions due to their negative perceptions about their physical environment. Although Santos and her colleagues acknowledged the value

difference across the four nursing generations, they did not, however, attribute the obtained results to the fact that these generational differences may impact the ways in which nurses from each generation approach their work climate, colleagues and authority figures. Consequently, nurses' expectations about what constitutes an effective leadership style or positive work climate may differ. Thus, they will feel and behave differently.

Similar to their earlier study, McNeese-Smith and Crook (2003) conducted a multi-site study to identify work value differences as related to age, generation, job stage, level of education and ethnicity; as well as the association between age, job stage (IV) and job satisfaction, productivity and commitment. The authors conceptualized values as indicator for what constitute right or worthwhile. Furthermore, McNeese-Smith and Crook (2003) assumed that work values are important predictor for nurses job satisfaction, productivity and turnover. Work values were measured by using Super's (1970) Work Values Inventory (WVI).

The study sample consisted of 412 RNs, representing a 52% response rate, from four hospitals in Los Angeles. Seven instruments were utilized in this study; for relevance to this study, results involving the Work Values Inventory (WVI) will be presented. The WVI consisted of 15 subscales representing 15 values; participants replied to these values' subscales by using a five-point likert scale ranging from very important to unimportant (McNeese-Smith & Crook, 2003).

Work values were found to differ based on nurses' ethnicity, job position, level of education, job stage, age and generation. The study results showed that younger nurses scored significantly higher than older nurses in subscales related to economic returns ($\rho = -.13$, $p = .008$), prestige ($\rho = -.10$, $p = .04$), and variety ($\rho = -.19$, $p = .0001$).

Furthermore, nurses were classified into three generations based on age: Silent, Boomers and Gen-Xers. Gen-Xers scored significantly higher than their colleagues with regard to values of variety ($M=11.81, 11.18$ & 10.58 respectively, $p=.002$); and economic return ($M= 13.25, 12.77, 11.97$, respectively $p=.003$).

It was also found that there was a significantly negative relationship between economic return value and job satisfaction ($\rho=-.14$, $p=.05$). Additionally, significant positive association was found between most of the work values and job satisfaction, commitment and productivity. The results of this study presented empirical support for the impact of values on some aspects of nurses' outcomes. Although the researchers were concerned with studying work values, by comparing the studied work values with both generational and professional values, some overlapping (similarities) among them will be found. The distinction between these values is not clear, but it is apparent that most human values can overlap and influence each other. The distinction between the different values, however, is beyond the scope of the study. Therefore, conceptualizing values is arbitrary and based mainly on how the researcher defines and conceptualizes values within the context of the proposed study.

In a more recent attempt to explore the relationship between nurses' personal values and job satisfaction, Prothero, Marshall, Fosbinder and Hyndrix (2000) conducted a descriptive correlational study at two mountain west hospitals. The study sample consisted of 49 RNs working in three acute care medical surgical units. The participants' ages ranged from 23 to 35. Nurses' values were measured by using the Rokeach (1973) survey. Participants were asked to rank 18 terminal and 18 instrumental values based on their degree of importance. Job satisfaction was measured using the Index of Work

Satisfaction (IWS), which measures job satisfaction as related to pay, professional status, interpersonal interactions, task requirements, organizational policies and autonomy (Prothero, et al, 2000).

Values of sense of accomplishment, equality, being imaginative, helpful, self controlled and obedient were significantly associated with total work satisfaction ($p < .05$). The values of health, self-respect, satisfaction, exciting life, inner harmony, and being loyal ranked among the top-order values; yet these values did not significantly correlate with job satisfaction. Other values, such as a sense of accomplishment, equality, and being imaginative, helpful, broad-minded, and loving, were significantly associated with satisfaction with autonomy ($p < .01$). The values of family security, being imaginative, obedient, and responsible were associated with satisfaction with pay ($p < .01$).

Through adapting a newer perspective, some studies have focused on examining the effect of value congruence on different nurses' outcomes, such as performance and intent to leave (Takase, Maude & Manias, 2005) and job satisfaction (Verplaken, 2004). Takase, et al. (2005) utilized the person-environment fit theory to guide their study. In this study, the researchers focused on examining whether nurses' work values are congruent with their perceptions of their environmental characteristics and whether nurses' work values and perceptions of their environment are predictors of their performance and intent to leave (Takase, et al., 2005). Work values was conceptualized as desired outcomes such as autonomy, recognition and fair salaries, while environmental characteristics were conceptualized as the extent to which nurses perceive that their environment facilitate achieving these outcomes (Takase, et al., 2005).

Both nurses' work values and perceptions of their environmental characteristics were measured using Manhardt's (1972) work value scale (Takase, et al., 2005). The study participants were asked to utilize a six-point likert scale to indicate how much they need items related to each dimension (their work values), and how much they believe that these dimensions are available at their environment (their perceptions of their work environment). Task performance was measured by utilizing Goodman and Svyantek's (1999) seven-item job performance scale, while nurses' intent to leave was measured by the Withdrawal Cognition Scale, which was developed by Mowday et al., (1984) (Takase, et al., 2005).

The researchers used data from 346 participants (representing a 37% response rate) for data analysis. Paired t-tests failed to support the person-environment fit assumption, as a statistically significant difference was found between nurses' work values mean score (mean= 4.89) and the mean score of their perceptions of their work environment (mean= 4.23, $t= 17.18$, $p<0.001$). Nurses reported that their needs for income and recognition were not met in their current work environments. Contrary to other studies, the study's work performance and intent to stay results suggested that job performance is not a function of a linear relationship with values and work environment; instead, it should be examined as a curvilinear relation (Takase, et al., 2005). Meanwhile, intent to leave was found to be a function of a linear relationship with values and work environment ($F= 0.07$, $p<0.05$).

Takase, et al.'s (2005) study is consistent with the current study in terms of examining the relationship between values and work environment as related to nurses' intent to leave. However, Takase and colleagues focused on nurses' work values and

operationally defined work values as desired outcomes. While, the proposed study conceptualized values (professional and generational) as enduring beliefs that indirectly, through their pivotal role in the process of meaning formation about a particular work situation, shape and influence behavior. Moreover, the researchers of the previous study did not differentiate between nurses based on their age. So, given the current information about the presence of relative value differences between nurses based on their age, the findings of Takase et al.'s study are limited.

Most importantly, although personal investment theory, the guiding theory for the study, may resemble the person-environment fit theory at a very abstract level in emphasizing the role of situation/environment in directing behavior; personal investment theory emphasizes the role of meaning (not the environment/ situation) as an immediate antecedent to behavior, whereas the person-environment fit theory considers behavior a direct result of the degree of fit between the person and his/her environment. Finally, Takase's study was performed in Australia, where the work environment and values are culturally different from the American context.

In an extensive literature search to better understand differences between as well as stereotyping of Boomers and Gen-Xers, Appelhaum, Serena and Shapiro (2004) reviewed multidisciplinary literature to investigate six myths proposed by Paul and Townsend (1993). The results of the review revealed that despite the myths about value differences between Gen-Xers and Boomers, both generations possess some similarities. This finding is consistent with Rokeach's (1973) proposition that most individuals have relatively few values, and it is consistent with the proposed study's assumption that nurses have relative value differences. The existing differences between nurses'

generational cohorts are mainly in terms of the degree of value representation, and are not related to the presence or absence of certain values.

In reviewing nursing generational values studies the following trends emerged:

- 1) Most of the studies were mainly descriptive, and did not present the guiding theoretical model.
- 2) No distinction was made between nurses' values and nurses' characteristics, and sometimes they were used interchangeably.
- 3) Studies that examined values of nurses' generational cohorts did not define "generation," nor did they explain how nurses from the same age cohort/generation hold similar values.
- 4) The reviewed studies did not point to the presence of other values that may impact nurses' outcomes.
- 5) Most of the studies failed to present the logic behind value formation; furthermore, most of the studies presumed that nurses from different age cohorts possess totally different values, which contradicts Rokeach's (1973) assumptions about human values.

Values – Professional values

Professional values represent a common frame of reference that guides and directs nurses' professional decisions and actions (Weis, et al., 1993). The ANA, along with the American Association of Colleges of Nursing (AACN), have outlined what they conceptualize as essential professional values. Where the AACN outlines the essential knowledge and skills for nursing baccalaureate educational programs (Fahrenwald et al., 2005; Schank & Weis, 1987; Weis, et al., 1993), the ANA code, with its interpretive

statements, outlines the overall universal values that should govern nursing practice (Fahrenwald et al., 2005).

In order to meet professional demands through the frequent regulatory and environmental changes, both the AACN and ANA have modified their codes and presented newer versions of those codes. The old seven values of altruism, equality, esthetics, freedom, human dignity, justice and truth (Weis, et al., 1993) that were proposed by the AACN, have been changed to the current five values of human dignity, integrity, autonomy, altruism and social justice (Fahrenwald, et al, 2005). For the ANA, the former eleven provisions have changed to nine provisions with interpretive statements that are concerned primarily with regulating the relationship of nurses to patients, to the community and to the profession (Weis & Schank, 2000; Weis & Schank, 1997). The ANA code of ethical practice acts as the core foundation for nursing values and practice (Weis & Schank, 2002).

Professional values are introduced to nursing students during their fundamental nursing educational preparation through the socialization process (Weis, et al., 1997; Schank & Weis, 1987). As the socialization process is a continuous process (Schank & Weis, 1987), it is expected that nurses' values may be influenced by their work environment. Consequently, investigating nurses' professional values is important for understanding the values of the current nursing work force. Weis and Schank have investigated nurses' professional values at national (Schank & Weis, 1989; Weis, et al., 1993) as well as international level (Weis & Schank, 2000 & 1997). These authors argued that the ANA code for practice is the foundation for nurses' professional values (Weis &

Schank, 2000), and they have utilized the ANA code as the foundation for their nurses' professional values instrument (NPVs).

At an international level, Weis and Schank conducted two descriptive comparative studies aimed at identifying the congruence of professional values between both educators and nursing students in the U.S. and England. In the first study, Weis and Schank (1997) surveyed a convenience sample of 80 American freshmen nursing students at a private baccalaureate nursing program, and 50 first-year British nursing students at Project 2000. This project was aimed at improving healthcare knowledge and training (Weis & Schank, 1997). The data were collected using the NPVs instrument that was developed by the researchers.

The study results showed that neither group differed significantly regarding the total professional values mean score (U.S. mean= 173.66, $SD=19.43$; British mean= 173.56, $SD= 17.36$; $p=0.97$). The reported significant differences were mainly related to the individual items representing the nine code statements, which related to protecting patients' rights and peer review. Driven by the same interest in comparing U.S. and British nursing educational preparation, Weis and Schank (2000) conducted another study to compare congruence between British and U.S. educators' professional values.

In this study, Weis and Schank sampled 17 Associate degree-program American nurse educators, and 14 Project 2000 British nurse educators. The NPVs instrument was also utilized in this study. Similar to the students' results, educators from both countries did not differ significantly regarding their total mean scores ($t= .10$, $p= .97$); they differed regarding the individual values scores. The study results showed that British educators

scored higher than U.S. educators in most of the ANA code statements related to nursing research and evaluating nursing standards.

The differences between both British and American students and educators could be attributed mainly to differences in the socio-cultural background of the study participants, as well as to potential differences in nursing educational preparation. This result is consistent with most of the writings about value development as well as with personal investment theory. Furthermore, all the British participants in both studies were members of project 2000, so these samples are not representative of most of the British nursing population. The important point here is that this study provided additional empirical support for the idea that even with the presence of socio-cultural differences, value differences are related to the relative importance of each value.

Similar to the international studies, most of the national studies were descriptive, and the studied populations consisted mainly of nursing students and faculty. As professional values are introduced to the students during their educational preparation, Elfrink and Lutz (1991) conducted a study to identify nursing faculty perceptions, practices and plans regarding the essential professional values. The researchers utilized the values outlined by the AACN report as their reference for the essential professional values. The AACN outlines the scope of nurses' roles as providing care, coordinating care and being a member of a profession.

The data was collected by utilizing an instrument developed by the investigators to obtain information regarding education, demographic data, perceptions about the AACN's essential values, inclusion of these values in the current teaching, and plans to

include these values in their teaching. The instrument contains both open-ended questions and 5-point likert-like scales.

No significant difference was found across the study participants regarding their perceptions about the importance of the AACN values. The study also revealed that teaching the AACN values occurs through formal and informal methods. Examples of the formal methods included incorporating faculty role models, such as the contents as a part of the curriculum, and seminar discussions. Examples for the informal methods included discussions at the patient bedside level, and post-clinical conferences.

In another effort to examine the representation of the AACN values in nursing education, Weis, et al., (1993) conducted a descriptive study to examine the extent to which the NLN baccalaureate program contents reflect the seven values specified by the AACN. The research team utilized the Professional Nursing Behavior instrument (PNB), which is based on the AACN *Essentials of College and University Education for Professional Nursing Report*, and was refined by Eddy (Eddy, 1989). After modifying the instrument, Eddy tested it for validity, reliability and clarity. A stratified random sample technique was used to sample NLN accredited nursing programs, representing the four main regions, and 8 public and 13 private programs were included in the study. The findings of this study suggested that the majority of school programs reflected at least one of the AACN values. The values of *altruism, equality, freedom, human dignity, and justice* were reflected in the majority of the programs. Twenty percent of the programs reflected the value of *truth*, while only 10% of the programs incorporated the value of *esthetics* in their contents.

In order to explore the differences in professional values between senior nursing students and nursing educators, another national study was conducted by Eddy, Elfrink, Weis and Schank (1994). The study results indicated that the faculty scored significantly higher than the senior students ($t= 2.11$, $p= 0.045$). Comparing differences between faculty and students based on the type of institution, institutional affiliation or prior exposure to ethics, philosophy and/or theology did not result in any significant differences. Considering differences based on demographic variables such as age, sex, or religious education in high school also did not result in significant differences. Finally, faculty members with more years of teaching experience had significantly higher value scores ($p < .004$).

Martin, et al., (2003) aimed at exploring the congruence of professional values between Associate and Baccalaureate degree nursing students. Martin and her colleagues used the NPVs instrument to measure students' professional values. The study results indicated that AD and BSN students did not differ significantly in their professional values total mean score ($t= 1.6$, $p= .10$). AD students, however, scored higher than their BSN peers in five subscales related to the 11 ANA code statements. Differences between the two groups may be attributed to differences in the way by which nursing students are socialized into the nursing role. Differences in socialization could be attributed to differences in the scope of responsibility of each program graduate. Based the results of this study, educational level might be considered as a control variable in this study.

Besides the studies that were conducted at educational settings, other studies were conducted to examine nurses' professional values from more practical aspects. Reviewing these studies revealed the presence of conceptual inconsistency on how

professional values were operationalized and measured. Mitchell (1994) conducted a study to examine whether nurses' job satisfaction is a function of the congruence between nurses' personal work values and values imposed by the unit. The researcher assumed that through nurses' daily interactions within their work environment their work values might be modified to meet the work requirement. Nurses' failure to modify their values to be congruent with the required work values, may result in nurses' job dissatisfaction (Mitchell, 1994). Both Rokeach's (1973) and Omery's (1989) personal value systems were utilized to guide Mitchell's study.

Four metropolitan hospitals were conveniently sampled for the study. Six hundred surveys were distributed to nurses who had worked for at least one year in their units. The study survey comprised three parts, the first two of which were work role questionnaires. In the first part, nurses were asked to rank seven nursing work roles from the most valued role to the least valued role. In the second part, nurses were asked to rank the same values based on the actual most and least time spent in fulfilling these roles during their work. The third part comprised the Minnesota Satisfaction Questionnaire (MSQ). Out of the 600 distributed surveys, only 201 surveys were usable.

Spearman's rank order correlation test indicated that there was no statistically significant difference between nurses' work values and the required roles. Additionally, no statistically significant relationship was found between the results of Spearman's rank order correlation and job satisfaction. Mitchell attributed the insignificant results to the lack of evidence to support both reliability and validity for the utilized instrument. The researcher suggested that the study should be replicated in other settings with high levels of turnover and staff dissatisfaction.

When relating Mitchell's study to this study, it could be inferred that her conception of work roles/domains is equivalent to professional values in this study. Although, Mitchell, did not empirically conceptualize work roles as professional values, she acknowledged that nurses roles (which is similar to nurses' values in the proposed study), may be influenced by nurses interaction/ socialization within their work environment. The hypothesized impact of work environment on nurses' values is consistent with this study. Furthermore, reviewing the seven roles included in the work role questionnaire e.g. teaching, helping patients, and monitoring patient progress teaching, clearly indicates similarities with the attributes of the nursing profession as specified by the ANA code of ethics. The ANA code of ethics represents the foundation for nurses' professional values (Weis, et al, 1993).

Approaching professional values from a different perspective Flynn and Aiken (2002) hypothesized that nurses from collectivist cultures will value aspects of professional nursing practice that deal with cohesion, chain of command and task ambiguity differently as compared with the international individualistic nurses as well as individualistic American nurses. Examples for countries that conceptually defined as supporting collectivistic cultures include: North and West Africa, Japan, Indian, and Mexico. Examples for international countries that support individualistic culture include: Canada, France, Belgium and Scotland. To test this hypothesis, Flynn and Aiken (2002) conducted a secondary data analysis study. The study sample consisted of 799 nurses out of a larger sample data set (820 nurses). The distribution of nurses in each group was American nurses= 547, international collectivistic= 231, and international individualistic= 21.

Selected items from the NWI-R were utilized to indicate values of control, physicians' relationships, autonomy, ambiguity reduction, collectivism and hierarchy. The Maslach Burnout Inventory (MBI) was utilized to measure nurses' burnout. The study results, revealed that there was no statistically significant difference among the studied sample as regard their professional work environment scores. The post hoc test, however, showed that the mean scores for autonomy was slightly less for international nurses from collectivistic cultures ($M= 18.03$, $SD= 3.30$) as compared with the American nurses' scores ($M= 18.62$, $SD= 2.67$). The study results supported the presence of a statistically significant inverse relationship between professional work environment and nurses' burnout in both American ($B= -.27$, $p=.000$) and international nurses ($B= -.28$, $p=.000$).

Although the underlying assumption of Flynn and Aiken's (2002) study was not supported by the findings, the results of the study suggest that, despite the cultural value differences, sharing the same work environment may override value differences. This conclusion supports the proposed influence of work environment on nurses' values. The researchers, however, did not provide any plausible explanation of these findings. Instead, they highlighted, in the discussion, the influential role of professional practice environment of nurses' burnout and concluded that the environmental influence was similar, regardless of the nurses' cultural background.

As a part of a causal model Gureny, Muller and Price (1997) examined the direct, indirect and total effects of professional values in predicting selected outcomes (level of job satisfaction, organizational commitment and intent to leave) for nurses holding doctoral degrees. In this secondary analysis causal model testing study, which utilized

Price and Muller's nurses' turnover model as the guiding study framework, the researchers used older data (1989) to conduct their study. All the utilized data collection tools were developed by Price and Muller (1986).

Gureny et al (1997) did not provide a clear definition for professional values. They conceptualized it as values pertinent to the nursing profession that were introduced to the nurses formally, during their educational preparation, or informally, at their work place. The examined professional values were autonomy, variety, and distributing justice. The researchers conceptualized autonomy as the extent to which nurses control their jobs; variety was conceptualized as the degree to which the required tasks were not repetitive; and distributing justice was conceptualized as equality/balance (Gureny, et al, 1997). Each professional value was found to be a statistically significant predictor for one outcome. LISREL results indicated that variety significantly predicted job satisfaction ($\beta = .29, P < .001$), and autonomy significantly predicted intent to leave ($\beta = -.15, p < .001$), while distributive justice significantly predicted organizational commitment ($\beta = .16, p < .001$).

These results support the study's proposed relationship between professional values and outcome. Despite the significant results of Gureny, et al.'s (1997) study, these results have limited generalizability because the numbers of nurses who have doctoral degrees are limited. Given the current state of nursing shortage, examinations aimed at retaining a majority of RNs are more significant than examination methods that aim at retaining limited numbers of nurses. Furthermore, the reviewed study did not provide any data about whether these results are consistent across the diverse nurses' age cohorts. More importantly, other than control over practice, the selected professional values-

namely, variety and distributed justice, are not part of the ANA code of practice or the attributes of the nursing profession, as specified in the classic writings of Bixler and Bixler (1959), Hall (1968) and Greenwood (1957).

A review of the different studies that have examined students' professional values revealed the following:

1. Most of the conducted studies were descriptive or comparative studies that focused on professional values for students and educators.
2. There is a lack of empirical evidence for professional values held by nurses from different age cohorts. Having insufficient information about nurses' professional values creates ambiguity about how nurses from different generation value practices that reflect the core of the profession. Given the influential role of a nurse manager in creating a climate conducive to professional practice and nursing retention, having information about nurses' professional values may guide nurse managers in their planning activities.
3. According to Weis and Schank's writings (1997, 2000, 2002) professional values are expected to be similar for different age cohorts, however, there is not sufficient empirical evidence either to support or contradict this theoretical assumption.
4. According to Omery (1989) ;Weis and Schank (1997, 2000, 2002) and Mitchell (1994) the socialization process to nursing professional values will continue at the work place; nevertheless, there are not any studies that examine/consider the influence of environmental factors (nurse manager's leadership style and climate) on nurses' values.

5. Professional values, by definition, act as standard for professional practice and guide nurses' decisions; however, the influence of nurses' professional values in guiding decisions such as intent to leave have not been examined.

Work environment – Nurses' Perceptions about their Nurse Manager's Leadership style

The contemporary healthcare environment is characterized by uncertainty due to rapid economical, socio-demographical, regulatory changes and, most importantly, nursing shortage. The current nursing shortage is attributed in part to the aging nursing population. From another perspective, the current workforce in the U.S. in general comprises four generational cohorts that possess relatively different value systems (Kupperschmidt, 2000; Yu & Miller, 2005; Zemke, 2004). Managing environmental changes and a generationally diverse workforce, and retaining nurses require a visionary leader who can function beyond the traditional leadership roles (Frisina, 2001; Herrin, 2001, Weston, 2001, 2006; Sherman, 2006).

Nurses from different generational cohorts may perceive their nurse manager's leadership style differently and may prefer to be managed differently (Kupperschmidt, 2000; McNeese-Smith & Crook, 2003; Weston, 2001). Thus, in order for nurse managers to manage nurses effectively and retain them, they should be aware of varying perceptions of leadership style in different age cohorts (Hu, et al., 2004; Rodriguez, et al., 2003; Weston, 2001). Identifying nurses' perceptions (not the manager's perception of his or her own leadership style) is important because these perceptions can influence a nurse's decision to stay or to leave their job (Robbins, 2001). Additionally, based on nurses' perceptions, nurse managers can function consistently with the relative value difference for each age cohort (Hu, et al, 2004; Weston, 2001).

The influential role of leadership in individuals, groups and organizations in both business and the healthcare industry was summarized in a Meta-analytical study conducted by Vance and Larson (2002). Based on the reported figures by Vance and Larson, half of the published healthcare studies supported the pivotal role of leadership in job satisfaction and performance. A smaller percentage of the studies supported the influence of leadership on attitudes and values (20%), and organizational characteristics (about 1%); patient and organizational outcomes were equally represented by almost 5% of the healthcare studies (Vance & Larson, 2002). The majority of the reviewed leadership studies in the healthcare field were descriptive in nature (51.3%); only 40.6% were correlational (Vance & Larson, 2002). Finally, most of the reviewed nursing studies that focused on identifying nurse managers leadership style, found it to be based mainly on nurses' perceptions (e.g. Volk & Lucas, 1991; Nakata & Saylor, 1994; Sellgren, Ekvall & Tomson, 2006); this review supports the focus of this study on nurses' perceptions to their first line managers' leadership style.

Although leadership is not a new concept, and its pivotal function is well documented, there is not conceptual agreement or universal definition of leadership (Rost, 1994). Leadership and management are two distinctive but complementary functional systems; both of them are essential for surviving the constantly changing work environment (Kotter, 1990). While management is usually used to refer to formal positions, leadership can be used more broadly; it can be used to describe a process or the characteristics of an individual (Cassidy & Koroll, 1994; Huber et al., 2000). However, good managers are not necessarily good leaders and vice versa (Gokenbach, 2003).

Therefore, the real challenge for managers is to combine or to balance both leadership and managerial abilities (Kotter, 1990).

Over the past several years, leadership's focus has shifted from being task-focused to being people-focused and, recently, to the new charismatic transformational leadership (Bennett, 2004). A transformational leader focuses on achieving organizational goals through motivating and empowering staff. The results of the magnet hospital studies (Buchan, 1999; Kramer, 1990; Kramer & Schmalenberg, 1988a, 1988b) reported that nurse managers at these hospitals utilize a transformational leadership style. Through utilizing this style, magnet-hospital managers succeed at creating a professional practice climate that attracts and retains nurses (Buchan, 1999; Kramer, 1990; Kramer & Schmalenberg, 1988a, 1988b).

Given the current nursing shortage, efforts of clinicians, scholars and educators are directed toward investigating how to manage this situation. The impact of nurse managers' leadership style on nurses' turnover was empirically supported from early nursing studies to the present time. Among the early nursing studies that examined the effect of nurse managers' leadership style on nurse turnover is Volk and Lucas's (1991) study. In this study, the researchers utilized Hinshaw and Atwood's anticipated, turnover model and Likert's four-system management style to examine the relationship between nurse manager's leadership style and nurses' anticipated turnover.

Management style was measured by using Likert's profile of Organizational Characteristics. Anticipated turnover was measured using Hinshaw and Atwood's Anticipated Turnover Scale (ATS). The study results indicated that nurses perceived that their current manager was midway between system 2 (benevolent-authoritative) and

system 3 (conclusive). By conducting Pearson moment correlation, nurses' demographic characteristics such as age, educational preparation, tenure in both current position and institution, years of experience and shift work were analyzed with nurses' perceptions to their current nurse manager's leadership style.

From the examined demographics, the only significant relationships were a positive correlation between nurses' perceptions about their nurse manager's leadership style with both age ($r = .25$, $p = .028$) and tenure in the organization ($r = .311$, $p = .004$). Regarding the anticipated turnover results, the statistical analysis illustrated a negative association between age ($r = -.26$, $p = .02$), tenure in the current position ($r = -.24$, $p = .05$), tenure in the organization ($r = -.22$, $p = .05$) and anticipated turnover. These results mean that older and tenure nurses are less likely to leave their jobs and perceive their nurse managers in a more positive way. Finally a significant, negative correlation was found between leadership style and anticipated turnover ($r = -.57$, $p = .0001$); this result indicates that the more participative leadership style is associated with fewer turnover intentions.

Although Volk and Lucas reported the presence of a significant relationship between nurses' age, tenure in the organization and nurses' perceptions of their nurse manager's leadership style, they did not explain whether there was a difference across nurses based on their age or not, nor did they provide an explanation for such results. In regard to the relationship between nurses' tenure and their perceptions of their manager's leadership style, the researchers did not clarify whether the nurses worked in the same unit exclusively in the years before their tenure and whether or not the time was with the same nurse managers or if they had previous exposure to different leadership styles.

The results of Lucas and her colleague (1991) also revealed a significant difference between the actual leadership style and the desired (participative) leadership style ($t=2.89$, $p=.0001$). This result indicated that nurses want a more participatory style than what they currently experience. Differences in nurses' perceptions of perceived leadership style and desired leadership style is consistent with the results of two other studies (Nakata & Saylor, 1994; Sellgren, Ekvall & Tomson, 2006). In Nakata and Saylor's (1994) study, nurses reported that they perceive their current nurse manager's leadership style as benevolent – authoritative, as represented by total mean score of 4.34 on 1-8 scale while they desire more participative style as represented by 6.85 (Nakata & Saylor, 1994). Nurses' desire to have a more participative leadership style is consistent with the results of the magnet hospital studies, in which more participation in decision-making was found to be associated with low turnover rates (Buchan, 1999; Kramer, 1990; Kramer & Schmalenberg, 1988a, 1988b; Kramer & Hafner, 1989).

Within the same context, the results of Sellgren et al, (2006) study supported the previous results, as significant difference was reported between nurses' perceived and preferred leadership styles in all examined leadership dimensions (change orientation, production orientation and employee orientation) ($p<0.001$). The findings of Sellgren et al (2006) also reported a statistically significant difference between managers' perceptions of what is their preferred leadership style and nurses' perceptions of what constitutes preferred leadership style. Where the mean score for managers in change orientation was 5.07 as compared with 5.14 ($p<.05$), for production orientation managers, the mean score was 4.76 as compared with 5.08 ($p<.001$). Finally, for employee orientation, managers' mean score was 5.19 as compared with nurses' mean score of 5.44

($p < .001$) (Sellgren, et al, 2006). Differences between nurses' and managers' perceptions of what represents effective leadership style highlighted the importance of examining nurse managers' leadership style from nurses' perspectives.

As Gen- Xers are the future leaders, thus out of interest to identify how Gen-Xers perceive the leadership responsibilities, and how these perceptions may shape their decisions about leadership positions, Sherman (2005) conducted a qualitative study. In this study, the researcher interviewed 48 RNs with an average age of 33 years; half of them had BSN the other half had AD. Although the study participants were asked to respond to nine questions, nurses' responses to questions relevant to this study will be discussed. The results of the focus groups showed that the study participants ranked "creating safe environment for both nurses and patients" followed by "staffing efforts" (e.g. recruitment and retention) as the first two priorities for the nurses in leadership positions (Sherman, 2005). The previous result indicated that failure of nurse managers in giving these responsibilities high priority may affect nurses' decisions about leaving or staying in their jobs. Furthermore, this result highlighted that the participating Gen-Xers believed that nurse managers play a pivotal role in not only retaining nurses but also in creating a climate that supports nurses' retention.

Additionally, the study participants ranked factors such as "cohesion with the staff", "competency", "being a mentor", and "proper delegation" from the top activities for the ideal leader (Sherman, 2005). The results of the focus group indicate, in part, what nurses from Gen-Xers expect from their nurse managers and the qualities they value the most in their leaders. However, as Sherman's study was qualitative, conducted at one

setting and consisted of small sample, its results cannot be generalized and should be interpreted with caution.

Because nurses' shortage was cyclical over the years, interest in studying nurses' turnover and retention as well as the influential role of nurse manager in controlling turnover rates and retaining nurses continued to be one of the essential research areas over the years. Taunton, Boyle, Woods, Hansen, and Bott (1997) developed Organizational Dynamics Paradigm of Nurses Retention, and incorporated both Hinshaw and Atwood's (1983-1985) and Price and Muller's (1981- 1986) turnover models, to their model. The developed model from the most comprehensive model as it includes nearly all the variables that influence nurses' retention (Acree, 2006). The researchers proposed that this model theoretically links between managers' leadership characteristics and nurses' retention. Based on this model, nurses' retention, turnover, and separation is a function of managers', organizational, work, and nurses' characteristics, and the intervening variables of job satisfaction, commitment and intent to stay (Taunton, et al, 1997). In Taunton's et al (1997) model managers' characteristics included leadership style; organizational characteristics included control over practice; work characteristics included communication patterns; and nursing characteristics included educational level..

Taunton and her colleagues conceptualized structural factors (e.g. nurse / patient ratio and nurses' characteristics) as correlate variables. Taunton et al clarified that the term "correlate variable" was introduced by Price (1995) and Price & Mueller (1986). It refers to a variable that is expected to influence nurses' retention but does not have theoretical support for the proposed relationship. The inclusion criteria for the RNs required the RNs to have been working at the current unit for at least 3 months, to have

worked more than two shifts per month and to have had sufficient interaction with the nurse manager. Because the preliminary data analysis showed negatively skewed data on the retention variable, a subset of 248 nurses was selected.

As Taunton and her colleagues have utilized several multidimensional instruments, only instruments relevant to this study will be presented. Retention was measured as the stability of nurses at the same organization and the same unit for a 6-month period. Leadership style was measured using Kruse & Stogdill's (1973) Ohio State University Leader Behavior Description Questionnaire. This instrument conceptualizes leadership differently than the more contemporary conception of Bass and Avolio that was used in this study. The Ohio State leadership instrument does not classify leadership into styles; it focuses mainly on analyzing different behaviors considered essential for effective leadership. Two items concerning fairness and helping work group members have been added to the leadership behavior instrument.

With respect to managers' leadership behavior, on average nurse managers were occasionally to often considerate to staff members (mean= 43.22, *SD*= 8.83, mid point=36.00). Furthermore, RNs' perceptions of their nurse managers' behavior were significantly related to their perception about their organizations ($p < .01$). These results indicated the importance of having positive perceptions about a nurse manager's leadership style because it will influence nurses' perceptions about their overall work environment, and, consequently, their decisions about staying or leaving their jobs.

The initial analysis, which focused on turnover and other variables, yielded 11% explained variance. Taunton et al. (1997) purported that this percentage is higher than the 4% explained variance reported by Hinshaw and Atwood (1983- 1985) and is similar to

Price and Mueller's (1986) 12% explained variance. By using the modified sample of 248 nurses, path analysis was utilized to examine the direct, indirect, and total effects of the study variables on retention. The analysis showed that the two variables that had significantly explained variance in retention were considerate leadership and intent to stay. Considerate nurse managers had a significantly direct effect on nurse retention ($r = .040, p < .01$), while the intervening variable of intent to stay had a direct effect of ($r = .109, p < .01$). In this study, consideration was conceptualized as the degree to which the nurse manager pays attention to the comfort, contribution and well-being of the staff.

Although nurse managers' leadership characteristics were found to have a statistically significant correlation with nurses' retention, the strength of the relationship was very small; its practical (clinical) impact is questionable because statistical significance could be attained simply due to the large sample size. Nevertheless, treating nursing characteristics as correlates contradicts the behavioral approach (e.g. Lewin's theory, Bandura's cognitive behavioral theory and personal investment theory [guiding theory for this study]), which proposes that personal characteristics as well as environmental/ situational characteristics influence outcome. More importantly, the researchers included turnover, retention and separation in their model without providing theoretical definition or conceptual distinction between the three concepts.

Two years later Boyle, et al., (1999) conducted another study to examine the indirect effect of their nurses' perceptions to their nurse managers' characteristics (power and leadership style), work characteristics (autonomy, communication, and group cohesion) and nurses' intent to stay in critical care units. The research team has utilized the same theoretical framework that Taunton et al, (1997) used earlier. However, they

added job stress (personal and situational) to the intervening variables; additionally, the researchers conceptualized intent to stay as an outcome variable instead of as an intervening variable in the earlier model. Furthermore, similar to Taunton's et al, (1997) study Boyle, et al (1999) considered nurses' characteristics as correlates variable.

Nurses working in the ICUs reported moderate levels of intent to stay (mean= 13.96, *SD*= 3.39, midpoint= 12). Boyle et al. (1999) reported that this result is similar to the results reported in earlier studies by Hinshaw, et al. (1987), Volk and Lucas (1991), and Price and Mueller (1986). The causal model indicated that the overall model explained 45% of the variance in nurses' intent to stay. After adding the correlates variables, the amount of explained variance increased to 52%. Nurse managers' characteristics were found to account for 12% of the explained variance; the intervening variable of job satisfaction added 10% of explained variance. The reported results indicated that both work characteristics (autonomy, communication, and group cohesion) as well as the other intervening variable of job stress (personal and situational) did not significantly contribute to the amount of explained variance in nurses' intent to stay (Boyle, et al, 1999).

Similar to the findings of Taunton, et al (1997) Boyle and her research team found that nurses' perceptions of their nurse managers' characteristics had a significant impact on how nurses perceived their organizational characteristics as control over practice, opportunity and reward system. Boyle, et al. (1999) acknowledged some limitations for the study, such as lower reliability of some of the utilized short form instruments, and the possibility of admitting specification errors by omitting some variables through the process of model trimming. Other than the reported limitations, where Boyle, et al.

considered the possibility that having nurses from different settings may help in the generalizability of the results, according to the climate studies, different settings may have different climates, so grouping all the units together may affect the validity of the results.

By adopting Bass and Avolio's full-range model, Kleinman (2004) conducted their study aiming at examining the relationship between nurses' perceptions to their nurse managers' leadership style and turnover, and identifying, as well, which set of perceived nurse managers' behaviors could better predict nurses' turnover. Kleinman (2004) operationally defined turnover as the percentage of nursing staff who voluntarily resigned from their jobs over a six months period at the year of 2003. Leadership style was measured by using MLQ-5X form. The reported internal consistency in Kleinman's study ranged from $\alpha = 0.68$ to $\alpha = 0.89$ (Kleinman, 2004b).

The study results illustrated that nurses differed in their perceptions based on their shift; nurses who were exposed to their nurse manager more frequently by working day shifts (7am-7pm or 7am-3pm) perceived their nurse manager leadership style to exhibit fewer laissez-faire characteristics (Kleinman, 2004b). Other workforce characteristics such as years of nursing experience, years of experience at the unit, total working hours, and daily nurse patient ratio did not contribute to any statistical differences regarding nurses' perceptions of their nurse managers' leadership style.

The study results showed that, the only significant leadership behavior that had a statistically significant correlation with turnover was Active Management by Exception (AME). AME represents one of the evident behaviors of transactional leadership style. Compared with nurses who considered leaving their jobs (54%) nurses who did not

consider leaving their jobs scored significantly higher in their perceptions to some transformational leadership style behaviors as idealized influence (attributed and behavioral), inspirational motivation, and intellectual stimulation, as well as outcomes of leadership as extra effort, effectiveness and satisfaction (Kleinman, 2004b). Finally, similar to earlier studies (Nakata & Saylor, 1994; Sellgren, et al, 2006), Kleinman reported that nurse managers perceived themselves as transformational leaders while nursing personnel did not perceive their managers as transformational leaders.

In contradiction with the results of the literature review that was conducted by Acree (2006), four articles published from March 1984 to March 2004 illustrated that nurses' retention and positive outcomes are attributed to transformational leadership style. Kleinman (2004) found that nurses' turnover is correlated with AME, which is one of the transactional leader behaviors. However, nurses who did not consider leaving their jobs scored higher in behaviors related to transformational leadership style, as compared with their colleagues who considered leaving their jobs. These contradicting results were not explained by the researcher. Further, the researcher did not provide a plausible rationale for measuring both turnover and intention to leave, especially, that intent to leave is a strong predictor for turnover. Studies supporting this idea will be presented in a later section (nurses' intent to leave).

Although the nurse managers' role in both turnover and retention was presented first in the relevant and proposed studies, nurse managers' leadership style and behavior are not the only factors essential for retention. Results of both nursing and non-nursing studies elaborated that nurse managers' behaviors are essential for job satisfaction (Bratt, Broom, Kelber & Lostocco, 2000; Holdank, Harsh & Bushardt, 1993; Loke, Lucase,

1988, 1991; Mastrangelo, Eddy & Lorenzet, 2004; Upenieks, 2003), commitment and productivity (Loke, 2001, McNeese-Smith, 1995-1997) and professional practices (Manojlovich, 2005). For the significant impact for these outcomes on nurses' intent to leave, summary for some these studies will be discussed in the next section of the review.

Among the early job satisfaction studies, Lucas conducted two studies to examine the influence of nurses' perceptions to their nurse managers' leadership style and their job satisfaction. In the first study, Lucas (1988) sampled clinical nurse specialists (CNS) only. The mean age of the studied sample was 35.8 (SD=7.0) years. Likert's four systems leadership styles was used to measure nurses' perceptions of their nurse manager's leadership style while job satisfaction was measured by using Porter and Lawler's instrument, which was developed based on Maslow's hierarchy of needs (Lucas, 1988).

The study results revealed a high positive correlation between the CNS perceptions of their nurse managers' leadership style and their job satisfaction ($r=.71$, $p=.0001$). Lucas added that there was a statistically significant difference between the currently perceived nurse manager's leadership style and desired leadership style ($t=-16.61$, $p<.001$); this result asserted that nurses needed more exposure to a participative leadership style than what they currently experiencing. This result is consistent with the results of other studies that have been presented earlier.

Although Lucas's study was conducted in the 1980's and the other studies were more recent (2000-2006), the consistency in reporting discrepancy between desired and perceived leadership styles raises an important point that may explain the consistently high nurses' turnover rates. None of the previous studies however, explained or suggested

possible reason(s) for such a discrepancy, or considered values as a possible interpretation. Lucas reported similar results in her second study (1991) when she sampled different nursing populations from two public and two private hospitals.

By conceptualizing job satisfaction as a multidimensional construct that contains essential components that give nurses a sense of fulfillment and enjoyment, Bratt, et al, (2000) surveyed 1,973 nurses working in pediatric intensive care in 65 hospitals in the U.S. and Canada. Bratt and her colleagues focused on examining both professional and organizational job satisfaction. The selected predictors were nurses' perceptions to group cohesion, nursing leadership, job stress, and nurse-physician collaboration. The overall model explained 52% of variance on organizational job satisfaction. In addition to the influential role of leadership style on turnover and satisfaction, leadership style was found to influence nurses' job satisfaction, productivity and organizational commitment (Loke, 2001; McNeese-Smith, 1997, 1995).

Despite the frequently reported positive influence of leadership style on both nursing and organizational outcomes, some leadership styles were found to be predictors of stress and/or emotional exhaustion (Stordeur, D'hoore & Vandenberghe, 2001). Stordeur, et al. (2001) conducted a study to examine the effect of work stressors and nurses' perceptions of their managers' leadership style – both transformational and transactional – on nurses' emotional exhaustion. For the purpose of the study, Bass and Avolio's (MLQ form 5-X) instrument was utilized for measuring only transformational and transactional leadership styles (Stordeur, et al, 2001). Work stressors were measured by using Gray-Toft & Anderson's NSS instrument while emotional exhaustion was measured by using a subscale from the Maslach Burnout Inventory. From a large Belgian

university hospital, 1,593 RNs were surveyed through the internal mailing system. Thirty-nine percent of the mailed surveys were returned back and were usable.

The study results showed that job stressors significantly explained 22% of the explained variance in emotional exhaustion while transformational and transactional explained significantly 9% of the explained variance in emotional exhaustion. All five transformational leadership style dimensions had a significantly negative correlation with emotional exhaustion ($p < .001$). This result meant that, having nurse manager who displayed transformational leadership style was associated with lower levels of emotional exhaustion. For a transactional leadership style, only the contingent reward dimension had a significant negative correlation with emotional exhaustion, while the other two dimensions of Management by Exception Active (MBEA) and Management by Exception Passive (MPEP) had a significant positive correlation with emotional exhaustion. Although it was not among the study's stated purposes, surprisingly, all dimensions of transformational leadership style and contingent reward were found to have significant positive relationships with work stressors.

As the previous study was conducted in a different country, its results are not generalizable to the American context. This study, however, is among the few studies that have examined a possible negative effect of leadership style: especially transformational and transactional leadership styles. The significant positive relationship between a transformational leadership style and work stress may highlight an important point, which is that nurses from different cultures may have different value systems, and thus a transformational leadership style was not associated with all positive outcomes as is the case in American culture.

Similar to this study, in the management discipline, Jung and Avolio (2000) conducted a study to examine the indirect causal effect of employees' perceptions of their managers transformational and transactional leadership styles on employees' performance (quality, quantity and satisfaction), with the mediating effect of value congruence and trust. Jung and Avolio's study was similar to this study, as both studies were interested in leadership styles and values. However, this study examined nurses' perceptions to the three main leadership styles, not just transformational and transactional; furthermore, this study explored two types of values (professional and generational). Additionally, this study was not interested in identifying value congruence; instead it focused in examining the influence of values in forming a meaning about nurses' work environment. Based on the formed meaning, nurses may decide about whether to stay or to leave their jobs. Hence nurses' intent to leave was conceptualized as a result of the developed meaning, not based on value congruence. Finally, while Jung and Avolio examined performance as outcome, this study examined nurses' intent to leave as a predictor for turnover.

The results of Jung's study supported the presence of direct and indirect effects, through trust and value congruence, and the two main leadership styles on performance. The standardized coefficients for the relationship between transformational leadership style and both trust and value congruence was significant ($\beta = .51$ & $.50$, respectively $p < .01$). Transactional leadership style was found to be significantly related to trust only ($\beta = .14$, $p < .01$) (Jung & Avolio, 2000). Although Jung and Avolio conceptualized values differently than this study, their results, however, presented empirical support for the examined relationship between leadership style and values.

Reviewing nursing literature that examined the influence of nurses' perceptions to their nurse managers' leadership styles on different outcomes revealed:

1. Nurse managers' leadership styles play an instrumental role in both positive (satisfaction, commitment and productivity) and negative (stress and emotional exhaustion) nurses' outcomes. Most of the nursing studies that have been conducted to measure nurse managers' leadership styles measured it from nurses' and few from managers' perspective.
2. There is a significant difference between nurses' perceived and experienced leadership style. This difference in perception tends to be more evident among younger nurses than older nurses. Additionally, nurses' perceptions of their nurse managers' leadership style differed from nurse managers' perceptions of their own managerial leadership style. No plausible explanation, however, was provided for this discrepancy.
3. Older nurses with more nursing experience tend to perceive their nurse manager in a more positive way than younger nurses. No explanation for this result was suggested by the researchers.
4. It has been theoretically suggested that nurse managers have a responsibility for supporting core organizational values. Hence, in doing so, nurse managers may influence nurses' values through their daily interaction. However, this idea has not been empirically tested.
5. The examined relationships of direct effect of nurses' perceptions of their nurse managers' leadership style to nurses' values (professional and generational) as well as the indirect effect of nurses' perceptions to their

nurse manager leadership style on nurses' turnover, has not been empirically tested in the earlier studies.

6. There is not enough empirical evidence that clarifies differences in perceptions of nurse managers' leadership style across the four nursing generational cohorts.

Work Environment – Nurses' Perceptions about their Unit Climate

Climate is one of the most influential yet often overlooked variables that influences and shapes individuals' behaviors in different organizational settings (Snow, 2002). Climate distinguishes one organization from another (McMurry, 2003), and it indirectly affects individuals' behaviors (Woodman & King, 1978). In order to manage high nurse turnover rates, some organizations direct their efforts toward financial incentives and flexible working hours, other organizations approach the turnover problem by paying attention to the work climate (Snow, 2002).

Despite the growing interest in studying climate, there is conceptual ambiguity and inconsistency in defining, measuring, and validating the already developed climate instruments. According to Litwin and Stringer (1968), climate is defined as the measurable properties of the work environment that are perceived directly or indirectly by individuals, and it affects individuals' behaviors and motives. Similarly, Snow (2002) conceptualized climate as "how it 'feels' to work in a particular environment; it includes a complex mixture of norms, values, expectations, policies and procedures that influence individual and group behavior" (p.393). Going along with the notion that climate reflects feelings about the norms and values of an organization, Jones, et al., (1990) purported that climate represents how individuals perceive their culture.

Based on the previously presented definitions for climate, it can be inferred that climate could be conceptualized as a distinct environmental aspect. However, climate, culture, environment, and context have frequently been used interchangeably (Sleutel, 2000). In efforts to distinguish between climate and culture, researchers as McMurry, (2003), Schneider, Gunnarson & Niles-Jolly (1994) and Sleutel (2000) suggested that culture reflects the overall organizational norms, values and beliefs, while climate is how employees perceive and feel about the different practices, procedures and rewards within their organization. The different practices and procedures, however, are supposed to be a reflection for the overall organizational culture. Hence, climate in general is a representation for nurses' perceptions of their culture. From a measurement perspective, climate is quantifiable and could be measured quantitatively while culture is more abstract and should be measured qualitatively (Mc Murry, 2003; Schneider, et al., 1994; Sleutel, 2000). For this study, climate was conceptualized as a distinct concept that is derived from the broader construct of environment.

Snow (2002) stressed that identifying the different climate dimensions is vital, as it could help managers in developing strategies for recruitment and retention. Glisson and James (2002) reported that work climate affects nurses' behaviors; therefore, identifying nurses' perceptions about their climate is beneficial not only for planning different recruitment and retention activities, but also for understanding their behaviors.

Reviewing the literature revealed that most of the early nursing studies focused on the relationship between nurses' perceptions to their work climate and job satisfaction (Duxbury, Henly & Armstrong, 1982; Gillies, Franklin & Child, 1990; Lyon & Ivancevich, 1986). All of these studies conceptualized climate as a multidimensional

construct, and measured it from nurses' perceptions. The findings of these studies illustrated that while climate has an influential role in nurses' job satisfaction, not all of the climate dimensions have this influential effect.

Inspired by the influence of climate on nurses' job satisfaction, Hart and Moore (1989) examined the relationship between organizational climate and job satisfaction that results in nurses' stability in critical care units. The dependent variable of nurses' stability in the intensive care units was measured through calculating the length of nurses' employment in the unit. The study results showed the existence of differences among the different units in some of the climate dimensions. The differences in nurses' perceptions of their climate dimensions resulted in differences in nurses stability among nursing units.

From the few nursing studies that looked at leadership behavior and climate, and tried to link culture and climate, Jones, et al., (1990) conducted a study to examine whether nurse practitioners' (NPs) perception of their formal and informal leadership behavior could be predicted by their perceptions of their work climate. Work climate was measured by using Litwin and Stringer Organizational Climate Questionnaire (LSOCQ).

Although this study considered from the few nursing studies that aimed at clarifying the nature of the relationship between climate and culture as well as leadership behavior and work climate, using the self-report method for the nurse practitioner (they assume leadership responsibilities) is questionable. As reported earlier, differences do exist between nurses' perceptions and their managers' perceptions of the different leadership behaviors. Thus, when examining the influence of leadership behavior on climate, it should be examined from nurses' perspectives.

Similar to this study, Keuter, Byrne, Voell and Larson (2000) have conceptualized climate as a distinct component of the work environment. Guided by Litwin and Stringer's definition of climate, the researchers aimed at examining nurses' job satisfaction at two inpatient hospital units that were characterized by patients with various diagnosis and high nursing layoffs. Nurses' job satisfaction was measured by using Stamps' (1997) nurses' work satisfaction questionnaire, while climate was measured by Litwin and Stringer's organizational climate questionnaire (nine dimensions). In reporting their results, they used both total mean score as well as means score for each dimension.

Analogous to the previously presented studies, there was a significant correlation between total scores of organizational climate and job satisfaction ($R^2 = .61$, $p < .0001$). However not all the dimensions of climate predicted job satisfaction; significant correlation was reported only on two subscales of job satisfaction (organizational policies and professional status) with three climate dimensions of structure, standard and support (Keuter, et al , 2000).

In order to examine the influence of organizational climate on the likelihood of nurses' needlestick injuries and near-misses, Clarke, Sloan and Aiken (2002) as well as Clarke, Rockett, Sloane and Aiken (2002) conducted two secondary analysis studies. Both studies reported that nurses' perception of a selected aspect of work climate (administrative support) was associated with 50% to two-fold increase in the likelihood of nurses' needlestick injuries and near-misses. Nurses Work Index – Revisited (NWI-R) was utilized in both studies to measure nurses' perception of the selected climate dimension (administrative support). Because NWI-R was developed mainly to measure

aspects related to professional work environment that characterizes magnet hospitals; and because not all of the sampled hospitals were magnet hospitals, using NWI-R to measure administrative support is questionable. The results of Clarke and his colleague indicated that nurses' perceptions of their organizational climate dimensions were not associated only with satisfaction but could also result in such risky behaviors as injuries. This result showed another important outcome for organizational climate and emphasized the importance of understanding how nurses perceive their climate.

In addition to Clarke's above-referenced studies, Hemingway and Smith (1999) proposed a model that links nurses' perceptions to their work climate to nurses' behavior directly and indirectly through the mediating effect of organizational stressors. The main assumption for this study was that work stressors will mediate the relationship between nurses' perceptions of their work climate and withdrawal behavior and injuries. Hemingway and Smith asserted that their model was supported by other studies.

Hemingway and Smith conceptualized short-term absences and turnover intention as indicators for withdrawal behaviors. Dimensions for climate that have been examined in this study were work pressure, supervisor support, peer cohesion and autonomy, while occupational stressors of interest were role ambiguity, role conflict, workload, and death and dying. Nurses' perceptions of their climate were measured by Moos and Insel's (1974) Work Environment Scale (WES); turnover intention was measured by three items adopted from Michigan Organizational Assessment Questionnaire (Hemingway & Smith, 1999).

The results of multiple regression analysis showed that at least one of the examined climate dimensions predicted significantly at least one aspect of organizational

stressors. The highest amount of explained variance was workload ($R^2 = .26$, $p \leq .05$), followed by role ambiguity ($R^2 = .22$, $p \leq .05$) (Hemingway & Smith, 1999). In contrast to the researchers' hypothesis, only one climate dimension (work load) significantly predicted one outcome behavior (turnover intention) ($\beta = .42$, $p \leq .05$). All climate dimensions significantly predicted 8% of explained variance in near-misses. Finally, the researchers concluded that they failed to support the direct relationship between climate and behavioral outcomes, and that the study results supported the mediating effect of perceived occupational stress.

Although, Hemingway and Smith measured and conceptualized climate dimensions differently, one of the outcome variables (turnover intention), was similar to the outcome of this study. Furthermore, by looking at the organizational stress dimensions of role ambiguity, role conflict and work overload, a link could be made between these variables and nurses' values. Based on nurses' perceptions to their nurse of managers' leadership styles and work climates compared with their values, nurses may feel some degree of role ambiguity and conflict. Additionally, given the information about how generations approach their work (Baby Boomers are workaholics while Gen-Xers want to balance their life and work), how they perceive their workload is closely related to their values. Thus, despite the differences between the previous study and this study, a logical connection could be made between both studies.

The influence of nurses' perceptions of their social climate, nurses' characteristics and environmental uncertainty of burnout was examined by Garrett and McDaniel (2001). Elliott and Eisdorfer framework of the interaction between person and his/her environment was used to guide the study (Garrett & McDaniel, 2001). Climate was

measured by Moos and Insel's WES, but only the relationship dimension of the WES was utilized. The relationship dimensions included three subscales of perceptions for involvement, peer cohesion and supervisor support (Garrett & McDaniel, 2001). Burnout was measured by Maslach Burnout Inventory. Two subscales of emotional exhaustion and depersonalization were utilized in the study. Finally, environmental uncertainty was measured by Perceived Hospital Uncertainty at Hospital scale (Garrett & McDaniel, 2001).

By conducting a three regression analysis for the main burnout subscales of emotional exhaustion, depersonalization and personal achievement, at least one climate dimension significantly explained variance in each burnout subscale. For example involvement subscale had a significant impact on nurses' emotional exhaustion ($\beta = -.31$, $p=.02$), depersonalization ($\beta = -.60$, $p<.01$) and personal achievement ($\beta = .36$, $p=.03$). While supervisory support subscale had a significant influence on nurses' depersonalization ($\beta = -.25$, $p=.04$) and emotional exhaustion ($\beta = -.33$, $p<.01$). The results of the previous study provided empirical support for the instrumental role of climate on nurses' burnout, which is one of the strong predictors for nurses' turnover and retention.

Where the previously presented literature examined climate in general, other literature examined particular types of climate such as ethical climate (Bell, 2003; Hart, 2005; Shirey, 2005) emotional climate (Brown, R. & Brooks, 2002), safety climate (Zohar, 2002), and psychological climate (Brown, S. & Leigh, 1996). These studies yielded similar results to the general climate studies. As a result of the conceptual blurring for the term climate, several studies (Hart & Rotem, 1995; Hayburst, Saylor &

Stuenkel, 2004; Jo Foley, Kee, Minick, Harvey & Jennings, 2002; Smith, Hood, Waldman & Smith, 2005; Staten, Mangalindan, Saylor & Stuenkel, 2003) used the term “environment”, and operationalized it similar to climate (nurses perceptions to work practices and procedures), and measured it using similar instruments.

In a non-nursing longitudinal study of climate, Jackofsky and Slocum (1988) measured climate, job satisfaction, performance, leader reward behavior, intent to leave and turnover in a newly established hotel. The study participants were asked to complete the study surveys 45 and 150 days after opening the hotel. The climate was conceptualized as how individuals perceive practices in their work environment. Climate was conceptualized as comprising seven dimensions: supervisory style, task characteristic, co-workers, work motivation, employee competence, decision making and performance rewards. The participants were to indicate their degree of agreement or disagreement about statements reflecting the seven dimensions by using a five-point likert-like scale.

Similar to this study, Jackofsky and Slocum suggested that intent to leave is strongly related to actual turnover. For their study, they conceptualized intent to quit as “the degree to which the employee intended to leave his/her current job within the near future” (Jackofsky and Slocum, 1988, p.325); however, they did not provide enough information regarding the number of items, or the time frame for the “near future.” Actual turnover was measured by checking the personnel records after a six-month period. The study results indicated the presence of different climates in the different hotel departments. The researchers suggested that climate develops as a result of individuals’ interactions, as well as the different tasks and activities that take place in the different

departments because the different departments consist of diverse individuals with different demographics and activities, and tasks take place in the different departments. Consequently, different departments had different climates.

Regarding the relationship between unit climate and nurse stability, one-way ANOVA revealed the presence of a significant relationship between the two climate dimensions of communication ($F= 3.81, p<. 006$) and interdisciplinary politics ($4.92, p<.001$), and nurse stability in their units.

Furthermore, it was found that not all of the climate dimensions are related to nurses' stability in the units. This result could be attributed to the relative importance of each dimension, i.e., not all of the dimensions are equally important to the nurses. However, as illustrated by the previous review of literature there is a dearth of empirical support for this interpretation. By considering the relevance of this result to this study, it could be inferred that based on the nurses' relative value differences, some of the climate dimensions may be more relevant to certain age-cohort values than others, and that may result in differences in outcomes in terms of nurses' intent to leave.

By reviewing the climate studies it could be concluded that:

1. There is inconsistency in using the term climate; it is mixed frequently with culture and environment. Several studies used the word "environment" and measured it with climate or conceptualized "environment" as nurses' perceptions of the different practices in their work. There is only one study that conceptualized climate similar to this study – as environmental dimension.
2. Similar to nurses' perceptions of their nurse managers' leadership styles, nurses' perceptions of their work climate were found to be associated with both positive

(job satisfaction, stability in work units) and negative outcomes (injuries and near-misses, turnover intention and burnout). These results assert the importance of examining nurses' perceptions of their work climate.

3. Climate is relatively enduring, and is influenced by managers' behaviors. Thus it could be manipulated to achieve organizational goals and retain nurses.
4. Most of the reviewed studies measured climate from nurses' perspective. This result supports measuring climate in this study by using nurses' perceptions.
5. There is not any empirical evidence about how nurses from different age cohorts perceive their work climate. Furthermore, none of the previous studies examined the influence of climate on nurses' values.

Turnover – Nurses' Intent to Leave

The nursing workforce represents the largest hospital caregivers population (Gifford, Zammuto & Goodman, 2002). Hence, high nurses' turnover will substantially and negatively impact the remaining nurses, physicians and, most importantly, the quality of patient care (Buerhas, Donelan, Ulrich, Norman and Dittus 2005; Gifford, et al, 2002). Currently, there are about 126,000 unfilled RN positions (Lynn & Redman, 2005). Because baby boomers represent a large percentage of the nursing workforce, the average age of the working RNs is 45 (baby boomers), and it is expected that most of them will retire within the next 20 years (Lynn & Redman, 2005). Therefore, efforts to address nurses' turnover are vital.

Although, several studies were conducted to explore reasons for high nurse turnover rates, turnover rates remain high (Cline, Reilly & Moore, 2003a). Nursing turnover is an exemplar of a negative and unwanted nurse behavior (Wagner & Huber,

2003). In order to better understand nursing turnover, multiple models were proposed (Irvine & Evans, 1995). Price and Mueller's (1981) as well as Hinshaw, Smeltzer, and Atwood's (1987) frameworks are considered to be the most widely used frameworks for examining turnover. Recently Taunton, et al, (1997) incorporated both Price and Mueller's, and Hinshaw and Atwood's models, and developed Organizational Dynamics Paradigm of Nurses Retention. In this model, Taunton and his colleagues added nurse managers' characteristics among turnover predictors. This model was presented earlier within nurses' perceptions of their nurse managers' leadership styles.

Price and Mueller (1981) asserted that the developed models of turnover are not inclusive. Therefore, they proposed a model that consists of 11 exogenous variables e.g. pay, instrumental communication, kinship responsibility and distributive justice; and two intervening variables of job satisfaction, which will predict nurses' intent to stay, which in turn will predict nurses' turnover (Price & Mueller, 1981). Price and Mueller considered nurses' characteristics (e.g. age, length of service, and presence of unions) as correlates variables. Meaning of correlates variables was presented earlier.

For Hinshaw et al., (1987) turnover is a multistage process that starts with initial expectation of tenure and mobility factors such as nurses' age, education and kinship responsibilities and ends with actual turnover. Where Price and Mueller conceptualize intent to stay as immediate antecedent to turnover, Hinshaw and Atwood conceptualized intent to leave as the immediate antecedents to turnover. Lucas, Atwood and Hagaman (1993) replicated and validated the original Hinshaw and Atwood (1987) model. The replication study validated the original model and yielded nearly the same results. Furthermore, it supported that anticipated turnover is a strong predictor for the actual

turnover. Although most of the proposed models differ in their degree of complexity, most of them have concluded that turnover is a multi-stage attitudinal, decisional and behavioral process (Irvine & Evans, 1995).

Reviewing nursing turnover studies revealed that most of the conducted studies conceptualized nurses' intent to stay or intent to leave as direct predictors for nurses' turnover. However, Wells, Roberts and Medlin (2002) in their review of factors that contribute to nurses' retention have conceptualized intent to leave as the direct predictor of turnover, while intent to stay functions as a direct predictor of retention. Whereas turnover is usually conceptualized as a multistage process that will precede nurses' voluntarily termination of their service (Hinshaw, et al., 1987; Price & Mueller, 1981), retention is defined as the ability of the organization to keep its nursing personnel (Cowan & Jacobson, 2003). Because this study focused on nurses' decisions rather than organizational ability to retain nurses. Additionally, the theory of planned action suggests that intention for behavior is the antecedent for behavior, as several studies reported that intent to leave is a strong predictor for actual turnover. Finally as Davidson, Folcarelli, Crawford, Duprat (1997) empirically proven in a longitudinal study that intent to turnover is predictor for actual turnover. Thus, nurses' intent to leave, which is the direct antecedent for nurses' behavior of turnover, was selected for the study.

The results of the literature review studies that focused on examining factors that contribute to turnover and retention (Borda & Norman, 1997; Irvine & Evans, 1995; Tai, Bame & Robinson, 1998; Wells, et al, 2002) revealed that nurses' job satisfaction, work environment, managers' behaviors/leadership style, commitment, autonomy, empowerment and control over practice are the main predictors for nurses' intent to leave

and, consequently, turnover. Irvine and Evans (1995) reported that although job satisfaction is a strong predictor for behavioral intention, it is a weak predictor for actual turnover.

The influence of leadership, work environment, empowerment and control over practice on nurses' turnover rates was empirically supported by the results of the magnet-hospital studies. The magnet-hospital studies (Buchan, 1999; Kramer, 1990; Kramer & Schmalenberg, 1988a, , 1988b) frequently asserted that these factors are the main characteristics of the magnet hospitals. The magnet-hospital results notably highlighted the influential role of leadership, more specifically transformational leadership style, in creating a favorable climate that empower nurses, gives them control over practice and appreciates their autonomy. The results of the magnet hospitals, however, did not provide indications about how these factors influence nurses across different generational cohorts.

Given the theoretically provided generational characteristics, it could be argued that nurses from different age cohorts may value aspects like autonomy and empowerment relatively differently. Furthermore, not all nurses would appreciate the visionary nature of transformational leadership. Although the magnet hospitals managed to attract and retain their nurses, there is still a gap regarding how nurses from different age cohorts perceive their nurse managers' leadership styles and work climates, and how nurses' perceptions affect their intent to leave.

Where some studies looked at factors that influence nurses' intent to leave, other studies looked at factors that influence not only leaving their employment but also at leaving nursing as a profession. For instance, Lynn and Redman (2005) sampled nurses from 8 different states to have more diverse nursing populations in terms of region of the

country, labor union, and status of nursing shortage. Out of 3,000 mailed surveys, only 787 were returned (26% response rate). The mean age for the studied population was 44 (SD= 10.49). This mean age is the typically reported mean age for the current nursing workforce.

The study results showed that organizational commitment, satisfaction (with workload and administrative support, i.e. professional and organizational satisfaction) and financial status were the main predictors of nurses' intent to leave their position (the amount of explained variance 42%) (Lynn & Redman, 2005). While professional satisfaction, rewards, reason for working as well as financial situation were the main predictors for nurses' intent to leave nursing as a profession (the amount of explained variance 45%) (Lynn & Redman, 2005). The study results showed that age was not a significant predictor for nurses' intent to leave; only financial status was the demographic variable that predicted nurses' intent to leave both the profession and employment.

The insignificant influence of nurses age was reported in another study (Nedd, 2006). The results of Nedd's study failed to support the influence of nurses' age as well as other demographics such as years of experience in nursing and in their current position, and level of education, in nurses' intent to leave. Nedd's study, however, supported Kanter's empowerment theory because the study results found that all of the empowerment dimensions such as formal and informal power, opportunity, support and resources significantly correlated with nurses' intent to stay. Besides Nedd's study as well as the results of magnet hospitals, the influence of empowerment in nurses' commitment and retention was supported in a series of studies conducted by Laschinger

(Decicco & Laschinger, 2006; Laschinger, Finegan & Shamian, 2001; Laschinger, Finegan, Shamian & Casier, 2000; Laschinger, Finegan, Shamian & Wilk, 2001).

The results as regard nurses' age is contradictory to other findings that reported the inverse relationship between nurses' age and their intent to leave (Shader, et al., 2001; Starchota, et al., 2003). Given the contradictory results for nurses' age, more studies should be conducted to focus on nurses' age. However, as argued earlier, it is not the nurses' chronological age that influences nurses' decisions about whether to stay or to leave; instead it is nurses' values pertinent to each age that serves as the main influence. This assumption was empirically examined in this study.

To gain understanding about the pattern of nurses' turnover, and to identify changes in nurses' perceptions and evaluation of nursing shortage situation, factors that contributed to it, and possible interventions to face this problem, Buerhaus, et al, (2005) conducted a study to examine these aspects. The study compared data with that from an earlier survey conducted in 2002. The study results were mixed and contradictory on some points (Buerhaus, et al, 2005). For instance, nurses emphasized salary and benefits as well as undesirable working hours less in the 2004 survey compared with 2002 survey as a reason for nurses' turnover. They emphasized financial aid, improving wages, and better working hours in 2004 survey as solutions to retain nurses more than in 2002 (Buerhaus, et al, 2005).

From the other studies that examined both nurses intent to leave their employment and profession, Hart (2005) conducted a study to examine the influence of ethical climate in nurses' intent to leave nursing as a profession and their employment. The study results showed that nurses' perceptions to their ethical climate explained 25.4% of the variance

in anticipated turnover and 14.7% of the variance in leaving the profession. The results of Hart's study pointed to the importance of ethical climate in turnover, which supported one of the proposed relationships for this study. However, because ethical climate relates mainly to nurses' perceptions about ethical decisions and practices, an ethical climate may be one factor in nurses overall professional values.

It has been philosophically assumed that values have a significant impact on directing nurses' perceptions and decisions; therefore nurses' professional values may shape their perceptions about ethical practices. Additionally, based on nurses' perceptions of their ethical climate, values can also guide nurses in the process of meaning development about what it means to work in a given climate. Based on the developed meaning, nurses may decide to stay or to leave their jobs or even to leave nursing as a profession.

Results of both studies have asserted the importance of professional and organizational satisfaction in nurses' turnover intentions. These results were supported by Hinshaw and Atwood's model in which they asserted that the two dimensions of organizational and professional satisfaction are important predictors for nurses' intent to leave. As the different studies that focused on nurses' turnover and retention suggested, identifying factors that lead to nurses' turnover is important because it will help in raising managers' awareness about how to retain nurses. Wilson (2005) conducted a program evaluation study, in order to identify the effect of nurse managers' training programs on nurses' intent to stay. The training program aimed at emphasizing leadership skills, such as coaching, team work, process improvement skills, financial and personnel management, which have been known to enhance nurses' retention (Wilson, 2005).

In this study, nurses were asked to fill out Index of Work Satisfaction (IWS) and Anticipated Turnover Scale, at two time points before and after implementing the managers' training program. The study results indicated the presence of a statistically significant decrease in nurses' intent to leave between time 1 and time 2 ($p < .0005$). Although there was not significant differences in nurses' scores in IWS, nurses scored higher on items related to professional status, autonomy and organizational policies. The results of this study suggest that training programs may improve nurse managers' leadership abilities, and, consequently, retain nurses.

Although there were not enough studies that considered nurses' values in general and in relation to nurses' satisfaction and retention, Mills and Blaesing (2000) investigated the influence of nurses' work values in nurses' career satisfaction. The researchers conceptualized values as either intrinsic or extrinsic, as shared by nurses and as an influence on their performance (Mills & Blaesing, 2000). In this study, the investigators asked the nurses to respond to 17 nurses' values that were outlined based on the publications about nursing and work satisfaction. Examples for these values are job security, salary, professional status, and benefits (Mills & Blaesing, 2000).

In replying to these values, nurses were asked to think retrospectively, concurrently and prospectively. The responses were mainly about reasons that made nurses choose nursing as a profession (time 1), reasons for continuing in nursing (time 2), and if they had to choose again whether they would consider nursing as a career (time 3). The results of this study indicated that nurses who have values of professional status, pride in the profession, patient care, rewards, job security, career advancement, salary

and full-time job were more likely to be satisfied with nursing as a career (Mills & Blaesing, 2000).

As work satisfaction strongly influences nurses' turnover, four dissertations investigated nurses' job satisfaction and retention efforts for mainly Baby Boomers and Gen-Xers (Cellillie, 2003; Minnis, 2004; Swearingen, 2004; Withers, 2002). Cellillie, (2003) reported that both Boomers and Xers are dissatisfied by some of their work aspects such as schedule and peer relationships. Swearingen's (2004) study results provided empirical support for the relationship between nurses' perceptions of their managers' leadership styles and their overall satisfaction with their work.

In contrast to the theoretical assumption that job satisfaction may be different between Boomers and Gen-Xers, Withers (2002) reported that her study results failed to support this assumption.

Most of the proposed turnover models assumed that turnover is a result of linear process; however, the linearity of the earlier models may fail to capture the non-linearity of human emotions (Wagner & Huber, 2003). Driven by the assumption of the unpredictability of human behavior and emotions, Wagner and Huber (2003) proposed a non-linear model for turnover. Guided by the Chaos and Catastrophe Theory, Wagner and Huber (2003) proposed their non-linear turnover model.

Wagner and Huber's model is composed of one dependent variable and two independent variables. The dependent variable is withdrawal behavior that may result in actual turnover. The two independent variables are job tension and organizational commitment. According to this model, turnover occurs due to changes in the commitment level and job tension level that can result in unanticipated changes in employees'

behavior, and that, in turn, may result in turnover. The researchers have not yet provided empirical support for the proposed model.

As job satisfaction has been found to be one of the influential factors for turnover, Irvine and Evans (1995) conducted a meta-analytical study and utilized the reported correlation coefficient (methodology developed by Hunter et, al. [1982], Hunter and Schmidt [1990]) to explain that turnover is a result of the causal relationship between job satisfaction, behavioral intention (intent to leave) and turnover (Irvine & Evans, 1995). The researchers conceptualized that economical factors, structural factors and psychological factors are directly related to job satisfaction and indirectly related to behavioral intentions, which directly leads to turnover.

Based on the meta-analytical findings, job satisfaction was found to have a small negative relationship with turnover (-.12), while behavioral intention, on the other hand, was found to have a stronger positive relationship with turnover (.34). Behavioral intentions were conceptualized as intent to leave in four studies and intent to stay in three studies (Irvine & Evans, 1995). However, the reported 95% confidence intervals for intent to leave was more significant (0.15 – 0.39), compared with the 95% confidence intervals for intent to stay (-0.78 – 0.20). This result supported using nurses' intent to leave to estimate turnover. Finally, age was found to have a small positive relationship with job satisfaction (.16) (Irvine & Evans, 1995).

Despite the findings of the meta-analysis review, the authors admitted that these results are not explicit enough because they were based mainly on reviewing published results; these results may be biased, as most publishers prefer to publish studies with

significant results (Irvine & Evans, 1995). Reviewing the proposed models and studies about turnover suggested that:

1. Most of the work factors that enhance nurses' retention could be categorized under either professional or organizational satisfaction aspects. Similarities do exist between these two factors and nurses' professional and generational values. This finding supports the inclusion of values in the examined study model.
2. Although the results of the magnet hospitals outlined the most important environmental factors, specifically leadership and climate aspects, which contribute to nurses' retention, there is lack of empirical evidence of how nurses from different generational cohorts perceive their environment and, consequently, decide whether to stay or to leave their jobs.
3. Based on the results of the magnet hospitals, some studies compared magnet and non-magnet hospitals' leadership and some professional attributes (autonomy and commitment). Nevertheless, there is not sufficient empirical evidence about the work climate in the non-magnet hospitals as well as nurses' values.

Chapter 3

Methodology

The purposes of this study were *first*, to describe and compare nurses' values – professional and generational – as they represent different generational cohorts; *second*, to evaluate the direct effects of nurses' work environment dimensions (nurses' perceptions of their nurse managers' leadership styles and climates) on nurses' values (professional and generational); and *finally*, to evaluate the direct, indirect, and total effects of nurses' perceptions of their nurse managers' leadership styles and work climates, and nurses' values (professional and generational) on nurses' intent to leave.

Chapter 3 provides the methodology used to answer the proposed research questions: 1) what are the professional and generational values of the four nursing generational cohorts currently in the workforce? 2) What are the differences across nursing generations regarding their professional and generational values? 3) what are the differences across nursing generations in their perceptions of their work environment (leadership style and work climate)? and 4) What is the direct, indirect and total effect of work environment (nurses' perceptions of their nurse managers' leadership style and the work climate) and nursing values (professional and generational) on nurses' intent to leave? Maehr and Braskamp's (1986) personal investment theory guided the study.

Design

The study used a cross-sectional, descriptive correlational design. Evidence as described previously in the acute care setting has supported the positive relationship between work environment and both nursing and organizational outcomes. However, the total effect of social dimensions of the work environment (climate and leadership) and

nurses' values (professional and generational), as well as the direct effect of nurses' values on nurses' intent to leave lack empirical support. Because a descriptive design is usually appropriate for investigating areas that lack sufficient empirical support (Burns & Grove, 2003), such a design is proper for the study. Additionally, the main study variables (work environment variables and nurses' values) are expected to be stable over a period of time (Jones, Guberski & Soeken, 1990, Roackech, 1973), which further supports the use of a cross-sectional design.

Setting

This study was conducted in three (A, B, & C) conveniently selected non-magnet community hospitals. A total of 38 units from the three hospitals were included in the study. Slightly less than half of the participating units (n=18, 47.4%) were medical surgical and other specialty units. The study surveys were distributed to all RNs who met the study inclusion criteria in nearly all the in-patient units at these settings.

Some units did not participate in the study for two reasons; first, some nurse managers refused to participate in the study. Units not participating included birthing center at hospital A and the pre-natal, post-natal and neonatal units in hospital B. The second reason that some units were not included was because they did not have a unit manager at the time the study was conducted. These units included the oncology medical unit, the perioperative unit and some inpatient surgical units in hospital B. Because the study examined RNs' perceptions to their nurse managers' leadership style among its studied relationships, having a nurse manager was required. A list of the distributed surveys in three main unit categories (medical surgical and specialty units, ER, OR,

CCUs, ICUs, OBGYN and newborn) as well as the response rate for each category in each hospital is presented in Appendix (A).

Sample

A non-probability convenience sampling technique was used in the study. Inclusion criteria were the following: full-time, part-time, or unit-based PRNs, working at least 20 hours per week on the same unit; worked on their current unit with the same manager for at least a 3-months period; and finally, had no leadership responsibilities. Inclusion criteria of weekly work hours and unit work experience were required to ensure that the nurses had worked long enough with their nurse managers and on their units so they could complete the study instruments that measured their perceptions about their managers' leadership styles and their work climates.

As both agency and float nurses usually work on different units and in different organizations, this might impact their perceptions of the work environment and consequently their way of responding to the questionnaire, so they were not included in the study. Furthermore, because LPNs do not have the attributes of professional RNs as specified by Bixler and Bixler (1959) and Hall (1968), who identified characteristics such as autonomy, control over practice, and having a well-developed body of knowledge, LPNs were excluded from the study.

Determination of sample size

Power analysis was used to estimate the required sample size. Parameters such as power, effect size (ES), and alpha level (α) were used to conduct the power analysis. The *power* of a statistical test is the probability that the statistical test will yield statistically significant results (Cohen, 1988). Statistically, power = $1 - \beta$, where β is related to type II

error (Cohen, 1988). *Effect size* “is the degree to which the phenomenon is present in the population” or “the degree to which the null hypothesis is false” (Cohen, 1988, p. 9-10). Alpha level is the level over which the null hypothesis could be rejected. *Alpha level* is mainly related to the probabilities of type I error (Cohen, 1988).

Polit and Sherman (1990) concluded that most researchers pay more attention to *type I* error over *type II* error. Type I error is the probability of rejecting a true null hypothesis (Cohen, 1988; Nunnally & Bernstein, 1994). Committing type I error will result in mistakenly paying attention to the work environment aspects (e.g. nurse managers’ leadership style and climate) and values as possible causes for nurses’ intent to leave. More efforts would be directed toward these areas, while the main cause for nurses’ intent to leave would be overlooked. .

The other type of error, type II error, is the probability of accepting a false null hypothesis (Cohen, 1988; Polit & Sherman, 1990; Nunnally & Bernstein, 1994). Committing type II error would result in overlooking two influential factors that may play positive roles in reducing nurses’ turnover rates. Consequently, turnover rates may remain high. Thus, because the expected consequences for each type of error may negatively impact nursing, patients, and organizational outcomes, the selected parameters took into account both type I and type II errors. Shadish, et al. (2002) suggested that in social science Alpha level is usually set at .05 and power at .80. A power of .80 yields β value = 0.20. Because the probability of type I error to type II error = β / α , using these parameters makes the chances of type I to type II error = 4:1.

The effect size for this study was the amount of explained variance in nurses’ intent to leave, which is attributed to nurses’ perceptions of their nurse managers’

leadership styles, their work climates, and their values – both professional and generational. According to Polit and Sherman (1990), one of the possible ways to establish effect size for a study is to use effect size as reported in similar studies. The nursing studies that examined the direct effect of environmental variables (nurses' perceptions of their managers' leadership styles and climates) and nurses' turnover reported mixed results as high, moderate, and low. A summary of these studies is presented in Table (1).

Inconsistency in the obtained results supported conducting further investigations to explain high turnover rates; furthermore, these results indicated the existence of other variable(s) that have been overlooked in the previous studies that might affect turnover rates. Therefore, the proposed study examined nurses' values, which have not been examined in previous studies, as a potential variable that may add more insight into high nurses' turnover rates.

As noted in the previous chapter, there is a dearth of empirical evidence to support either the direct effect of values (professional and generational) on any of the nurses' outcomes (e.g. intent to leave); or the empirical support of the total effect of the work environment (nurses' perceptions of their nurse managers' leadership styles and climates) and values on nurses' intent to leave. Hence, a moderate effect size of .15, which is a conservative approach in regression (Cohen & Cohen 1988) and .3 for t-test, were used for the study.

Table 1

Illustrative Studies for The Reported Effect Size (r & R²) for the Relationship Between Work Environment Variables (Nurses' Perceptions of their Nurse Managers' Leadership Styles & Climates) as Related to Nurses' Turnover/Intent To Leave

Author (s) /	Relevant IV	Relevant DV	Results
Boyle, D., Bott,M., Hansen, H., Woods, C.& Taunton, R. (1999)	Managers' characteristics	Nurses' intent to stay at CCUs	R ² = .12 (p<.01)
Taunton,R., Boyle,D. Woods,C., Hansen, H. & Bott, M. (1997)	Leadership style	Retention of hospital staff nurse	Consideration aspect of leadership (r = .20, p<.01)
Volk, M. & Lucas, M. (1991)	Management style	Anticipated turnover	r = .575 (p=.0001) With management style as a single variable in the regression equation, it accounts for 32% of explained variance in anticipated turnover.
Kleinman, C. (2004)	Leadership style	Staff nurse retention	r=.26, (p=.03) the significant style was management by exception active.
Hemingway & Smith (1999)	Organizational climate & work stressors	Turnover intention	R ² = .11 (P≤ .05), attributed to climate dimensions.
Hart, E. (2005)	Ethical climate	RNs' intention to leave	R ² = .25 (p<.001)

Using the previously established parameters, G power software program (Faul & Erdfelder, 1992) was used to calculate the required sample size. The required sample size was 216. However, Henry (1990) suggested that researchers should adjust their sample size to overcome issues such as non-response and ineligible participants. Ineligible participants are those participants who are listed in the sampling frame but who do not meet the inclusion criteria (Henry, 1990), while non-response refers to those participants who did not complete the survey (Henry, 1990). By using Henry's formula the adjusted sample size for this study was 432. However, as the researcher approached three hospitals CNOs and three of them requested to participate on the study, the final number of RNs who received the study packages amounted to 1,078.

Recruitment

By using the American Hospital Association 2005 Guide, the researcher conveniently selected three non-magnet community hospitals located in northeast Ohio. After obtaining the phone numbers and the addresses of the selected hospitals from the AHA guide, the researcher contacted the CNOs of the three hospitals and set an appointment for the purpose of introducing the study. At the meeting the researcher explained the study purposes and the expected level of participation from the nurses and the nurse managers. Upon completing the required approvals, the researcher was invited to the nurse managers' meeting at each hospital. For both hospitals A and C the researcher had to attend one meeting with all the nurse managers and the directors. For hospital B, the researcher attended three different meetings; each one was with the nursing director and the nurse managers for one division (e.g. critical care and ER units; inpatient units; and OR and surgical services).

The researcher explained the study to the nurse managers. The nurse managers were informed that their participation was voluntary. Nurse managers were asked to notify the researcher if they were not interested in participating in the study. For hospital A nurse managers who refused to participate were informed to notify the research coordinator. Initially, all the nurse managers agreed to participate.

After receiving the manager's approval, the researcher contacted each nurse manager and requested the time, date, and place of the next unit staff meeting. In the three hospitals some nurse managers conducted one meeting, while the majority of the nurse managers conducted more than one meeting. This provided the researcher the opportunity to meet nurses working different shifts. The researcher attended all meetings.

Study Variables and their Measurements

Demographic Variables and their Measurements

An investigator-developed demographic data form was used to measure participants' characteristics. Demographic data collected included both categorical and continuous data. Categorical data included gender, race, age cohort, level of education, and shift work. Gender, a dichotomous variable, was categorized as male or female.. Race was categorized into eight categories: American Indian & Alaska Native, White, Black or African American, Asian, Native Hawaiian & other Pacific Islander, Hispanic, other, and two or more races. Nurses were asked to identify with one category. Age cohort was categorized into four categories: veterans (1922-1943), Baby boomers (1944-1960), Gen-Xers (1961-1980), and Millennials (born after 1980). Nurses were asked to identify their age cohort based on their birth year. Nurses' highest educational degree was categorized into six categories: diploma, associate degree, baccalaureate degree in

nursing (BSN), master's degree (MSN), doctor in nursing practice (DNP/ ND) , and doctor of philosophy degree (PhD).

Regarding nurses employment characteristics, nurses' working units were categorized into three main categories: the first category included; medical/surgical and specialty units, the second category included: Emergency Rooms (ER), Operating Rooms (OR), Intensive Care Units (ICUs) or Critical Care Units (CCUs), the last category included : Obstetrics and Gynecology (OBGYN) and newborn units. Shift work was categorized into seven categories: 7am-3pm, 3pm-11pm, 11pm-7am, 12hrs shift, 8am-5pm, no specific shift and other. Nurses were asked to specify the main shift worked. Nurses were asked to indicate their working status by choosing one of the three categories: full time, part time and PRN.

Continuous variables included nurse's age, nursing experience, experience in the unit, and experience with the current head nurse. Nurses' were asked to indicate their age in years. Nursing experience was defined as the length of time working as a registered nurse. Experience in the unit was defined as the length of time the nurse worked in the same unite. Experience with the current head nurse was defined as length of time nurses spend working with their current nurse manager. Nurses were asked to reply to these questions by indicating the length of their experience in years and/or months.

To assure that only nurses who met the inclusion criteria completed the survey, two filter questions included at the beginning of the survey. The first filter question asked nurses if they had been working for less than a three-month period on their current unit and/or with the current nurse manager. If their answer was yes, instructions indicated that they should stop and return the survey to the investigator. Similarly, the second filter

question asked nurses if they were working less than 20 hours per week. If their answer was yes, they were asked to return the survey. The demographic data was represented on the first part of the study survey (Appendix B).

Independent Variables and their Measurements

Nurses' perceptions about their nurse manager's leadership style.

Leadership was defined as an influential relationship between the leader and the follower toward implementing changes designed to achieve common goals (Rost, 1994). While leadership style was defined as the approach or behavior managers use to achieve a desired goal (Huber et al., 2000). For the purpose of this study, nurse managers' leadership style was conceptually defined as a situational factor, external to the nurse, which specified a relational component between the nurse manager leader and the registered nurse that influenced achievement towards a common goal (Maehr & Braskamp, 1986; Huber, et al., 2000; Bass & Avolio, 1997). Nurse managers' leadership style was measured from the nurses' perspective. The individual nurse represented the unit of analysis for this measure as well as all the study measures.

Multifactor Leadership Questionnaire (MLQ-5X)

Bass and Avolio's (2002) Multifactor Leadership Questionnaire (MLQ-5X) was used to measure nurses' perceptions about their managers' leadership style. The MLQ was based on Bass and Avolio's full range leadership theory (FRLT) (Antonakis, Avolio & Sivasubramaniam, 2003). The FRLT specified three forms of leadership behaviors; these behavioral forms are transformational, transactional and non-transactional laissez-faire, which is sometimes called passive/avoidance (Antonakis, et al, 2003).

The original MLQ was subjected to several revisions to better capture the full range of leadership behaviors (Antonakis, et al 2003). The currently used form, MLQ-5X, was modified based on several studies that were conducted using the original MLQ (Antonakis, et al, 2003). Thus, the revised form MLQ-5X was used in this study. The MLQ-5X has been used widely in leadership research, and it is considered among the best validated instruments for measuring different leadership styles (Ozaralli, 2003). The MLQ has been used successfully over the past 25 years to distinguish between effective and ineffective leaders working in different areas – including hospitals – as well as various service settings (Bass & Avolio, 2004).

The MLQ-5X instrument identifies the manager's leadership style from the perspective of the manager and the follower (Bass & Avolio, 1997). The instrument contains two sections: one section for completion by the leader (manager), and the other section for completion by the subordinate (employee). Each section of the MLQ-5X consists of four distinctive factors represented by 45 items (Bass & Avolio, 1997). The first three factors address three main leadership styles (behaviors), while the fourth factor addresses outcomes of leadership (Bass & Avolio, 1997).

For the purpose of this study, only the employee's section (form) and items related to the three leadership styles were used. Participants were asked to complete 36 items – with nine subscales – that represented transformational, transactional, and passive/avoidant leadership styles.

A *transformational leadership* style was measured by five subscales: idealized attributes, idealized behaviors, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1997). A *transactional leadership* style was

measured with two subscales: contingent reward and management-by-exception (Active). Finally managers' *passive/avoidant* style was measured with two subscales: management-by-exception (Passive) and laissez-faire. (Bass & Avolio, 1997).

Each leadership style subscale consisted of four items. Participants indicated their perceptions of their nurse managers' leadership behavior by using a zero to 4-point likert scale, for which zero was "not at all," and four was "frequently if not always." Higher scores indicated stronger leadership style attributes. Items scores for each subscale were aggregated to yield a single score for each leadership style (transformational, transactional, or passive/avoidant). The estimated time required for completing the instrument was about 15 minutes (Bass & Avolio, 1997).

The validity and reliability of the MLQ-5X instrument was supported previously by Antonakis, Avolio and Sivasubramaniam (2003) as well as Judge and Piccolo (2004). Antonakis, et al.(2003) established the *validity* of the MLQ-5X by conducting Confirmatory Factor Analysis (CFA).The results of the CFA illustrated that all 36 items, with one exception, had a strong factor loading of .70 or higher on the nine leadership subscales. While Judge and Piccolo (2004) confirmed the *reliability* of the MLQ-5X through the following Cronbach's alphas: .90 for transformational leadership style dimensions, .75 for transactional dimensions, and .84 for passive/avoidant dimensions.

For this study, Cronbach's alpha for the MLQ-5X's three main leadership styles ranged from .95 for transformational leadership style to .73 for transactional leadership style. Results are reported in Table 2. The Cronbach's alpha (.95) found in this study for the transformational leadership style was slightly higher than the Cronbach's alpha (.90) reported by Judge and Piccolo (2004). On the other hand, for this study, the Cronbach's

alpha (.73) for transactional leadership style was slightly lower when compared with the reported alpha (.75) by the Judge and Piccolo (2000).

Cronbach's alpha for subscales of each leadership style can also be found in Table 2. For the transformational leadership subscales, the Cronbach's alpha ranged from .89 for inspirational motivation to .78 for idealized behavior. For the Transactional leadership style subscales, contingent reward had a higher alpha (.84) as compared with the management-by-exception active (alpha = .71). Finally, for the third main leadership style of passive/avoidant, the management-by-exception passive subscale had a slightly higher Cronbach's alpha (.80) than the laissez-fair subscale (.79).

Table 2

Reliability Indicators for Leadership Styles Measured by MLQ-5X

Scales ^a	Standardized	Mean	Items	Range
	Alpha	Inter-item correlation	mean	
Transformational leadership	.95	.51	2.42	1.18
Idealized attitude	.85	.59	2.50	.34
Idealized behavior	.78	.46	2.46	.93
Inspirational motivation	.89	.67	2.79	.39
Intellectual stimulation	.81	.52	2.19	.45
Individual consideration	.80	.50	2.16	1.11
Transactional leadership	.73	.25	2.27	1.05
Contingent reward	.84	.57	2.44	.49
Management-by-exception active	.71	.38	2.10	.79
Passive/avoidant	.88	.48	1.24	.54
Management-by-exception passive	.80	.50	1.35	.23
Laissez-Fair	.79	.49	1.13	.51

^a Each subscale consisted of 4 items

For this study, validity of the MLQ-5X was established by using theory testing. The presence of empirical support for the theoretically proposed relationships would be considered evidence for construct validity; i.e., if the measures of two constructs captured the theoretically proposed relationship between the two measured constructs. The three main leadership styles scales, as well as the nine subscales, were correlated with the total score of the Anticipated Turnover Scale (ATS). The ATS, developed by Hinshaw and Atwood (1978), was used to measure nurses' intent to leave. With the exception of the transactional leadership subscale of management-by-exception active, all the leadership scales and subscales were significantly correlated with the ATS. Table 3 provides correlation results. The presence of significant correlations, which is consistent with the proposed theoretical relationship between the two concepts, supports the construct validity of the MLQ-5X.

Table 3

Correlation Table for Validity Indicators for Leadership Scale (MLQ-5X) and Nurses' Anticipated Turnover Scale (ATS)

Leadership total scales and nine subscales	Total ATS
Transformational leadership total score	-.37**
Idealized attribute	-.33**
Idealized behavior	-.25**
Inspirational motivation	-.29**
Intellectual stimulation	-.27**
Individual consideration	-.31**
Transactional leadership total score	-.24**
Contingent reward	-.39**
Management-by-exception active	.04
Passive/avoidant total score	.31**
Management-by-exception passive	.28**
Laissez-Fair	.29**

** $p < .01$.

Nurses' perception about their unit climate.

Despite the growing interest in studying climate, until now there has been conceptual inconsistency in defining, measuring, and validating existing climate instruments. According to Litwin and Stringer (1968), climate comprises measurable properties of the work environment that are perceived directly or indirectly by individuals, and it affects individuals' behaviors and motives. Similarly, Snow (2002)

conceptualized climate as “how it ‘feels’ to work in a particular environment; this includes a complex mixture of norms, values, expectations, policies and procedures that influence individual and group behavior” (p.393). As climate reflects feelings about the norms and values of an organization, Jones, et al. (1990) reported that climate represents how individuals perceive their culture. In this study, climate was conceptually defined as a multidimensional and situational factor of the work environment, which represented how a nurse felt about her/his work environment. Climate encompassed nine dimensions of *structure, responsibility, reward, risk, warmth, support, standards, conflict, and identity* (Litwin & Stringer, 1968).

Litwin and Stringer’s Organizational Climate Questionnaire (LSOCQ)

The Litwin and Stringer’s Organizational Climate Questionnaire (LSOCQ) (1968) was used to measure nurses’ perception of their work climate. The LSOCQ is widely used in nursing and management research. LSOCQ consists of 50 items representing nine subscales that measure work climate dimensions; these dimensions are conceptualized as essential for motivating and satisfying working personnel. Responses are on a 4-point likert scale, for which 1 = that the participant “*Strongly Agrees*” that he or she feels that the rated item is available in his or her work environment and 4 = that the participant “*Definitely Disagrees*” that he or she feels that the rated item is available in his or her work environment. LSOCQ has negatively and positively worded items, so reverse scoring for the negative items was conducted before aggregating them to obtain the total subscale score. Lower scores indicated a more favorable work climate.

Subscales, reflecting the conceptualized climate dimensions as defined by Litwin and Stringer (1986), the number of items under each subscale, and the reported

Cronbach's alpha (α) by Jones, Guberski & Soeken, (1990) are presented in Table 4. Since the original development of LSOCQ, Keuter et al. (2000) tested the instrument for face, content, and construct validity before using it in their study. Keuter et al. (2000) established face validity of the LSOCQ through pilot testing the instrument on 9 RNs whose ages ranged from 25 to 44, who worked as RNs for 2-23 years, and who worked in the study setting for periods ranging from 3 months to 11 years. The pilot study participants reported the importance of the LSOCQ to their work climate. The estimated time for completing the questionnaire is 20 minutes. Validity was also tested using experts in the organizational systems field to critically analyze the items and the subscales (Keuter et al., 2000).

Table 4

LSOCQ Subscales (Climate Dimensions) with Definitions, Numbers of Items and the Reported Cronbach's alpha by Jones, Guberski & Soeken, (1990)

Subscales	Subscale (dimension) Definition	Items	alpha
Structure	The feeling about the degree of group constraints, number of rules and regulations, and the degree of work atmosphere formality.	8	.80
Responsibility	The feeling about the amount of delegated responsibility in order to get work done, and the degree of freedom for decision making.	7	.64
Reward	The feeling about the availability of a reward system for a job well done, as well as fair salary and promotion policies.	6	.84
Risk	The feeling about the degree of risk and challenges in the work.	5	.34
Warmth	The feeling about the presence of a friendly and social work group atmosphere where there is fellowship.	5	.86
Support	The feeling of managerial as well as group support.	5	.78
Standards	The feeling about how important the implicit and explicit goals and standards are. The importance of effective performance.	6	.20
Conflict	The feeling about the acceptability of opinion differences as well as strategies used to solve problems.	4	.49
Identity	The feeling about belonging to an organization and a working team, and being appreciated and valued by the other team members.	4	.86

Dimensions of the LSOCQ have been subjected to repeated analysis (Campbell, Dunnette, Lawler & Weick, 1970; Muchinsky, 1976; Rogers, Miles & Biggs, 1980; Sims & Lafollette, 1975). Results of factor analysis revealed variation in the factor structure across studies. Factor analysis conducted by Rogers et al. (1980), Muchinsky (1976), and Sims and Lafollette (1975) resulted in six dimensions while Campbell et al. (1970) found four factors. The reported factor structure instability of LSOCQ makes the validity of the instrument questionable. However, as Messick (1995) and Sechrest (2005) suggested, the validity of the instrument is contextual, as it depends on the situations as well as the individuals responding to a particular instrument. This was also supported by Rogers et al. (1980) who attributed differences in study results (e.g. Sims & La Follette, 1975; Muchinsky, 1976) of LSOCQ factor analysis to climate differences among the studied settings should be factor analyzed in each study.

For this study, climate was conceptualized as a situational factor that represented how a nurse feels to work in a particular work environment. Dimensions of the LSOCQ were consistent with how this study conceptualized climate. Following the recommendations of Rogers et al. (1980), the LSOCQ was factor analyzed. Principal Axis Extraction (PAE) and initially both varimax and oblimin rotations were used. Factors with Eigen values of more than 1.0 were kept. Items were forced initially into 1 to 11 factors solution. Items with weak $<.4$, secondary factor loading of $\leq .2$, or no loading were removed one item at a time. After removing any item the FA by using both types of rotations was conducted. After removing 5 items it was clear that EFA with both 10 and 11 factor solutions were over extracting the factors. Similarly, after going down to 42 items varimax rotation seems to have more meaningful solution than the oblimin

solution. Therefore, varimax rotation was utilized for the rest of the analysis. By continuing the analysis by PAE and varimax rotation and by forcing the items into 9 to 1 factor (s) solutions, and deleting problematic items one at a time, the final factor solution resulted in 25 items with a strong and clean loading on two factors. The obtained factors were labeled as: warmth and belonging, and administrative support (Table 5). These two main factors were consistent with the frequently emphasized importance of both interpersonal relations among the nursing team as well as administrative support in creating a favorable work climate.

Table 5

Climates' Two Factors Solution and the Values for Item Loading

Items	F1 ^a	F2 ^b
A friendly atmosphere prevails among the people in this unit (Q75).	.74	
I feel that I'm a member of well functioning team (Q96).	.73	
It's very hard to get to know the people in this unit (Q77). ^c	.72	
In this unit people look pretty much at their own interest (Q98). ^c	.69	
People are proud of belonging to this unit (Q95).	.66	
As far as I can see there is much personal loyalty to the unit (Q97).	.63	
People in this unit really do not trust each other (Q82). ^c	.60	
In this unit people do not seem to take much pride in their performance (Q90). ^c	.59	
People in this unit tend to be cool and aloof toward each other (Q78). ^c	.58	
This unit is characterized by a relaxed, easy-going working climate (Q76).	.58	

Note. ^a Warmth and belonging sub-scale. ^b Administrative support sub-scale. ^c Indicates recoded items.

Table 5 cont.

Climate Two Factors and the Values for Item Loading

Items	F1 ^a	F2 ^b
In difficult assignments, I can get help from the nurse manager and co-workers (Q84).	.53	
Rewards are in proportion with job performance (Q66).		.66
In this unit the rewards and encouragements you get usually outweigh threats and the criticism (Q65).		.66
Nurse manager makes an effort to talk with you about your career aspirations within the unit (Q81).		.63
Our nurse manager is willing to take a chance on good ideas (Q73).		.62
The philosophy of our nurse manager emphasizes the human factor, how people feel...etc (Q83).		.59
We are encouraged to speak our minds even if it means disagreeing with our superiors (Q93).		.57
We have a promotion system here that helps the best man to rise to the top (Q64).		.53
The policies and organizational structure of the unit have been clearly explained (Q51).		.51
Red-tape is kept to a minimum in this unit (Q52).		.49

Note. ^a Warmth and belonging sub-scale. ^b Administrative support sub-scale. ^c Indicates recoded items.

Table 5 cont.

Climate Two Factors and the Values for Item Loading

Items	F1 ^a	F2 ^b
There is not enough reward and recognition given in this unit for doing a good job (Q68). ^c		.49
Excessive rules, administrative details, and red tape make it difficult for new and original ideas to receive consideration (Q53). ^c		.46
The job in this unit is clearly defined (Q49).		.44
In some of the projects I have been on, I have not been sure exactly who my boss was (Q55). ^c		.43
Our manager is not concerned about formal organization and authority but concentrates instead on getting the right people together to do the job (Q56).		.42

Note. ^a Warmth and belonging sub-scale. ^b Administrative support sub-scale. ^c Indicates recoded items.

Reliability of the LSOCQ was established by using Cronbach's alpha after factor analyzing the instrument. Cronbach's alpha for the two climate subscales were .91 for the warmth and belonging subscale and .88 for the administrative support subscale. Detailed Cronbach's alpha and item analysis for LSOCQ are presented in Table 6.

Table 6

Reliability Indicators for Climate Sub-scales Measured by LSOCQ

Scales	Number of items	Standardized Alpha	Mean Inter-item correlation	Items mean	Range
<i>Unit climate</i>					
Warmth and belonging	11	.91	.48	2.1	.64
Administrative support	14	.88	.34	2.4	1.2

*Dependent Variable**Nurses' intent to leave.*

Nurse's intent to leave is the individual's perception regarding the possibility of leaving their place of employment (Price & Mueller, 1981). This study conceptually defined nurse's intent to leave as a decisional process that ends with the nurse's voluntary termination of employment. Intent to leave represents the degree of the nurse's willingness to invest in a particular work environment. The nurse's decision about intent to leave is influenced by the meaning the nurse places on the work environment; this meaning formation is assumed to be influenced by the nurse's values.

Anticipated Turnover Scale (ATS)

The Anticipated Turnover Scale (ATS), developed by Hinshaw and Atwood (1978), was used to measure nurses' intent to leave. The ATS consists of 12 items. The likert-like scale ranges from strongly agree (1) to strongly disagree (7). Some items are worded positively while others are worded negatively; thus, reverse scoring was

conducted before the data analysis. Higher scores indicated higher probability for nurses' turnover.

Hinshaw and Atwood (1978) tested the reliability of the instrument on 1,597 nurses working in 15 urban and rural hospitals throughout Arizona. The reported Cronbach's alpha was .84. Shader, Broome, Broome, West and Nash (2001) reported a Cronbach's alpha of .86, while Hart (2005) reported a Cronbach's alpha of .94 when using the ATS in her study. Hinshaw and Atwood (1978) established construct validity through factor analysis, which yielded two factors explaining 54.9% of variance. However, Hinshaw and Atwood did not state what factors were found, and they suggested that the items' scores could be aggregated to yield a single score. The total mean score was used for the data analysis.

For this study, *reliability* was tested using the Cronbach's alpha. Cronbach's alpha for the ATS was found to be .88 with a mean inter-item correlation of .37. See Table 7 for results of ATS reliability analysis. *Validity* of the ATS was established using theory testing by correlating the ATS with the MLQ-5X. Results are reported previously in Table 3.

Table 7

Reliability Indicators for Nurses' Intent to Leave Measured by ATS

Scale	Number of items	Standardized Alpha	Mean Inter-item correlation	Items mean	Range
ATS	12	.88	.37	3.34	2.02

Intervening Variables

Nurses' generational values.

Values represent the beliefs and the conventions about what constitutes acceptable behavior pertinent to particular nurses from a similar age cohort. For the purpose of this study, nurses' generational values were conceptually defined as relatively enduring beliefs of nurses about lifestyle and work life that were derived from historical, social, and political contexts, and these enduring beliefs were shared by nurses born in a particular set of years (Kupperschmidt, 1998). In this study, it was assumed that values could directly influence a nurse's decision to leave a job through the instrumental role of values in the process of meaning formation.

Rokeach's Generational Values Instrument

The Rokeach's (1973) generational values instrument was used to measure generational values. The instrument was developed based on Rokeach's research in the field of human values. It is composed of two parts: the first part contains 18 terminal values, and the second part contains 18 instrumental values. Terminal values refers to desired end-states such as inner harmony, pleasure, and a sense of belonging, while instrumental values represent means to achieve desired ends, such as independence, loyalty, and honesty. In the original instrument, participants ranked the different values in descending order based on their importance. Test-retest reliability for the terminal values was .87 and .60 for the instrumental values (Rokeach, 1973). The length of time between the two tests was not reported.

Thurston, Flood, Shupe and Gerald (1989) used the Rokeach's generational values instrument with a slight modification. Instead of asking participants to rank the

values based on their relative importance, participants were asked to indicate their agreement or disagreement about the importance of values by using a 5-point likert scale. High scores indicated higher degrees of agreement regarding the importance of the value, with 1 meaning “strongly disagree” and 5 meaning “strongly agree.” Thurston et al. reported Cronbach’s alphas of .84 for the instrumental values and .79 for the terminal values.

However, based on the results of a pilot study that was conducted for this study, using the previously mentioned response format did not yield sufficient variability among the participants. Therefore, the response format for this study was changed to a 5-point likert scale, where “1” indicated that the stated value was not important while “5” indicated that the stated value was most important. As Dr. Shupe was the only accessible researcher, her permission was obtained to change the response format. A total score was obtained for terminal values and for instrumental values.

For this study, reliability of Rokeach’s generational values instrument was tested using Cronbach’s alpha. Result for terminal values was .89 and .94 for instrumental values (Table 8). Convergent validity was established by correlating both generational values as measured by Rokeach’s instrument and professional values as measured by the Nursing Professional Value Scale-Revised (NPVs-R). The presence of significant correlation between the two scales, as well as between the subscales of professional values and terminal and professional values supported the convergent validity of the instruments. The correlation results are presented in Table 9.

Table 8 Reliability Indicators for Nurses' Generational Values (terminal and instrumental) as Measured by Rokeach's Instrument

Scales	Number of items	Standardized Alpha	Mean Inter-item correlation	Items mean	Range
Generational values					
Terminal values	18	.89	.33	4.03	1.24
Instrumental values	18	.94	.44	4.02	1.18

Table 9

Convergent Validity for Professional Values Scale (NPV-R) and Terminal and Instrumental Generational Values

Professional values	Terminal values	Instrumental values
Total professional values	.52**	.56**
Caring	.47**	.54**
Activism	.39**	.42**
Professionalism	.40**	.43**
Trust	.40**	.42**
Respect	.36**	.37**
Security (single item)	.22**	.26**
Integrity (single item)	.16**	.15**

** $p < .001$.

Nurses' professional values

Nurses' professional values represent their beliefs about what constitutes accepted professional nursing practice. It was conceptually defined as nurses' enduring beliefs about the practice of professional nursing. Professional values also guide the standard for professional practice by providing a framework for evaluating performance and distinguishing nursing from other professions (Weis & Schank, 1997, p.366). Similar to generational values, the concept of professional values is assumed also to influence nurses' turnover intentions through its vital role in the process of meaning formation.

Nursing Professional Value Scale-Revised (NPVs-R)

The Nursing Professional Value Scale-Revised (NPVs-R), which was developed by Weis and Schank (2000), was used to measure nursing professional values. The NPVs-R was developed based on the ANA (2002) code of ethics with its interpretive statements (Weis & Schank, 2000). The instrument is composed of 26 items representing seven factors of caring, activism, professionalism, trust, respect, integrity, and security; these factors are conceptualized by Weis and Schank as the essential professional nursing values. Nurses indicated the importance of each item by using a 5-point likert scale, where 1 meant "*Not important*" and 5 meant "*Most important*." Higher scores indicated higher professional identification.

The 37-item likert-like scale instrument was tested on 632 subjects including baccalaureate and masters students as well as on RNs. Students participating in NLN- and CCNE-accredited programs were randomly selected; nurses were randomly selected from the state board RNs list. Principal component analysis (PCA) using varimax rotation was used for factor analysis. The results of the factor analysis identified seven factors

accountable for 56.5% of the explained variance. Results of factor analysis indicated that the two factors of caring and activism were responsible for most of the explained variance. The results of factor analysis, as well as the reported Cronbach's alpha for each subscale, are presented in Table 10. For the total scale, Weise and Schank reported a Cronbach's alpha of .91. Because the NPVs-R was developed based on the newest version of the ANA code of ethics and its interpretive statements, this version was used in this study. Higher scores indicated higher professional values.

Table 10

NPVs-R Factor Analysis Results (Main Factors and Items Loading, Presented with Permission from Dr. Weis)

Factor structure/items (N=632)	Factor loading
<i>Factor 1 Caring (33.7% explained variance, Cronbach's Alpha=.87)</i>	
21 Safeguard patient's right to privacy.	.82
25 Maintain confidentiality of patient.	.75
23 Protect rights of participants in research.	.66
24 Practice guided by principles of fidelity and respect for person.	.62
20 Provide care without prejudice to patients of varying lifestyles.	.62
16 Protect moral and legal rights of patients.	.55
18 Act as a patient advocate.	.49
22 Confront practitioners with questionable or inappropriate practice.	.47
<i>Factor 2 Activism (6.4% explained variance Cronbach's Alpha=.80)</i>	
26 Participate in activities of professional nursing associations.	.75
19 Participate in nursing research and/or implement research findings appropriate to practice.	.66
11 Recognize role of professional nursing associations in shaping health care policy.	.66
10 Advance the profession through active involvement in health-related activities.	.65
4 Participate in public policy decisions affecting distribution of resources.	.56
<i>Factor 3 Professionalism (4.0% explained variance, Cronbach's Alpha=.76)</i>	
6 Establish standards as a guide for practice.	.75
7 Promote and maintain standards where planned learning activities for students take place.	.67
5 Participate in peer review.	.59
8 Initiate actions to improve environment of practice.	.53
<i>Factor 4 Trust (3.4% explained variance, Cronbach's Alpha=.73)</i>	
15 Maintain competency in area of practice.	.66
14 Accept responsibility and accountability for own practice.	.60
9 Seek additional education to update knowledge and skills.	.55
1 Engage in ongoing self-evaluation.	.53
2 Request consultation/collaboration when unable to meet patient needs	.51
<i>Factor 5 Respect (3.3% explained variance, Cronbach's Alpha=.57)</i>	
12 Promote equitable access to nursing and health care.	.69
13 Assume responsibility for meeting health needs of the culturally diverse population.	.60
<i>Factor 6 Integrity (2.9% explained variance)</i>	
17 Refuse to participate in care if in ethical opposition to own professional values.	.73
<i>Factor 7 Security (2.8% explained variance)</i>	
3 Protect health and safety of the public.	.75

For this study, reliability testing of the NPVs-R was conducted using Cronbach's alpha. Cronbach's alpha for total professional values scale was .92 Alpha's for the subscales ranged from .78 to .87. Table 11 provides detailed information on reliability results. Convergent validity was used to examine the validity of PNV-R for this study. Validity results were presented earlier in Table 9. .

Table 11

Reliability Indicators for Nurses' Professional Values as Measured by NPV-R

Scales & Its Sub-scales	Number of items	Standardized Alpha	Mean Inter-item correlation	Items mean	Range
Professional values total	26	.92	.31	3.88	1.76
Caring	8	.87	.46	4.37	.88
Activism	5	.81	.47	3.19	.65
Professionalism	4	.80	.51	3.55	.86
Trust	5	.78	.41	4.24	1.00
Respect	2	.78	.63	3.66	.04

In conclusion, in order to yield credible results, the instrument should be valid and reliable. *Validity* is concerned with the scientific utility of the instrument, or whether the instrument measures what it is intended to measure (Nunnally & Bernstein, 1994). From a practical aspect “validity is a process of hypothesis testing that ... demonstrates the relationship between the measure of interest and other measures” (Frytak & Kane, 2006, p.104). Reliability, on the other hand, is concerned with the consistency of the results

when the instrument is used frequently to measure the same phenomena (Carmines & Zeller, 1979). Both reliability and validity are a matter of degree (Carmines & Zeller, 1979). Reliability is usually related to random measurement error, while validity is related to non-random (systematic) error (Carmines & Zeller, 1979).

For this study, the reliability of the utilized instrument was established by using Cronbach's alpha for internal consistency. Carmines and Zeller (1979) suggested using the internal consistency measures over split half's and test-retest reliability measures. The validity of the study instruments was established through construct validity. *Construct* validity "is concerned mainly with the theoretical relationship of the study variables to other variables" (DeVellis, 2003, p. 53). Construct validity could be established through convergent, divergent (discriminate), known group and multitrate-multimethod validity. Convergent validity as well as Factor analysis was used to establish the validity of the used instrument. As presented earlier all the reported figures satisfy validity and reliability indicators as specified by authors as Carmines & Zeller (1979), Nunnally & Bernstein (1994), and DeVellis (2003).

Pilot Test of Instruments

A pilot study was conducted to examine the length, clarity, and readability of the questions used in the study, as well as to examine the variability for the values instruments. Based on the results of the pilot study, a modification for the response format of Rokeach's generational values survey was conducted (as reported earlier). Additionally, two participants commented about the length of the survey. Therefore, a page break with a piece of candy, as a simple incentive, was placed on the middle of the survey (Appendix B-2). Summary for the pilot study results can be found in Appendix C.

Procedure

After obtaining the required approvals, the researcher met with the nursing staff and introduced the study. Nurses were informed that a package would be placed in their mailboxes. For units with several staff meetings, the study packages were distributed after the last meeting to ensure that almost all the staff was introduced to the study and the study's purposes. The packages included the following: a cover letter (Appendix D), the study survey (Appendix B), and a pre-stamped envelope addressed to the researcher were placed in their mailboxes. Nurses were informed that the survey was anonymous and their participation was voluntary and would not affect their current position. In addition, nurses were informed that each nurse would receive a \$5 Target gift card after receiving the completed survey. Following the staff meeting, the nurse manager oriented the researcher with respect to the location of the staff mailboxes, and provided a list of the staff names. For some units the nurse manager had marked RN names on mailboxes. A modified Dillman (2000) technique was used to guide the process of conducting the survey. One week after distributing the study packages, reminder cards (Appendix E) were placed in the RNs' mailboxes. After another week, reminder flyers (Appendix F) were placed in the RNs' lounge and on announcement boards in the different units. Finally, after the third week, last-call flyers (Appendix G) were placed in the previously mentioned places.

After the researcher received the completed surveys a \$5.00 Target gift card was mailed to each participant by using their address as shown on the return envelope. However, two weeks after starting the data collection a few nurses forgot to provide their mailing address on the return envelope. Therefore, a separate sheet of paper was included

in the study package for the participant to include their return address in (Appendix H). An IRB addendum was obtained before adding this separate sheet of paper. In the subsequent staff meetings, the researcher emphasized that this sheet of paper would be separated from their surveys and would be shredded immediately after mailing the incentive.

Response Rate

Out of the distributed 1,078 surveys, 475 surveys were mailed back, representing a 44% response rate. Four surveys were excluded because these surveys were completed by LPNs, and one survey was excluded because the participant specified that she was working as a float nurse; another one was excluded because the participant's main working experience was in the Philippines and not in the United States. Additionally, one survey was excluded because the participant reported that she is currently working in two units.

Since the study focused in part on identifying nurses' perceptions of their nurse managers' leadership style, it was important that the participant be worked on a single unit. Three participants did not proceed after the first filter question because they had worked for less than 3 months with the current nurse manager, while fourteen participants did not proceed after the second filter question because they worked fewer than 20 hours/week; therefore, these surveys were excluded. Finally, 22 surveys were excluded as they were mailed back empty. Having empty surveys may indicate that the participants did not want to participate in the study, or that they discovered after reading the cover letter that they did not meet the study inclusion criteria. The final number of the usable

surveys was 429. Response rates for each hospital and for the inpatient units categories are presented in Appendix (A).

Data Management and Cleaning

The validity of a study's results depends on the accuracy of the data; thus, identifying possible sources of errors, e.g. data coding and entry, is essential (Roberts, Anthony, Madigan & Chen, 1997). Through data cleaning, possible sources of errors, as well as possible patterns of error (systematic or random), can be identified (Roberts, et al., 1997). In this section, methods for data management are presented first, followed by data cleaning and imputation.

Data management

The raw data and the SPSS and AMOS data files were kept in a locked file cabinet at the PI's home. Three copies of the SPSS and AMOS data files were kept: one on the PI's laptop, the second copy on a jump drive, and the third copy on the dissertation chair's school computer. Backing up was done frequently throughout the analysis process. The PI and the committee members were the only persons who had access to the data. To minimize errors in coding, coded surveys were reviewed frequently against the code book. Both the code book and coding decisions were kept updated. As a requirement for Case Western Reserve University's IRB, the raw data will be kept for three years after completion of the study.

Data cleaning

Because the final number of the returned surveys was large, it was not feasible to double-enter the data. To clean the data, a randomly selected 20% of the returned surveys were individually checked for data entry accuracy. Furthermore, the data were entered by

only one person, the researcher, who checked the precision of the entered data frequently through out the data entry process. Descriptive statistics, such as frequencies and measures of central tendency, were performed to identify out-of-range values. Graphical presentations, such as histograms with the normal distribution curve, and scatter plots were performed to check for outliers. The few identified errors were checked against the raw data for entry mistakes. In addition to statistical screening, the data was visually screened for possible errors.

Missing Data and Data Imputation

It is not uncommon to have missing data in nursing research (Musil, Warner, Yobas & Jones, 2002). Therefore, after cleaning the data, the data set was examined for patterns of missing data. Ten percent of missing data (for the respondents) on one variable is considered small (Cohen & Cohen, 1988), while 40% of missing data on one variable is considered large (Raymond & Roberts, 1987). For this study data missing data on most of the variables did not exceed 10%.

Missing data may limit the generalizability of the study results and is a possible source of bias thus affecting the accuracy of the results. Therefore, identifying the patterns of missing data was crucial in determining how the missing data should be treated (Musil, et al., 2002). Pearson product-moment correlation was conducted to assess the patterns of missing data (Musil, et al., 2002). In order to make this correlation, a dummy coding variable was created; variables with missing data were coded as (1), while variables with complete data were coded as (0). No statistically significant differences between these two sets of variables were found. This result indicated that the pattern of missing data was random.

Multiple methods for data imputation were used. Because there was not a lot of missing data at a single variable, list wise deletion, the default in the SPSS, was used for analysis of variance statistics. For the path analysis, AMOS program (that was used for conducting the path analysis) has the capability of treating the data set as if it is complete by using the maximum likelihood technique. A few participants had checked more than one answer, so to increase the variability and to distribute the error; the average for the two answers was used (based on personal contacts with Dr. Chris Burant, 07/ 2007).

Human Subjects Consideration

After obtaining the selected hospitals CNOs' approval, the researcher applied to the hospital's Institutional Review Board (IRB). Two hospital IRB applications were completed. One IRB application was submitted for hospital A, and another IRB application was submitted for both hospitals B & C. As an operational requirement of hospital A, a nurse co-coordinator was appointed to facilitate contacting the nurse managers. This condition was not required by the other two hospitals. After obtaining the hospitals' IRB approvals, CASE IRB approval was obtained.

The study participants received a cover letter explaining the purpose of the study. The study cover letter explained the requirements for participation. The study participants were informed that there were no benefits or risks associated with completing the survey. The participants were also informed that their participation was voluntary, and that their refusal to participate would not affect their employment. Completion of the survey indicated the participants' willingness to participate in the study. The study participants were informed that their names would not be associated with the data (anonymous). An identification number was assigned to distinguish between the participating hospitals.

Furthermore, the study participants were informed that they may use the research's contact information provided in the study cover letter, if they are interested in having a summary of the study results. Additionally, based on the request of both nurse managers and the CNOs, after defending the dissertation, arrangements will be made to present the main study findings to the nurses at each of the participating hospitals. This presentation will be provided to all nurses, including those who did not complete the survey.

Chapter 4

Results

This chapter presents the results of a cross-sectional descriptive correlational study. The purposes of this study were the following: to describe and compare nurses' values – professional and generational – as they represent different generational cohorts; to evaluate the direct effects of nurses' work environment dimensions (nurses' perceptions of their nurse managers' leadership styles and climates) on nurses' values (professional and generational); and to evaluate the direct, indirect, and total effects of nurses' perceptions of their nurse managers' leadership styles and work climates, and nurses' values (professional and generational) on nurses' intent to leave.

Maehr and Braskamp's (1986) Personal Investment Theory (PIT) was used to guide the study. Descriptive and inferential statistics are presented to address the study purposes and to answer the study research questions. Findings are presented in four main sections: study sample characteristics, descriptive statistics for the study variables, study research questions, and post hoc power analysis.

Sample Description

RNs' demographic and educational preparation.

The study sample was comprised of 429 RNs. Almost half of the participants (n=214, 49.9%) were from hospital A, while the rest of the participants 31.7% (n= 136) and 18.4% (n= 79) were from hospitals B and C, respectively. Only 23 (5.4%) participants were male. The majority of the participants (89.3%) were Caucasian. Over 90% of the nurses identified that they belonged to either the Gen-Xer or Boomer generation. Because there was not sufficient response for the representation of the Silent

and Millennial generations, the four age cohorts were collapsed into two. Boomers and Silent generation comprised one group while Gen-Xers and Millennials comprised the second group. Descriptive statistics for the four age cohorts' scores in the main study variables are presented in appendixes (I- 1, 2, 3).

For the highest educational degree variable, participants had an option to select one of five responses, ranging from diploma degree to PhD degree. At the time of data entry, 4 nurses (.9%) reported that they had other non-nursing degrees, while 4 nurses (. 9%) reported that they had more than one degree. Therefore, two additional categories were added. Associate degree was the most common educational preparation for the study participants (36.6%, n= 157). Detailed descriptions of the participants' demographics and educational preparation are provided in Table 12.

Table 12

RNs' Characteristics: Gender, Age Cohort, Race, Highest Education (N=429)

Characteristics	n	%
Gender		
Female	406	94.6
Male	23	5.4
Age cohorts		
Silent generation	8	1.9
Baby Boomers	169	39.4
Gen-Xers	225	52.4
Millennial	27	6.3
Reported Race		
American Indian/ Alaska Native	1	.2
White	383	89.3
Black or African American	8	1.9
Asian	20	4.7
Hispanic	7	1.6
Two or more races	9	2.1

Table 12 cont.

RNs' Characteristics: Gender, Age Cohort, Race, Highest Education (N=429)

Characteristics	n	%
Highest educational degree		
Diploma degree	105	24.5
Associate degree	157	36.6
BSN	142	33.1
MSN	12	2.8
PhD	1	.2
Other non-nursing degree	4	.9
Two or more degrees	4	.9

Employment characteristics.

The study participants worked as RNs for an average of 15.6 years ($SD=11.0$). Forty-two percent ($n=182$) of the studied sample reported that they were working on medical surgical and other specialty units, while only 17.5% ($n=75$) were working on newborn and OBGYN units. Nurses had more experience on the units where they were working ($M=8.0$, $SD=7.9$ years) than they did with their nurse managers ($M=3.7$, $SD=3.3$ years). Slightly more than half of the RNs (50.3%, $n=216$) worked 12-hours shift. More than half of the RNs (61.8%, $n=265$) had full-time employment status and only 10.3% ($n=44$) worked as PRNs. Participants' employment characteristics can be found in Tables 13 a & 13 b.

Table 13-a

RNs' Characteristics: Years of Nursing Experience, Unit Experience, Experience with the Unit manager, and Working Hours (N=429)

Characteristics	M	SD	Median	Min	Max
Years of nursing experience	15.62	11.01	14.0	.33	47.0
Current unit Experience	8.03	7.92	5.5	.25	38.0
Experience with the current nurse manager	3.17	3.36	2.00	.25	22
Working hours	34.3	9.79	36	20.0	84.0

*Table 13-b**RNs' Characteristics: Work Shift, Work Units, Work status (N=429)*

Characteristics	n	%
Work shift		
7am- 3pm	79	18.4
3pm- 11pm	33	7.7
11pm- 7am	26	6.1
12-hour shift	216	50.3
8am- 5pm	6	1.4
No specific shift	40	9.3
Other	29	6.8
Work units		
Medical surgical/specialty units	180	42.0
ER/OR/CCU/Critical care units	173	40.3
Newborn/OBGYN	75	17.5
Work status		
Full time	265	61.8
Part time	117	27.3
PRN	44	10.3

Descriptive Statistics for the Independent Study Variables (Leadership and Climate)

Nurses' Perceptions about their nurse managers' leadership style

The first line nurse managers' leadership style was measured using Multi Factorial Leadership Questionnaire -5X (MLQ-5 X). The MLQ-5X uses a 5-points likert scale ranging from "0," which indicated that the nurse manager did not display the stated behavior, to "4," indicating that the nurse manager displayed the stated behavior frequently. Findings from the study showed that staff nurses identified that nurse managers used transformational ($M= 2.42, SD= 0.88$) and transactional ($M 2.28, SD= .70$) leadership styles more frequently. Results can be found in Table 14.

There were slight differences in the mean scores for both the transformational and transactional leadership styles sub-scales. The highest mean score for a transformational leadership sub-scale was ($M= 2.78, SD=.94$) for inspirational motivation, while the lowest mean score was ($M= 2.17, SD=1.07$) for individual consideration. For transactional leadership, contingent reward had a higher mean score ($M= 2.44, SD= .98$) as compared with management-by-exception active ($M=2.11, SD=.86$).

Table 14

Descriptive Statistics for the MLQ-5X

Scales and Sub-scales	Mean	SD	95% CI	Skewness	Kurtosis
Total transformational leadership	2.42	.87	2.34-2.51	-.45	-.52
Idealized attributes	2.49	1.02	2.39- 2.59	-.48	.57
Idealized behavior	2.46	.90	2.37-2.55	-.53	-.18
Inspirational motivation	2.78	.94	2.69-2.88	-.72	-.02
Intellectual stimulation	2.21	.94	2.11-2.30	-.14	-.69
Individual consideration	2.17	1.01	2.07-2.27	-.28	-.68
Total transactional leadership	2.28	.70	2.21-2.35	-.16	-.22
Contingent reward	2.44	.98	2.35-2.54	-.43	-.56
Management-by-exception active	2.11	.86	2.02-2.20	-.13	-.51
Total Passive/avoidant	1.25	.88	1.16-1.34	.58	-.25
Management-by-exception passive	1.36	.98	1.26-1.45	.57	-.37
Laissez-Fair	1.15	.90	1.06-1.24	.65	-.11

Note. Maximum score = 4. Higher scores indicate greater tendency to display behaviors related to the measured leadership style.

Nurses' perceptions to their unit climate

Nurses' perception of their work climate was measured using Litwin and Stringer's climate questionnaire. This questionnaire was factor analyzed for this study. Participants used a four-point likert-like scale to indicate their perceptions. A "1" indicated that the participants strongly agreed that the stated attribute was present on their unit; while a "4" indicated that they strongly disagreed that the stated attribute was present. Reverse coding was conducted with the negative statements. Low scores indicated a favorable climate attribute. Descriptive statistics for the climate two sub-scales are presented in Table 15. Nurses rated administrative support ($M= 2.43$, $SD= .51$) slightly higher than warmth and belonging ($M= 2.11$, $SD=.56$).

Table 15

Descriptive Statistics for the LSOQC Sub-scales

Climate Sub-scales	Mean	SD	95% CI	Skewness	Kurtosis
Warmth and belonging	2.11	.56	2.05-2.17	.25	-.08
Administrative support	2.43	.51	2.38-2.48	.11	-.26

Note. Maximum score = 4. Higher scores indicate a less favorable climate.

Dependent Variable (Nurses' Intent to Leave)

The anticipated turnover scale was used to measure nurses' intent to leave. The scale used 7-point likert scale. On this scale, a "1" indicated that the participant agreed strongly with the statement, while "7" indicated that the participants disagreed strongly with the statement. Reverse coding was conducted so higher scores indicated higher tendency to leave. The total mean score for this scale was 3.34 (SD=1.28). Descriptive statistics, confidence intervals, and normality distribution for the ATS is presented in Table 16.

Intervening Variables (Professional and Generational values)

Professional values

Nurses' professional values were measured using the NPV-R scale. The NPV-R used 5-point likert scale, where "1" indicated that the stated value was "not important" and "5" indicated that the stated value was "most important." The total mean score for this scale was 3.89 (SD= .48). For the professional values sub-scales, security sub-scale as represented by a single item of protecting public's safety had the highest mean score (M=4.41, SD=.76). .

The caring sub-scale had the second highest mean score (M=4.36, SD= .53). The single item measuring integrity "refuse to participate in activities if in opposition with one's ethical principles" and the activism sub-scale received the lowest mean scores (M=3.0, SD =1.43) and (M=3.16, SD=.82), respectively. Description for the participants' scores is presented in Table 16.

Generational values

Rokeach's values survey was used to measure nurses' generational values. The scoring system for this survey was similar to the scale for nurses' professional values. The total mean score for terminal values was 4.42 ($SD = .53$), whereas for instrumental values, the total mean score was 4.0 ($SD = .53$) (Table 16).

Table 16

Descriptive Statistics for Dependent Variable (Nurses' Intent to Leave) and the Intervening Variables (Professional and Generational Values)

Scales and Sub-scales	Mean	SD	95% CI	Skewness	Kurtosis
Total professional values ^a	3.87	.50	3.82-3.92	-.40	.48
Caring	4.36	.53	4.31- 4.42	-1.0	1.9
Activism	3.16	.82	3.07- 3.24	.01	-.49
Professionalism	3.53	.76	3.46- 3.61	-.2	-.1
Trust	4.24	.51	4.19- 4.29	-.6	-.29
Respect	3.66	.87	3.57- 3.74	-.3	-.09
Safety (single item)	4.41	.76	4.33-4.48	-1.28	1.65
Integrity(single item)	3.0	1.34	2.88-3.13	-.06	-1.15
Terminal values ^a	4.22	.53	4.17-4.28	-.14	-.38
Instrumental values ^a	4.01	.54	3.95-4.06	-.00	-.57
ATS ^b	3.32	1.29	3.19-3.45	.77	.06

Note. Maximum score for professional and generational values = 5. Nurses' intent to leave maximum score = 7.

^a Higher scores indicates higher value attribute

^b Higher scores indicates higher tendency to leave

Results of the Study Research Questions

Data screening and examination of statistical assumptions

Before conducting the data analysis the data were screened for assumptions of normality, linearity, outliers, and out of range values. With the exception of professional values subscales of caring and the two single items sub-scales of safety and integrity, most of the scales had skewness and kurtosis values less than ± 1.0 . According to Tabachnic & Fedell (1996), a slight violation for the normality assumption may weaken the regression analysis but will not affect the accuracy of the results especially with a large sample size. Within the same context, Mertler and Vannatta (2002) indicated that moderate violation for the normality assumption may be over looked with a large sample size.

Descriptive statistics were conducted to detect out of range values. Graphic presentation using Box plots and Q-Q plots were utilized to examine normality, linearity, and outliers. The data fulfilled these assumptions. The normality assumption for the t-test was fulfilled through the initial data screening. With the exception of passive avoidant leadership scale, having insignificant Levene's test satisfied homogeneity of variance assumptions for all the other sub-scales. For passive/avoidant leadership the mean difference was interpreted by using Equal variance not assumed values.

Path analysis is the second analysis that was used. Assumptions for the path analysis are similar to regression with additional assumptions relevant to the study model. Linearity of the relationship between both dependent and independent variables was fulfilled through the initial data screening. Scatter plot and P-P plots were used to examine residuals' assumptions of normality, linearity, and homoscedasticity. Durbin

Watson value was examined to assess for the independence assumption, and the result of this test was less than 2.5, which satisfies this assumption.

In the social sciences there is no perfect instrument; thus, one of the challenging assumptions in the regression is measurement without error. Measurement error = 1 - reliability, so using reliable instruments is the best thing researchers can do to fulfill this assumption. As the reliability of the utilized instruments was high, that assumption is fulfilled to a great extent. Additional assumptions pertinent to the path analysis include no reciprocal relationship between the variables, and the model should reflect the actual causal sequence (Mertler and Vannatta, 2002). These assumptions were fulfilled by design as well as through theoretical support.

Although multicollinearity is not one of the regression assumptions, having it will affect the accuracy of the regression coefficients. Variance Inflation Factor (VIF) and Tolerance were examined to check for the presence of multicollinearity problems; no values had a VIF value of 10, or a tolerance value of .1, so these results indicated the absence of multicollinearity. Finally, having a Cooks D value of less than 1.0 supported the absence of influential data points.

RQ1: What are the professional and generational values of the four nursing generational cohorts currently in the workforce?

To answer the first research question descriptive statistics were performed. Descriptive statistics showed that nurses from both age groups (Silent + Boomers generation and Gen-Xers + Millennials) reported higher mean generational values (terminal and instrumental) as compared with professional values. For professional values, nurses in the older age group reported slightly higher scores in both professional

values ($M= 3.90$, $SD= .53$) and instrumental values ($M= 4.04$, $SD= .53$) as compared with the younger age group ($M= 3.88$, $SD= .49$) and ($M = 4.01$, $SD= .55$) respectively. For terminal values, the younger age group reported higher scores ($M= 4.26$, $SD= .54$) as compared with the older age group ($M= 4.21$, $SD= .55$). Furthermore, the overlapping 95% confidence intervals indicated no significant differences between the examined age groups. Results for examining the significance of the differences in the participants' mean scores based on the age cohorts will be presented later. Detailed descriptive statistics are presented in Table 17.

Table 17

Descriptive Statistics for Professional and Generational Values for the Two Age Groups (Silent + Boomer Generation and Gen-Xers + Millennials)

Age groups	Mean	SD	95% CI	Skewness	Kurtosis
Professional values					
Age group 1 ^a	3.90	.53	3.81-3.98	-.61	-.10
Age group 2 ^b	3.88	.49	3.81-3.94	1.24	-.32
Terminal generational values					
Age group 1 ^a	4.21	.55	4.12-4.29	-.12	-.12
Age group 2 ^b	4.26	.54	4.19-4.33	-.50	-.37
Instrumental generational values					
Age group 1 ^a	4.03	.53	3.94-4.11	-.15	.09
Age group 2 ^b	4.01	.55	3.94-4.09	-.43	-.69

Note. ^a Silent and Baby Boomer generation. ^b Gen-Xers and Millennial generation.

RQ2: What are the differences across nursing generations regarding their professional and generational values?

Two tailed independent samples t-test was used to answer this research question. The results of the analysis showed the absence of statistically significant differences between the two age groups in professional ($t(406) = .83, p = .40$) terminal ($t(418) = .74, P = .46$), and instrumental values ($t(419) = .72, .47$). Detailed results are presented in Table 18. Mean and standard deviation of nurses' perceptions of their nurse managers' leadership style by the two age groups is presented in Appendix (J).

Table 18

Two Tailed Independent Samples t-test Results for Differences between Nurses Representing Two Age Groups (Silent + Boomer Generation and Gen-Xers + Millennials) in their Professional and Generational Values.

Dependent Variables	<i>df</i>	Mean	<i>t</i>	<i>P</i>
		differences		
Professional values	406	.04	.83	.40
Terminal generational values	418	-.03	.74	.46
Instrumental generational values	419	.03	.72	.47

RQ3: What are the differences across nursing generations in their perceptions of their work environment (leadership style and work climate)?

Similar to the second research question, two tailed independent samples t-test revealed the absence of statistically significant differences between the two age groups in their perceptions of their nurse managers' practices with respect to transformational (t

(410) = 1.18, $p=.23$) transactional ($t(409)= .08, p= .92$), and passive/avoidant ($t(406.2)= .75, p= .45$) leadership styles (Table 19-a). Mean and standard deviation presentation of nurses' perceptions of their nurse managers' leadership style by the two age groups is presented in Appendix (J)

Table 19-a

Two Tailed Independent Samples t-test Results for Differences between Two Age Groups of Nurses (Silent + Boomer Generation and Gen-Xers + Millennials) in their Perceptions of their Managers' Leadership Style.

Dependent Variables	<i>df</i>	Mean	<i>t</i>	<i>P</i>
		differences		
Transformational leadership style	410	.10	1.18	.23
Transactional leadership style	409	.00	.08	.92
Passive avoidant leadership style	406.2	-.06	.75	.45

Table 19-b present results of nurse's perceptions of their unit climate, the t-test results, Table 19-b, indicated the presence of statistically significant differences between the two age groups in their perceptions to climate dimensions of warmth and belonging ($t(411)= 2.83, p=.005$) and administrative support ($t(398)= 2.61, p=.009$). Mean and standard deviation of nurse's perception of their unit climate by the two age groups is presented in Appendix (J)

Table 19-b

Two Tailed Independent Samples t-test Results for Differences between Two Age Groups of Nurses (Silent + Boomer Generation and Gen-Xers + Millennials) in their Perceptions of Unit Climate

Dependent Variables	df	Mean	t	P
		differences		
Warmth and belonging	411	-.15	2.83	.005**
Administrative support	398	-.13	2.61	.009**

**P<.001

RQ4: What are the Direct, Indirect, and Total Effects of Work Environment (Nurses' Perceptions of their Nurse Managers' Leadership Style and Work Climate) and Nursing Values (Professional And Generational) on Nurses' Intent to Leave?

Path analysis was used to answer the last research question. Path analysis was conducted by using AMOS software program. Unlike the SPSS, AMOS has the analytical ability to conduct the required path analysis regressions simultaneously. Additionally, it handles missing data by using the Full Information Maximum likelihood method (FIML) (Byrne, 2001). Therefore, the final analysis was conducted on a complete data set that was composed of 429 subjects.

Path analysis was conducted to verify the causal effect of the nurses work environment (nurse's perceptions of their nurse manager's leadership style and climate) and the nurse's professional and generational (terminal and instrumental) values on nurse's intent to leave. The initial model (saturated model) (Fig. 3) was just- identified.

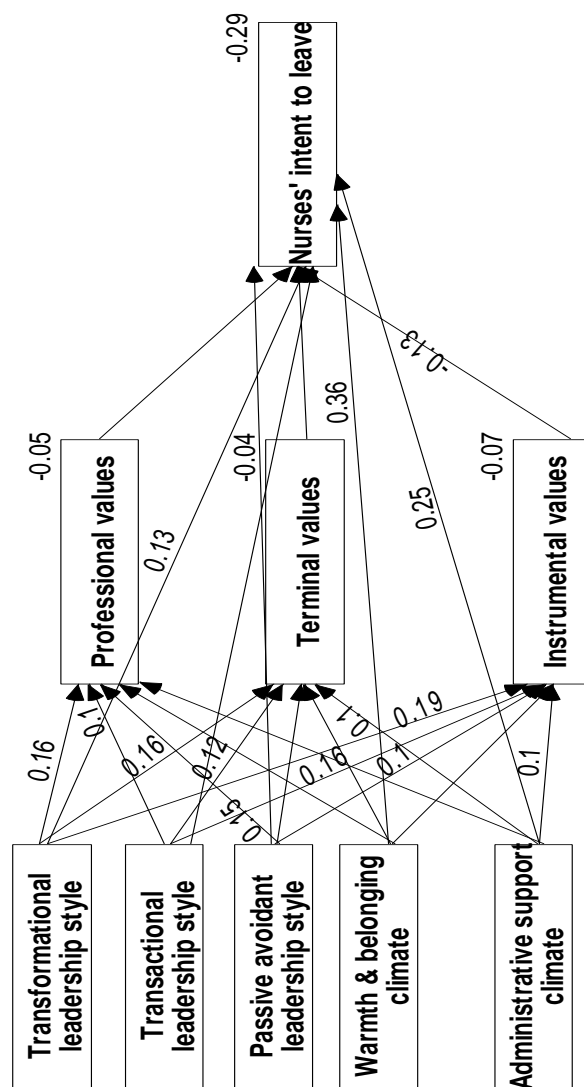


Figure 3. The direct indirect and total effect of situational factors and nurses' values on nurses' intent to leave. The Initial Saturated Study. Only values more than .01 are presented

A just-identified model is a model which has an equal number of both parameters to be estimated and the actual data points; therefore it has zero degrees of freedom (Kline, 2005; Byrne, 2001). Byrne (2001) stated that this type of models “is not scientifically interesting because it does not have any degrees of freedom therefore can never be rejected”. In this study the initial saturated model served as the starting point to indicate the non-significant paths. The initial model explained 29% of the explained variance on the endogenous variable, nurses’ intent to leave. However, there were several non-significant paths (not significant at .05 level). According to Mertler and Vannatta (2002), “if one goal of any analysis is a parsimonious solution, we should always have some missing paths in a model” (p. 209). The non-significant paths were deleted one at a time. Detailed path elimination (model trimming according to Pedhauzer, 1982) is presented in table (20). The final revised model (Fig.4) consisted of direct paths only; no indirect relationships were supported. In the revised model, nurses’ intent to leave, the primary endogenous variable, was explained mainly by the two exogenous climate dimensions of warmth and belonging ($\beta=.36$), followed by administrative support ($\beta=.21$) (Table 21).

As regards the other endogenous variables (professional, terminal and instrumental values), the revised model illustrated that the transformational leadership style was significantly ($p<.05$) the primary predictor for instrumental values ($\beta= .3$), terminal values ($\beta=.23$) and professional values ($\beta=.18$). With respect to the other environmental predictor, climate, only administrative support significantly predicted, almost equally, terminal ($\beta=.13$) and instrumental ($\beta=.126$) values (Table 21). In the final model, mainly the two exogenous climate dimensions, explained 27% of the variance in nurse’s intent to leave. The amount of explained variance for both professional and

terminal values was equal (3%), while the amount of explained variance in instrumental values was 5%. A detailed presentation of the order of the deleted paths is presented in Table 20.

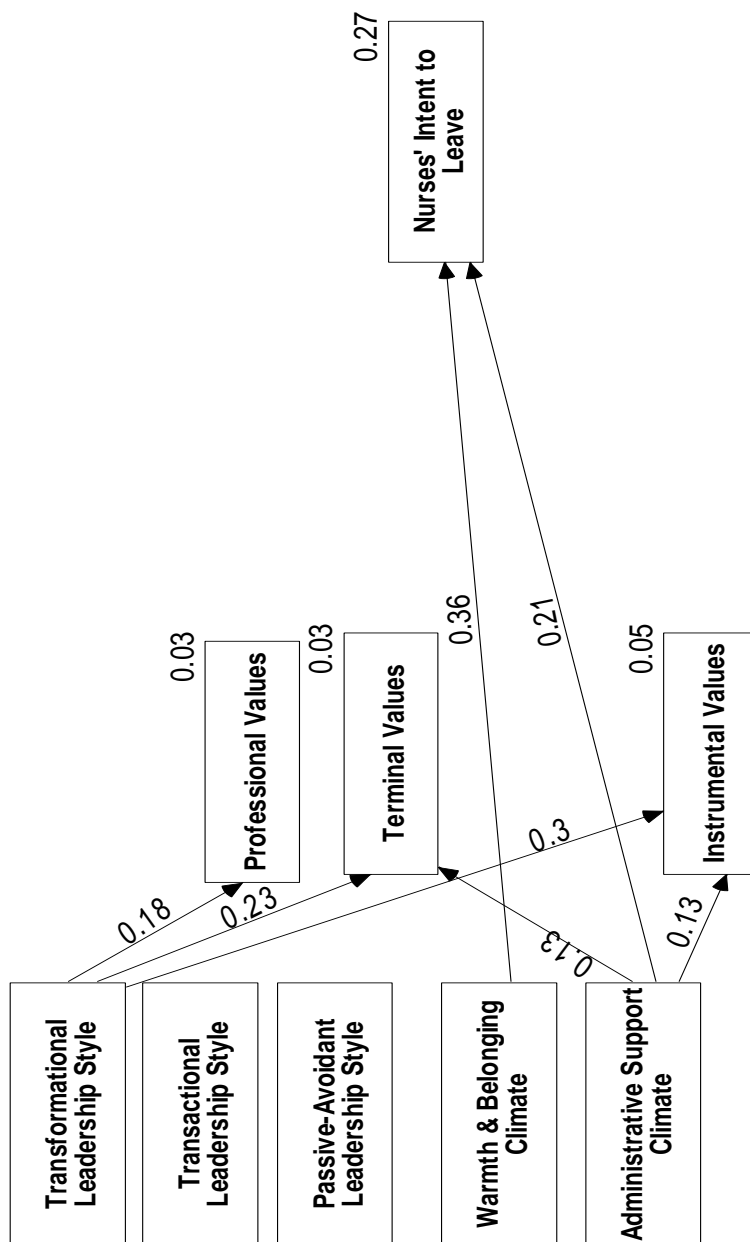


Figure 4. The Final Study Model. All presented Beta coefficients are significant at $p < .05$ and $p < .001$

Table 20

Summary Table for Deleted Path and the Associated Change in Goodness of Fit

Indicators (N=429)

Models	Chi-square	df	P	TLI	CFI	RMSEA
Saturated Model ^a	0	0	0		1.0	
Deleted paths						
Warmth <i>to</i> terminal values	.028	1	.86	1.0	1.0	.000
Warmth <i>to</i> professional values	.123	2	.94	1.0	1.0	.000
Passive-avoidant <i>to</i> anticipated turnover	.430	3	.93	1.0	1.0	.000
Administrative support <i>to</i> professional values	.868	4	.92	1.0	1.0	.000
Passive-avoidant <i>to</i> terminal values	2.31	5	.80	1.0	1.0	.000
Passive avoidant <i>to</i> instrumental values	2.95	6	.81	1.0	1.0	.000
Terminal values <i>to</i> anticipated turnover	4.62	7	.70	1.0	1.0	.000
Transactional <i>to</i> anticipated turnover	6.34	8	.60	1.0	1.0	.000
Transformational <i>to</i> anticipated turnover	6.82	9	.65	1.0	1.0	.000
Transactional <i>to</i> professional values	8.45	10	.58	1.0	1.0	.000
Transactional <i>to</i> terminal values	10.12	11	.51	1.0	1.0	.000
Transactional <i>to</i> instrumental values	11.80	12	.46	1.0	1.0	.000
Instrumental values <i>to</i> anticipated turnover	13.66	13	.39	.99	1.0	.01
Warmth <i>to</i> instrumental values	15.49	14	.34	.99	.99	.01
Professional values <i>to</i> anticipated turnover	18.05	15	.260	.99	.99	.02
Passive-avoidant <i>to</i> professional values	20.81	16	.18	.99	.99	.02

Note: ^a Some goodness of fit indicators could not be estimated as the saturated model had

0 degrees of freedom

Table 21

Standardized and Ustandardized Regression Weights for all the Significant Paths in the Final Model

Regression path	B	SE B	β
Warmth and belonging climate → Anticipated turnover	.84	.12	.36**
Administrative support climate → Anticipated turnover	.53	.14	.21**
Transformational leadership → Professional values	.11	.03	.17**
Transformational leadership → Instrumental values	.18	.04	.30**
Administrative support climate → Instrumental values	.13	.07	.126*
Administrative support climate → Terminal values	.14	.07	.132*
Transformational leadership → Terminal values	.15	.04	.24**

* $p < .05$, ** $p < .001$

Chapter 5

Discussion

This chapter presents a discussion of the study's findings, implications for hospital administrators and policy makers, suggestions for future research, and limitations. The study aimed generally at empirically exploring differences across four nurses' generational cohorts regarding their professional and generational values, and in examining a comprehensive turnover model that incorporates nurses' values in addition to the previously examined environmental aspects (leadership style and climate). Maehr and Braskamp's (1981) personal investment theory served as the theoretical underpinning for the study.

To fulfill the study's purposes and to answer the four proposed research questions, a cross-sectional descriptive correlational study was conducted. A convenience sample of 429 RNs working in three community non-magnet hospitals and meeting the study's inclusion criteria were included in the study. Descriptive statistics, independent samples, t-tests, and path analyses were conducted to analyze the study data. Due to insufficient numbers of RNs representing the four proposed age cohorts, the final data analysis was conducted by using nurses representing two broader age groups. The Silent and Boomer generations represented one group, while members of Gen-X and the Millennial generations represented the second age group.

The main study results revealed the absence of statistically significant differences between the two age groups in their professional and generational (terminal and instrumental) values, as well as in their perceptions of their nurse managers' leadership style. Nurses from the two main age groups differed, however, in their perceptions about

the two main dimensions of their unit climate. Furthermore, in contrast to what was proposed earlier in chapters one and two, leadership style had a trivial non-significant role in predicting nurses' turnover intentions. The two climate dimensions were the only significant predictors of nurses' intent to leave. They explained almost 27% of the explained variance in nurses' intent to leave. The discussion section will be organized into five main areas: sample characteristics as compared with national data; professional values; generational values; work environment (leadership and climate); and the proposed study model.

Sample Characteristics as Compared with National Data

Consistent with nationally reported RN statistics (HRSA, 2004), the study sample consisted of only 5.4% male participants, compared with the nationally reported 5.8 percentage of male RNs. The average age of the study participants (42.6 years) was less than the national average RNs' age of 46 years. For the RNs' highest level of education, the percent of RNs with associate and baccalaureate degrees in this study was comparable to the nationally reported data: 36.6 % vs. 33.7%, and 33.1% vs. 34.2%, respectively. There was a higher number of RNs with a diploma degree (24.5%) in this study compared to the nationally reported number (17.5%). The studied sample worked fewer hours weekly (M = 34.3 hrs.) than the nationally reported average of 43.9 hours weekly. Finally, although the majority of the studied sample worked full-time (61.8%), this percentage is less than the national RNs' full-time working status (71.2%).

In general, the sample from this study was comparable to some extent with the national RN population. This similarity points to the potential generalizability of the study results.

Nurses' Values

Professional values

Statistically significant difference between the two main age groups in terms of their professional values was not found. This finding is consistent with Weis and Schank (1997, 2000, 2002), who implied that professional values were not different across nurses from different age cohorts. Results of this study are also consistent with what was proposed previously in chapter one and with the literature cited in chapter two.

The absence of significant differences between nurses from different age groups in professional values, however, may represent a promising result for nursing scholars and professionals who have invested themselves toward mobilizing nursing along the occupation –profession continuum. Professional identity is strengthened by having a shared set of beliefs and value system (Kenny, 2002).

Generational values

Similar to professional values, the study results did not reveal any statistically significant differences between the two age groups in their generational values (terminal and instrumental). Results are contradictory to literature in nursing (e.g. Kupperschmidt, 2000; McNeese-Smith & Crook 2003; McNeese-Smith & Van Servellen, 2000; Parsons, 2002; Swearingen & Liberman, 2004) as well as non-nursing (Raines, 1994, 1997, 2002; Zemeke, 2004). As highlighted in chapter two, there have been no empirical nursing studies conducted to examine generational value differences among nurses from different age cohorts. Only two studies measured nursing values by using Rokeach's value survey. The first study focused on examining the influence of values on job satisfaction

(Prothero, 2000). The second study was conducted in an educational setting and compared values held by faculty members and students (Thurston, et al, 1989).

Absence of generational value differences was supported in several non-nursing studies (e.g. Kunreuther, 2002; Jorgensen, 2003; Jurkiewicz and Bradley, 2002; and Appelbaum, et al. 2004, 2005). Jorgenson (2003) proposed that most of the authors who spotlighted generational differences, e.g Zemke et al. (2000) and Tulgan (1996), among others, did not conduct empirical research. Instead, most of their writings were based on their experience as consultants, anecdotal records, and personal interviews. These sources lack the scientific rigor associated with empirical research.

Kunreuther (2002) and Jorgensen (2003) proposed examining the life cycle instead of generations to uncover values of a particular group. Based on this suggestion, differences across individuals might be a result of differences in their position in the life cycle rather than generational value differences. Because younger nurses are in a different place in the life cycle as compared to older nurses, assumptions may be made that any observed differences, e.g preference for a flexible schedule and balanced life, are attributed to fulfilling certain life requirements rather than to generational value differences. Kunreuther (2002) added that both the younger and older generations may have the same values but they differ in terms of the meanings of those values and the ways in which each value manifests itself. The results of the empirical investigation of both Kunreuther (2002) and Jorgensen (2003) failed to support completely the previously proposed steep generational differences. These studies, however, were conducted in the management field not in nursing.

Jurkiewicz and Bradley (2002) proposed career attraction as a plausible explanation for value similarities among individuals working in the same career. These researchers suggested that individuals attracted to the same career may tend to have similar personal values. With this explanation in mind, it could be concluded that nurses are individuals who have similar values, and therefore they were attracted to nursing as a profession/career. Jurkiewicz and Bradley (2002) added that continuous exposure to the same structured organizational environment will “nullify” generational value differences. The average years of RNs’ experience in their current unit was 8 years, and anticipated turnover scores indicated that the study participants were not planning to leave their work place. Perhaps the prolonged exposure study participants have had to their work environment has helped “nullify” generational differences that may have previously existed.

Several issues were identified during a review of the generational literature. First, there were inconsistencies in defining the age range for each age cohort. Cordeniz (2002), in her article about recruiting and retaining Gen-Xers, presented 11 date ranges for defining the Gen-Xer cohort. Second, contradictory writings about some of the values pertinent to each age cohort were found. For example, Parson (2002) and Searingen and Liberman (2004) proposed that Gen-Xers are good team players and require a team work environment. Meanwhile, Cordeniz (2002), Kupperschmidt (2001) and Weston (2001), among others, pointed out that Gen-Xers are independent and do not function well in teams. Third, Kupperschmidt (2000) asserted that there are two waves of the Boomer generation. These two waves are different, and the second wave resembles to a great extent the values of Gen-Xers. Finally, Ulric (2001) pointed that with growing older

Baby Boomers will seek to balance personal life and work. This was stated frequently as one of the main differences between the younger and older generations, Taking the previously presented issues into consideration points that assuming generational value differences should not be taken for granted without sufficient empirical support.

In conclusion, results of this study may be an indication that nurses from different age cohorts tend to have similar generational values. Differences among generations are represented in the ways by which these values are enacted. If we take having a comfortable life as an example, given all the literature on generations, older nurses may consider achieving this by exerting time and effort in a single work place so that they could be promoted and end up with nice retirement plans. The younger generation, on the other hand, may consider frequent and continuous job searches for better work opportunities and the means to achieving a comfortable life.

Relationship between professional and generational values

Although the relationship between professional and generational values was not part of the study purposes, findings related to nurses' scores on professional and generational values are worth a brief discussion. The study findings illustrated that the participants scored higher in generational values (terminal and instrumental) than in professional values. Having higher generational values may be an indication that values nurses developed as they matured, values shaped by different social, economical and political forces, are stronger and more established than values that nurses have acquired by belonging to the nursing profession. This interpretation is supported by Nevill and Kruse's (1996) notion that an individual's values develop within the first 18 years of life. Then a person's set of values becomes relatively stable, though it may be influenced by

external forces such as an individual's work environment, progress in age, and different interpersonal relationships. Further examination for the relationship between both professional and generational values and how these two values are conceptually related is warranted.

Work Environment

Nurse managers' leadership style

Nurses from the two age groups did not differ in their perceptions of their nurse managers' leadership styles. They perceived their nurse managers to practice both transformational and transactional leadership styles more frequently than a passive avoidance leadership style. Having insignificant differences between the two age groups is consistent with the findings of Wieck, et al (2002), who reported that nurses reached 80% consensus in their ranking of the most desirable and undesirable leadership traits.

Interpreting the insignificant differences between nurses representing the two age groups will be discussed from two perspectives: first, from a practical perspective that takes into consideration the previously mentioned leadership style characteristics, and second, from the generational values' results. Reviewing the relevant and related literature revealed that there is no empirical evidence that nurses from each age cohort prefer one leadership style (transformational vs. transactional) over another. However, some of the literature does provide general suggestions about how nurses from each age cohort like to be managed, i.e. desirable nurse managers' practices or behaviors.

For example, Weston (2001) specified that Boomers want to be recognized for their achievement; they expect rewards for performance, they want to feel that they are contributing to their community and organizational growth, and they appreciate

empathetic supportive managers. Yu and Miller (2005) added that Boomers respect chain of command and anticipate that the manager will specify the desired goals. Gen-Xers, on the other hand, want immediate feedback and gratification, expect collaborative decision making and anticipate mentoring relationships while working with effective and knowledgeable leaders (Wieck et al 2001; Weston, 2001; Hu et al, 2004).

Yu and Miller (2005) pointed out that Gen-Xers want their manager to invest in activities that help in the Gen-Xers personal growth and maturity. Gen-Xers like their manager to coach and train them, especially if that will lead to career advancement (Weston, 2001). Because Gen-Xers appreciate autonomy, they want their managers to inform them of the required goals and the available resources and then to leave them to function independently (Weston, 2001). Generally, both generations appreciate individual considerations as well as motivating and supportive leaders.

When comparing leadership characteristics measured by the MLQ-5X instrument and the desired management behaviors of the two age cohorts as outlined previously in the literature, shared areas between leadership styles and generational preferences were noticed. The desired managerial practices are woven through the two frequently used leadership styles of transformational and transactional. There is not a clear-cut way to classify leadership style by age cohort preference.

The generational values perspective can also be used to explain why nurses from the two age groups did not differ in their perceptions of their nurse managers' leadership styles. As mentioned in chapters one and two, nurses' perceptions about their leaders might be influenced by their values. Writers (e.g. Cane, Gonzalez & Stewart, 1999; Kupperschmidt, 1998) who supported the idea of generational value differences

proposed that nurses from different age cohorts will develop different perceptions of their managers due to their value differences. The results of this study did not report any significant value differences. Hence, nurses from different age cohorts did not differ in their perceptions of their nurse managers' leadership style.

Unit climate

Generally speaking, nurses reported that they perceived their units' climates as a moderately favorable work atmosphere. When comparing nurses' perceptions of their work climate based on their age group, statistically significant differences were found. Older nurses felt that their units' climate was characterized by the two dimensions of: warmth and belonging, and administrative support, while younger nurses did not.

Organizational Climate Questionnaire (LSOCQ)

Climate was measured in this study by using the Litwin and Stringer Organizational Climate Questionnaire (LSOCQ). LSOCQ was frequently used in both nursing as well as non-nursing literature (Gershon et al., 2004). As pointed earlier in chapter two and three, despite the raised questions about the factor structure stability of LSOCQ, with the exception of Keuter et al., (2000) who examined LSOCQ for its face validity, non of the nursing studies that used the instrument have factor analyzed it. Although the original LSOCQ instrument proposed nine dimensions for climate, the results of the factor analysis for this study identified only two dimensions, which were used in the analysis.

Failure to support the originally proposed nine dimensions is consistent with the results of the previously conducted factor analysis. However, the previous studies that factor analyzed LSOCQ were non-nursing studies. Most of these studies reported six

factors solution (e.g. Rogers et al., 1980, Muchinsky, 1976, & Sims and Lafollette, 1975) one study reported four factor solution (Campbell et al., 1970) while a more recent study (Toulson & Smith 1994) reported one factor solution and 34 items not 50 items. The results of the last study should be interpreted with caution because it was conducted in New Zealand, where the overall work environment might be different than the American work environment.

Although this study used the same extraction and rotation methods used in earlier studies, it is hard to discuss the results of the present factor analysis results with the previous studies that examined the perceptions of non-nursing population. Given the unique nature of nursing practice, it would be more relevant to compare the factor analysis results with studies that used nursing population. By looking at the resulted two factors and comparing it with the originally proposed factors and with Litwin and Stringers comments about the results it was observed that: 1) the LSOCQ developer reported the presence of high correlation among warmth and identity as well as between warmth and support subscales and suggested that these subscales should be grouped together, and 2) based on the results of their analysis to the improved LSOCQ Litwin and Stringer suggested that conflict subscale should be deleted or if used should be used to identify the level of conflict in the organization.

Both these suggestions were observed in the present factor analysis results where warmth and identity items grouped together under single factor. Items under conflict subscale did not have a single factor loading. Furthermore, from a practical point of view some of the items related to the remaining subscales (e.g risk and responsibility) were not relevant for RNs at a unit level. From statistical point of view other items that reported

low inter item correlation, with the original nine factor solution, did not load or had a weak factor loading, and subsequently were deleted. Thus, the remained items under the two main sub-scales (warmth and belonging and administrative support) were the most relevant to the nurses and to their unit climate. Subsequent examination for the instrument, however, still warranted.

Because no known studies have examined differences across nurses from diverse age cohorts on their perceptions of their climate, this discussion centers on comparisons with studies that measured similar concepts. Stuenkel et al (2005) examined differences in nurses' perceptions of their work environment in general. Moos's work environment scale was used to measure nurses' perceptions of their work environment. Similar to this study, the researchers combined nurses from the silent generation (n=10) with Boomers. In this study, the small numbers of Millennials (n=26) were added to the Gen-Xers. Stuenkel's study did not have any Millennials. In contrast to this study, Stuenkel and colleagues reported that as compared with the older nurses, younger nurses significantly perceived their superiors to be supportive.

Another finding in this study contradicted findings related to the warmth and belonging climate subscale. Where this study reported that older nurses reported significantly higher feelings of warmth and belonging as compared with their younger colleagues, Santos and Cox (2000) and Santos et al (2003) reported that older nurses had higher levels of interpersonal strain, stress, and burnout. However, these researchers conceptualized and operationalized climate differently. To be more specific, the studies focused on examining the work environment and did not distinguish between environment and climate. In contrast, this study conceptualized the work environment as

a situational factor external to the individuals/nurses, which influences both meaning formation and behavior. Climate operates at a lower level to the environment.

Differences in perception of work climate across nurses from different age cohorts have been attributed to multigenerational value differences (Duchscher & Cowin, 2004; Kupperschmidt, 2000). The study sample, however, did not report any differences in their values. Interpretation of this result will be approached from generational characteristics and family upbringing circumstances.

Generation Xers are termed the “latchkey kids or generation” (e.g. Ulrich, 2001; Kupperschmidt, 2000; Weston, 2001). These children regularly returned from school to empty homes, as mother and father were working or the children had a single-parent family (Cordeniz, 2002). Individuals of this generation rose to be independent (Cordeniz, 2002; Kupperschmidt, 1998; Cane et al, 1999). Generally speaking, they are not good team players; they prefer to get their work done independently (Cordeniz, 2002; Kupperschmidt, 2001; Weston, 2001). Their sense of belonging is related to their family or the friends with whom they have family-like relationships (Cordeniz, 2002; Kupperschmidt, 1998; Cane et al, 1999). That may explain why the age group that included Generation Xers in this study felt that they did not belong to the co-working group.

Boomers, on the other hand, grew up in nuclear families, where mothers stayed home and fathers went to work (Ulrich, 2001). Because Boomers were raised in seemingly more connected families and prefer to work in teams. This may explain why the age group that included Boomers in this study felt more warmth and belonging with their co-workers.

With respect to the administrative support differences, older age group scored significantly higher (higher scores indicate less administrative support) than younger age group. Younger generation need immediate gratification and feedback for their work and contribution (Wieck et al, 2002); they want to be immediately rewarded for their performance, which may not be the case in the hospital setting in general and at a unit level in particular. Boomers respect the chain of command and expect and accept directions from their managers (Yu& Miller, 2005). In contrast, Gen-Xers are not as inclined to follow a regular chain of command. They may be less comfortable in a structured environment, less likely to agree with their managers' expectations, and not as concerned with the formal organization. Significant differences between younger and older nurses' perceptions have to be interpreted with caution; significance could be achieved simply due to large sample size i.e. statistical significance rather than clinical/practical significance.

The Conceptual Model

The study was guided by Personal Investment Theory (PIT). According to PIT, individuals make decisions about their willingness to invest themselves, time, or energy in any particular situation based on these driving forces: the situation, the values and beliefs individuals bring to any particular situation, and the meanings individuals develop about a given situation. PIT emphasizes the role of meaning in directing individuals' behaviors, and this theory conceptualizes meaning as directly antecedent to behavior. In this study the meaning formation process was conceptualized to be enhanced in part by personal/generational and professional values. Furthermore, in this study, a direct relation

between situational factors (nurses' perceptions of their nurse managers' leadership style and climate) and personal investment (nurses' intent to leave in this study) was proposed.

With the exception of Manojlovich and Ketefian (2002), there were no other known nursing studies that examined or used this theory. Manojlovich and Ketefian (2002) conceptualized organizational culture as their situational factor and professionalism as their outcome variable. They did not clarify, however, what they conceptualized as the meaning. The study results indicated that situational factor (culture) explained 16% of the variance in nurses' professionalism. In this study, nurses' perceptions of their nurse managers' leadership style and climate was conceptualized as situational factors, nurses' values – both professional and generational – were conceptualized as the driving forces for the process of meaning formation. Nurses' intent to leave was conceptually considered as the equivalent to personal investment.

Influence of situational factors (nurses' perceptions of their nurse managers' leadership style and climate) on values.

The results of this study partially supported the direct influence of situational factors on generational and professional values. Transformational leadership style was the only situational factor that significantly influenced both professional and generational values (terminal and instrumental) directly. While climate dimension of administrative support was the other situational factor that directly influenced generational values (terminal and instrumental). However, the amount of explained variance in values, was not high enough (3% and 5%). Results do not represent clinical/practical significance. Statistical significance level may be related to the sample size.

Nurses' socialization process may provide a plausible explanation for the trivial impact of situational factors (nurses' perception of their nurse manager's leadership style and climate) on nurses' values. Nurses are professionals who were introduced to the profession and its values through the socialization process; socialization is a contentious process (Wise et al., 1997; Schank & Wise, 1987). Upon joining the workforce in a given location, another socialization process takes place. Feldman (1977, 1981) asserted that the socialization process is composed of three main stages: anticipatory socialization, accommodation, and role management. Each stage has its own indicators that help in making decisions about the employment, and about whether the employee will stay or leave. Anticipatory socialization incorporates all the educational activities that take place before entering the workforce (Feldman, 1977, 1981). The anticipatory stage has two indicators: realism and congruence (Feldman, 1977, 1981). Realism is the extent to which the individual develops an overall idea about the organization and the work at the organization (Feldman, 1977, 1981). Meanwhile, the congruence indicator is the extent to which individuals and expectations are congruent with the organization's resources (Feldman, 1977, 1981).

The second stage in the socialization process is the accommodation stage (Feldman, 1977, 1981). In this stage, the individual is part of the organization and has an opportunity to examine actual work in the organization (Feldman, 1977, 1981). There are four indicators in this stage: initiation to the task, initiation to the group, role identification, and congruence of evaluation (Feldman, 1977, 1981). The initiation to the task indicator is the extent to which the employee establishes his position as an employee and learns new activities and tasks, while initiation to the group is the extent to which the

employee develops friendships and feels accepted and part of a group (Feldman, 1977, 1981). Role identification is the extent to which the employee develops a clear idea about his role and what the required activities and allocated time for it are (Feldman, 1977, 1981). Finally, congruence of evaluation is the degree to which both the employee and his manager agree about the employee's progress, strengths and weaknesses.

The last stage is role management: this is the last stage in the socialization process in which the employee will be able to develop alternatives about the possible problems that he may encounter at work. This stage focuses mainly on how the employee will manage two main forms of conflicts. One is between his/her work and life, while the other form of conflict is between himself/herself and both work demands and group relations (Feldman, 1977, 1981). This stage has two indicators: the first one, resolution of outside conflict, is the extent to which a balance between life and work demands is attained, whereas the second indicator is resolution of conflicting demands, and this is the degree to which conflict with co-workers and work demands are resolved.

These stages, although not specifically stated, take place within the first period of employment. Bauer, Bodner and Tucker (2007) study considered socialization to take place within the first year of employment. If an employee, at any of the previously mentioned stages, was not satisfied or could not meet the employment requirements, the employee may plan on leaving the particular employer. In examining employment characteristics of the study sample, the participants' mean years of experience was 15.6 years with 8 years in the unit. Additionally, the participants' mean score in the anticipated turnover survey was 3.32, which means that they are not planning on leaving their work. Using the socialization process to explain findings, it might be suggested that the nurses

in the examined sample became socialized and embedded in their organizations. Their values were congruent to a great extent with those of their organization; therefore, the influence of situational factor (leadership and climate), although it was significant, was not high. In other words the most significant impact of situational /environmental factors took place prior to the study, within the first years of nurses' employment.

Another plausible explanation for lack of significant impact of situational factors on values may be that values – by definition, are comprised of relatively enduring beliefs about what are desirable and undesirable behaviors. That means that values are characterized by their relative stability. Being able to influence values by a small percentage (e.g. 5% or 3%) may be an acceptable effect given the nature of values. Work place environment, regardless of how strong its culture is, may not change individuals' core values to a great extent.

According to Maehr and Braskamp (1986), experiences from the past as well as perceptions and information from the present moment (situation) help in the process of meaning formation. Consistent with the influence of past experiences, Kupperschmidt (2001) pointed out that early employment experiences shape individuals' beliefs and attitudes about a current position. This study, however, did not examine that part of the model. It might be the case that for the examined population, earlier experiences had more influence in the process of meaning formation as compared to situational factors. Therefore, situational factors in this study did not explain much in the variance of values. Examining the influence of early experience on values requires a longitudinal examination.

Influence of values (meaning) on nurses' intent to leave

The direct impact of values (meaning) on nurses' intent to leave (personal investment) was supported to a small extent. As outlined earlier in chapter two, some studies reported the influence of values on job satisfaction. Although these studies did not examine differences based on the nurses' age cohort, they did find a significant impact of values on job satisfaction. Therefore, it might be assumed that values do not have direct influence on nurses' turnover intentions; instead this relationship is mediated or moderated by job satisfaction, which was not examined in this study.

Irvine and Evans (1995) described turnover as a multistage process that incorporates attitudinal, decisional, and behavioral components. The attitudinal component includes aspects of satisfaction. The decisional component may be interpreted as intent to leave, while the behavioral component is the actual turnover. Satisfaction as mentioned earlier was not measured. Consistent with this explanation, Gurner et al, (1997) reported that values influence turnover indirectly through its influence on job satisfaction.

Direct, indirect and total influence of situational factors and meaning on nurses' turnover intentions

The results of this study supported only the direct influence of climate on nurses' intent to leave. The two climate dimensions explained 27% of the variance on nurses' intent to leave. The influence of climate on nurses' intent to leave is consistent with the findings of Hart and Moore (1989) who reported the relationship between climate and nurses' stability on their units. The significant impact of climate on nurses' intent to leave supports the influential role of climate and is consistent with Snow's (2002) description

that climate is the “feeling in the air”. However, as climate was measured by using a relatively new instrument (given the significant alteration to the original format), further examination by using the modified instrument is required.

The study did not support the direct impact of leadership style on intent to leave. This result is contradictory to Kleinman (2004), who found that the management-by-exception active subscale of the transactional leadership style was significantly correlated with turnover. Kleinman’s results are not consistent with the proposed influence of transformational leadership style on turnover. The insignificant contribution of leadership style in general, and transformational leadership style in particular, with regard to nurses’ intent to leave, was initially surprising.

However, in reviewing some of the frequently used and frequently cited nurses’ turnover models, such as those by Hinshaw, Smeltzer, and Atwood (1987), Price and Mueller (1981), Lucas, et al (1993) and Irvine and Evans (1995), and Borda (1997), leadership style was not one of the components/predictors in many of these models. It has not been until recently, when Taunton, et al (1997) incorporated both Price and Muller’s and Hinshaw, et al’s models and added nurse manager’s characteristics to the developed turnover model. Descriptions of these models were presented earlier in chapter two.

One of the limitations of this study was that the study did not distinguish between nurses who work 12 hours as a morning shift or as a night shift. Nurses’ perceptions of their nurse manager may be different based on the degree of their interaction with the nurse manager. Intuitively, nurses working a 12-hour night shift may be less exposed to their nurse manager as compared with nurses working a 12-hour morning shift. This is supported by Kleinman’s study, which reported that nurses working (7am-7pm & 7am-

3pm) perceived their manager to practice a laissez-faire style less frequently. Slightly more than half the sample in this study worked 12-hour shifts; absence of information about the timing of those 12-hour shifts hindered interpreting this finding to a great extent.

In Boyle et al's (1999) study, leadership style was not a direct predictor for turnover. Instead, leadership style predicted turnover indirectly through its influence on job satisfaction, commitment, and stress. There is abundant literature to support the influence of leadership style on satisfaction, commitment, empowerment, and job stress. Examples for these studies were presented in chapter two. Therefore, it may be that leadership may influence turnover intention indirectly through its influence on climate, satisfaction, or commitment. Consistent with that explanation, in reviewing some of the writings about magnet hospitals (e.g. Kramer, 1988 parts I & II; Buchan, 1994, 1999; Laschinger, Almost & Tuer-Hodes, 2003), leadership style was not included as a factor that directly influenced retention. Rather, it was stressed that the influence of leadership style and specifically a transformational leadership style was responsible in creating a climate of retention. In light of the findings from this study, it is possible that the model may be misspecified.

In conclusion, based on the results of this study as well as the various writings about values, it may be concluded that values are a complex human attribute. One's value system has motivational power and influences behavior (Rokeach, 1973). However, this role is a complex one, and it should be carefully examined. Stereotyping about values and how individuals from a similar age cohort will have a distinguished set of values that differs significantly from values of other age cohorts represents a reductionist approach

which ignores the individual aspect. Each individual is a unique entity, and his/her values are shaped not only by the shared socio-economical and political forces; values are shaped also by one's circumstances of upbringing along with whatever special socio-economical forces are present. Consequently, managers' attention should be directed mainly to the individual nurse rather than the age cohort. Fulfilling this requirement is a challenge to the first line nurse managers. Designing training activities directed toward meeting the individual needs, especially at the early socialization period, may help nurse managers at all levels to effectively manage and establish well-functioning nursing teams.

Limitations and Implications

Limitations

The study used convenience sampling technique. Using this technique limits the generalizability of the results. Furthermore, the sample of this study did not have sufficient representation for nurses from both the Millennial and Silent generations, which may hinder making inferences about these two age cohorts.

Although the researcher attempted to attend all the different staff meetings to introduce the study, not all the nursing staff attended those meetings; thus, the obtained response rate was lower than what was anticipated. Only nurses who attended the meetings and had been informed about the study directly by the researcher may have answered the study's survey, which may introduce some biases. Furthermore, some units were not included in the study due to managers' refusal or not having a manager available at the time of data collection. Therefore the results of the study could reflect nurses who replied and nurses working in the participating units only. These limitations, may also, influence the generalizability of the study findings.

The study questionnaire did not distinguish between nurses who worked 12-hour night (7pm-7am) or day (7am-7pm) shifts. This information is important as it might impact nurses' responses for some of the questionnaire, particularly with regard to managers' leadership style and climate. Another aspect related also to measurement relates to how values were measured. Values in this study were measured by using Rokeach's (1973) value survey, while professional values were measured by using Wise and Schank's (2002) survey, both instruments did not capture some of the previously proposed generational value differences, e.g life balance or loyalty and willingness to work over working hours.

Another limitation is related to measurement issues. First, climate was measured using the LSOCQ, which was factor analyzed by the researcher. Measuring climate by using modified version from LSOCQ may limit comparing the results of this study with other studies which used the same instrument in its nine factors original format. A second measurement limitation relates to measurement of values. The study used values, which was argued to be an essential dimension in meanings individuals attribute to a particular situation. From a measurement perspective, it may be measuring values by using likert scale was not the accurate reflection to what the theory specified as meaning. Furthermore, using likert scale as the response format for Rokeach's values survey instead of its original ranking format may be not sensitive in detecting value differences.

The conceptual model is the last limitation. From a conceptual perspective, although values might be the underpinning determinant to meaning, but meaning may be reflected in another variable/concept that was not measured.

Implications for Nursing Knowledge

In light of earlier studies, this study may be the first study that aimed at examining professional and generational values and differences across nurses representing different age cohorts. The results of this study provide empirical data from the nursing discipline perspective. Thus, the obtained knowledge is more pertinent to nursing, unlike the other writings which were based mainly on personal interviews and anecdotal reports from a managerial perspective.

The nursing literature revealed a significant gap in areas related to nursing values (professional and generational) in general and as compared across age cohorts in particular. Results of this study may help in narrowing those gaps by adding to the nursing body of knowledge. Furthermore, climate is one of the concepts that was frequently overlooked and not clearly defined and measured in nursing. Validating one of the instruments that was used to measure it may present a valid empirically driven tool, which is applicable to the nursing population. Further examination of this instrument is therefore still warranted.

Implications for Nurse Administrators/Practice

Contrary to previous writings, study findings showed that nurses from different age cohorts have similar values. This result asserts that nurse managers, in planning for different staff development and training activities, should focus on the needs of the individual nurse, not the age cohort. Areas of value similarities, rather than differences, should be introduced to nurses. Writings about generational differences may have biased nurses' reactions and created a belief that generational differences exist, which was not supported by the findings of this study.

Although nurse managers' leadership style did not have a significant direct influence in nurses' retention, the pivotal role of leadership style in creating a favorable climate that enhances retention can not be over looked. Thus, training activities for nurse managers that incorporate strategies to meet individuals' needs and to create a more favorable work climate is required.

The influence of work environment (leadership style and climate), although it did not explain a lot of the variance in nurses' values, should not be ignored. Kopperschmidt (2001) pointed out that the early period of employment is very important; thus, nurse administrators should use the opportunity of the early socialization process to engage in a close interaction with the newcomer to identify his/her values and to introduce those of the organization. Periodic evaluations of and feedback about performance and the extent of the nurse's progress in his/her socialization in the organization is warranted.

Implications for Further Research

Further qualitative and quantitative research is warranted to better understand nurses' generational values. From a conceptual perspective, further research is warranted to provide conceptual and empirical clarification for the relationship between professional and generational values and how both or each of them influences nurses' behaviors. As was suggested in the discussion section, tenure in the organization may alter the impact of environment on values. Thus, examining the study model by using a sub-sample of nurses who represent different experience points may help in better understanding the influence of environment on nurses' values.

As a single study can not examine all the possible relations, further examination for values among nurses with different employment characteristics, e.g. hospitals, units, shifts, etc., is required. Personal Investment Theory was the guiding theory for this study, and although it has a lot of potential, it has not been used enough in nursing, so its appropriateness for nursing profession has not been proven. Examining the theory by using other concepts is required to support the applicability of the theory to nursing. This study is the first nursing study to factor analyze Litwin and Stringer's Organizational Climate Questionnaire. Further research using the new factor-analyzed instrument is warranted.

As was discussed earlier Boyle et al (1999) found that leadership style predicted turnover indirectly through its influence on job satisfaction, commitment and stress. In the conceptual model used for this study, nurses' intent to leave was conceptualized to be the direct outcome of leadership style. Perhaps leadership style has indirect effect on nurses' intent to leave and this warrants further research.

APPENDIX A

Number of Distributed Surveys, Returned Surveys by the Unit Categories and Response Rate for the Three Hospitals

Hospital	Distributed surveys	Received surveys	Response rate ^a
Hospital A			
Medical surgical & specially units	240	94	21.9%
ER,OR, CCUs, ICUs	274	93	21.7%
OBGYN & Newborn	64	26	6.0%
Total	578	213	49.6%
Hospital B			
Medical surgical & specially units	131	56	13.1%
ER,OR, CCUs, ICUs	179	52	12.1%
OBGYN & Newborn	37	28	6.5%
Total	347	136	31.7%
Hospital C			
Medical surgical & specially units	78	30	7%
ER,OR, CCUs, ICUs	89	28	6.5%
OBGYN & Newborn	25	21	4.89%
Total	192	79	18.4%

Note: ^a response rate calculated in relation to the total number of returned surveys (N=429). There is one missing value.

Generations at Work

ID:

Q1 Participant gender
Male..... Female.....

Q2 Age

Q3 Participant race

American Indian & Alaska Native.....	<input type="checkbox"/>	Native Hawaiian & other Pacific Islander	<input type="checkbox"/>
White.....	<input type="checkbox"/>	Hispanic.....	<input type="checkbox"/>
Black or African American.....	<input type="checkbox"/>	Other.....	<input type="checkbox"/>
Asian.....	<input type="checkbox"/>	Two or more races.....	<input type="checkbox"/>

Q4 Participant Highest Educational Degree

Diploma Degree.....	<input type="checkbox"/>	BSN.....	<input type="checkbox"/>	DNP/ND.....	<input type="checkbox"/>
Associate Degree.....	<input type="checkbox"/>	Master.....	<input type="checkbox"/>	PhD.....	<input type="checkbox"/>

Q5 Please indicate your years of experience as a RN

Q6 Are you working in

Medical /surgical/ other specialty units	<input type="checkbox"/>	ER /OR /CCU/ Critical care units	<input type="checkbox"/>	Newborn /OBGYN.....	<input type="checkbox"/>
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Q7 How long you have been working in your current unit?

Q8 How long you have been working with the current nurse manager?

If you have been working in the current unit for less than 3 months period or with the current unit nurse manager for less than 3 months period, do not proceed. Please mail the survey back. Thank you.....

Q9 How many hours do you typically work in a week?

Q10 Please indicate your typical working shift (shift that you work the majority of your time)

7Am - 3Pm.....	<input type="checkbox"/>	12 hrs shift	<input type="checkbox"/>	Other.....	<input type="checkbox"/>
3Pm -11Pm.....	<input type="checkbox"/>	8Am - 5PM.....	<input type="checkbox"/>		
11Pm - 7Am.....	<input type="checkbox"/>	No specific shift.....	<input type="checkbox"/>		

Q11 Are you

Full time nurse	<input type="checkbox"/>	Part time nurse	<input type="checkbox"/>	PRN.....	<input type="checkbox"/>
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If you work less than 20 hrs/week, do not proceed. Please mail the survey back.Thank you.....

Using the thirty-six descriptive statements. Judge how frequently each statement describe your unit nurse manager. Use the following rating scale.

0 Not at all 1 Once in a while 2 Sometimes 3 Fairly often 4 Frequently if not always

Q12		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Provides me with assistance in exchange for my efforts.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q13		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Re-examines critical assumptions to question whether they are appropriate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q14		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Fails to interfere until problems become serious.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q15		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Focuses attention on irregularities, mistakes, exceptions and deviations from standards.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q16		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Avoids getting involved when important issues arise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	0	1	2	3	4
Q17					
Talks about his/her most important values and beliefs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0 Not at all	1 Once in a while	2 Sometimes	3 Fairly often	4 Frequently if not always	
Q18	0	1	2	3	4
Is absent when needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q19	0	1	2	3	4
Seeks differing perspectives when solving problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q20	0	1	2	3	4
Talks optimistically about the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q21	0	1	2	3	4
Instills pride in me for being associated with him/her	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q22	0	1	2	3	4
Discusses in specific terms who is responsible for achieving performance targets.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q23	0	1	2	3	4
Waits for things to go wrong before taking action	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q24	0	1	2	3	4
Talks enthusiastically about what needs to be accomplished.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q25	0	1	2	3	4
Specifies the importance of having a strong sense of purpose.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q26	0	1	2	3	4
Spends time teaching and coaching.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q27	0	1	2	3	4
Makes clear what one can expect to receive when performance goals are achieved.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q28	0	1	2	3	4
Shows that he/she is firm believer in if ain t broke,don't fix it.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q29

	0	1	2	3	4
Goes beyond self-interest for the good of the group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

0 Not at all 1 Once in a while 2 Sometimes 3 Fairly often 4 Frequently if not always

Q30		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Treats me as an individual rather than just as a member of a group.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q31		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Demonstrates that problems must become chronic before taking action.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q32		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Acts in ways that builds my respect.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q33		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Concentrates his/her full attention on dealing with mistakes, complaints and failures.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q34		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Considers the moral and ethical consequences of decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q35		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Keeps track of all mistakes.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q36		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Displays a sense of power and confidence.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q37		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Articulates a compelling vision of the future.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q38		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Directs my attention toward failures to meet standards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q39		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Avoids making decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q40		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Considers me as having different needs, abilities, and aspirations from others.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

0 Not at all 1 Once in a while 2 Sometimes 3 Fairly often 4 Frequently if not always

Q41		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Gets me to look at problems from many different angles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q42		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Helps me to develop my strengths	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q43		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Suggests new ways of looking at how to complete assignment.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q44		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Delays responding to urgent questions.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q45		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Emphasizes the importance of having a collective sense of mission.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q46		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Expresses satisfaction when I meet expectations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q47		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Expresses confidence that goals will be achieved	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q48		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
	Is effective in meeting my job-related needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Each one of the following statements describe aspects of your unit work environment. Please check the response that closely indicates your degree of agreement/ disagreement with each statement.

Q49		<i>Definitely Agree</i>	<i>Inclined to Agree</i>	<i>Inclined to Disagree</i>	<i>Definitely Disagree</i>
	The jobs in this unit are clearly defined and logically structured.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q50					
	In this unit it is sometimes unclear who has the formal authority to make a decision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Definitely Agree</i>	<i>Inclined to Agree</i>	<i>Inclined to Disagree</i>	<i>Definitely Disagree</i>
Q51	The policies and organization structure of the unit have been clearly explained.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q52	Red -tape is kept to a minimum in this unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q53	Excessive rules, administrative details, and red- tape make it difficult for new and original ideas to receive consideration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q54	Our productivity sometimes suffers from lack of organization and planning.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q55	In some of the projects I've been on, I have not been sure exactly who my boss was	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q56	Our unit manager isn't so concerned about formal organization and authority, but concentrates instead on getting the right people together to do the job... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q57	We don't rely heavily on individual judgment in this unit; almost every thing is double-checked.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q58	Around here nurse manager resents your checking every thing with him/her; if you think you've got the right approach you just go ahead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q59	Supervision in this unit is mainly a matter of setting guidelines for your subordinates; you let them take responsibility for the job.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q60	You won't get ahead in this unit unless you stick your neck out and try things on your own sometimes.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q61	Our philosophy emphasizes that people should solve their problems by themselves.. ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Definitely Agree</i>	<i>Inclined to Agree</i>	<i>Inclined to Disagree</i>	<i>Definitely Disagree</i>
Q62	There are an awful lot of excuses around here when somebody makes a mistake.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q63	One of the problems in this unit is that individuals won't take responsibility.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q64	We have a promotion system here that helps the best man to rise to the top.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q65	In this unit the rewards and encouragements you get usually outweigh the threats and the criticism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q66	In this unit people are rewarded in proportion to the excellence of their job performance.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q67	There is a great deal of criticism in this unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q68	There is not enough reward and recognition given in this unit for doing good work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q69	If you make mistake in this unit you will be punished.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q70	The philosophy of our unit manager is that in the long run we get ahead fastest by playing it slow, safe and sure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q71	Our service has been built up by taking calculated risks at the right time.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q72	Decision making in this unit is too cautious for maximum effectiveness.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q73	Our nurse manager is willing to take a chance on a good idea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Definitely Agree</i>	<i>Inclined to Agree</i>	<i>Inclined to Disagree</i>	<i>Definitely Disagree</i>
Q74	We have to take some pretty big risks occasionally to keep ahead of the competition in the service we're in.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q75	A friendly atmosphere prevails among the people in this unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q76	This unit is characterized by relaxed, easy-going working climate.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q77	It's very hard to get to know people in this unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q78	People in this unit tend to be cool and aloof toward each other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q79	There is a lot of warmth in the relationships between nurse manager and nurses in this unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q80	You don't get much sympathy from higher-ups in this unit if you make a mistake.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q81	Nurse manager makes an effort to talk with you about your career aspiration within the unit.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q82	People in this unit really don't trust each other enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q83	The philosophy of our nurse manager emphasizes the human factor, how people feel,etc.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q84	When I'm on a difficult assignment I can usually account on getting assistance from my unit manager and co-workers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q85	In this unit we set very high standards for performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q86	Our unit manager believes that no job is so well done that it couldn't be done better.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Definitely Agree</i>	<i>Inclined to Agree</i>	<i>Inclined to Disagree</i>	<i>Definitely Disagree</i>
Q87	Around here there is a feeling of pressure to continually improve our personal and group performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q88	Unit manager believes that if people are happy, productivity will take care of itself.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q89	To get ahead in this unit it's more important to get along than it is to be a high producer... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q90	In this unit people don't seem to take much pride in their performance.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q91	The best way to make a good impression around here is to steer clear of open arguments and disagreements.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q92	The attitude of our unit manager is that conflict between competing units and individuals can be very healthy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q93	We are encouraged to speak our minds, even if it means disagreeing with our superiors.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q94	In unit meetings the goal is to arrive at a decision as smoothly and quickly as possible... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q95	People are proud of belonging to this unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q96	I feel that I'm a member of a well functioning team.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q97	As far as I can see, there isn't very much personal loyalty to the unit... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q98	In this unit people pretty much look out for their own interests.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Indicate the degree of importance of the following value statements relative to your practice. Please check the degree of importance. (1=not important to 5= most important) to each statement

1=Not Important 2=Somewhat Important 3=Important 4=Very Important 5= Most Important

Q99		1	2	3	4	5
Engage in on-going self-evaluation... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q100		1	2	3	4	5
Request consultation/collaboration when unable to meet patient needs.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q101		1	2	3	4	5
Protect health and safety of the public.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q102		1	2	3	4	5
Participate in public policy decisions affecting distribution of resources.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q103		1	2	3	4	5
Participate in peer-review.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q104		1	2	3	4	5
Establish standards as a guide for practice.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q105		1	2	3	4	5
Promote and maintain standards where planned learning activities for students take place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q106		1	2	3	4	5
Initiate actions to improve environments of practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q107		1	2	3	4	5
Seek additional education to update knowledge and skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q108		1	2	3	4	5
Advance the profession through active involvement in health related activities.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1=Not Important 2=Somewhat Important 3=Important 4=Very Important 5= Most Important

Q109		1	2	3	4	5
Recognize role of professional nursing associations in shaping health care policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q110		1	2	3	4	5
Promote equitable access to nursing and health care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q111		1	2	3	4	5
Assume responsibility for meeting health needs of the culturally diverse populations.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q112		1	2	3	4	5
Accept responsibility and accountability for own practice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q113		1	2	3	4	5
Maintain competency in area of practice.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q114		1	2	3	4	5
Protect moral and legal rights of patients.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q115		1	2	3	4	5
Refuse to participate in care if in ethical opposition to own professional values.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q116		1	2	3	4	5
Act as a patient advocate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q117		1	2	3	4	5
Participate in nursing research and/or implement research findings appropriate to practice.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q118		1	2	3	4	5
Provide care without prejudice to Patients of varying lifestyles.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q119		1	2	3	4	5
Safeguard patient's right to privacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1=Not Important 2=Somewhat Important 3=Important 4=Very Important 5= Most Important

Q120	Confront practitioners with questionable or inappropriate practice.....	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q121	Protect rights of participants in research	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q122	Practice guided by principles of fidelity and respect for person... ..	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q123	Maintain confidentiality of patient	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q124	Participate in activities of professional nursing associations.....	1	2	3	4	5
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This questionnaire is used to describe general values. We acknowledge that the stated values are important. However, each value has a different degree/level of importance in your life. Please check the box that best describe the degree of importance of the stated value in your life. Selecting "Not Important" (1) means that the stated value is "relatively" not important in your life. Selecting "Most Important" (5) means that the stated value is "relatively" the most important in your life.

Q125	A Comfortable life (a prosperous life)	<i>Not Important</i> (1)	<i>Somewhat Important</i> (2)	<i>Important</i> (3)	<i>Very Important</i> (4)	<i>Most Important</i> (5)
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q126	An exciting life (a stimulating, active life)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q127	A sense of accomplishment (lasting contribution)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q128	A world at peace (free of war and conflict).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Not Important (1)</i>	<i>Somewhat Important (2)</i>	<i>Important (3)</i>	<i>Very Important (4)</i>	<i>Most Important (5)</i>
Q129	A world of beauty (beauty of nature and art).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q130	Equality (brotherhood equal opportunity for all).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q131	Family security (taking care of loved ones)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q132	Freedom (independence, free choice).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q133	Happiness(contentedness).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q134	Inner harmony (freedom from inner conflict).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q135	Mature love (sexual and spiritual intimacy).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q136	National security (protection from attack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q137	Pleasure (an enjoyable, leisurely life).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q138	Salvation (saved, eternal life)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q139	Self-respect (self-esteem)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q140	Social recognition (respect, admiration)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q141	True friendship (close companionship).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q142	Wisdom (a mature understanding of life)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q143	Ambitious (hard- working, aspiring)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q144	Broadminded (open- minded).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		<i>Not Important (1)</i>	<i>Somewhat Important (2)</i>	<i>Important (3)</i>	<i>Very Important (4)</i>	<i>Most Important (5)</i>
Q145	Capable (competent, effective)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q146	Cheerful (lighthearted, joyful)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q147	Clean (neat, tidy)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q148	Courageous (standing up for your beliefs).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q149	Forgiving (willing to pardon others)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q150	Helpful (working for the welfare of others)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q151	Honest (sincere, truthful)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q152	Imaginative (daring, creative)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q153	Independent (self-reliant, self sufficient).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q154	Intellectual (intelligent, reflective)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q155	Logical (consistent, rational).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q156	Loving (affectionate, tender).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q157	Obedient (dutiful, respectful)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q158	Polite (courteous, well mannered)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q159	Responsible (dependable, reliable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q160	Self-controlled (restrained, self-disciplined)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For each item below, check the appropriate response. Be sure to use the full range of responses (Agree strongly to Disagree Strongly). Response options are:

AS = Agree Strongly
MA= Moderately Agree
SA= Slightly Agree
U= Uncertain
SD= Slightly Disagree
MD= Moderately Disagree
DS= Disagree Strongly

Q161 AS MA SA U SD MD DS
 I plan to stay in my position awhile

Q162 AS MA SA U SD MD DS
 I am quite sure I will leave my position in the foreseeable future...

Q163 AS MA SA U SD MD DS
 Deciding to stay or leave my position is not a critical issue for me at this point in time.....

Q164 AS MA SA U SD MD DS
 I know whether or not I'll be leaving this agency within a short time

Q165 AS MA SA U SD MD DS
 If I got another job offer tomorrow, I would give it serious consideration.....

Q166 AS MA SA U SD MD DS
 I have no intentions of leaving my present position.....

Q167 AS MA SA U SD MD DS
 I've been in my position about as long as I want to.

Q168 AS MA SA U SD MD DS
 I am certain I will be staying here awhile.....

Q169 AS MA SA U SD MD DS
 I don't have any specific idea how much longer I will stay.....

AS= Agree Strongly
MA= Moderately Agree
SA= Slightly Agree
U= Uncertain
SD= Slightly Disagree
MD= Moderately Disagr
DS= Disagree Strongly

Q170	AS	MA	SA	U	SD	MD	DS
I plan to hang on to this job awhile.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q171	AS	MA	SA	U	SD	MD	DS
There are big doubts in my mind as to whether or not I will really stay in this agency... ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q172	AS	MA	SA	U	SD	MD	DS
I plan to leave this position shortly.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q173 Based on your date of birth, do you consider your self

<i>Silent Generation (1922-1943).....</i>	<input type="checkbox"/>	<i>Generation -X (1961-1980).....</i>	<input type="checkbox"/>
<i>Baby Boomer (1944 - 1960).....</i>	<input type="checkbox"/>	<i>Millennial (born after 1980).....</i>	<input type="checkbox"/>

Thank you for your valuable participation.
A \$5 Target gift card will be mailed directly to you
immediately after receiving the completed survey.

APPENDIX B-2

Generations at Work Study

**Dear Colleague
You are almost done**



Enjoy a piece of candy &



**Please proceed to the second half
Your participation is highly appreciated
Thank you,**

APPENDIX C

*Pilot Study Descriptive Statistics for Professional Values and Generational Values**(Terminal and Instrumental)*

Instrument	Minimum	Maximum	Mean	Median	SD	95% CI
Terminal values	3.94	5.00	4.5	4.6	.35	4.36- 4.67
Instrumental values	3.78	5.00	4.49	4.56	.4	4.31- 4.67
Professional values	2.35	4.92	4.1	4.23	.55	3.88- 4.36

APPENDIX D

Dear Colleague:

My name is Amany Farag. As a PhD candidate at Frances Payne Bolton School of Nursing, Case Western Reserve University, I am investigating differences among nurses of different age groups, and how these differences influence nurses' perceptions to their work environment and their future plans. You were selected as a possible participant because you are a **full time, part time or PRN, who works for at least 20 hours/week; and because you have been working in your current unit with your current nurse manager for at least three months.** If you are an agency nurse, part time nurse or PRN who works for less than 20 hours/week or you have been working in the current unit and with the current nurse manager for less than three months, please **do not complete the survey** and please mail it back uncompleted by using the stamped envelope provided.

Background information:

The current healthcare environment is characterized by the presence of four nursing generational cohorts. Nursing literature suggest the presence of differences among nurses representing different age cohorts. However there is lack of empirical evidence to support or to contradict this suggestion. Thus the purposes of this study are:1) to examine whether there is differences among nurses from different age cohorts and 2) whether nurses from diverse age cohort perceive their work environment and plan for their future career differently.

Procedures:

If you agree to participate in study, you will be asked to complete a survey that will take about 20-30 minutes. The survey will be placed in your hospital mailbox. Completion of the survey will indicate your **approval** to participate in the study. After completing the survey, you can mail it directly to the researcher by using the included pre-stamped and addressed envelope to the following address: **Amany Farag, Frances Payne Bolton School of Nursing, Case Western Reserve University, 10900 Euclid Ave, Cleveland, OH 44106.** One week after distributing the surveys a reminder card thanking those who have completed and returned the surveys and reminding those who have not returned the survey, will be placed in your mail boxes. Another week after distributing the reminder cards, reminder flyers will be posted in your mail room, lounge and conference room. By the third week, final flyers specifying the last date for completing and mailing the survey will be placed in the previously specified locations.

Risks and benefits to being in the study:

There is no risk associated with being in the study. There is no direct benefit to you from participating in the study. However, your response is important to better understand the nursing workforce in acute care settings.

Compensation:

You will receive a \$5 Target gift certificate that will be directly mailed to you after your completed survey has been received. Your name and address will be used **only** to mail the gift certificate to you. **Your name and address will be destroyed after mailing the gift card.** Therefore, please write your complete address accurately and clearly.

Confidentiality:

Your responses to the study surveys will be kept confidential. Your name will not be required. Different identification numbers will be assigned to each survey. There will not be a link between your name and your responses. Research records will be kept in a locked file, and access will be limited to the researchers, the University Review Board that is responsible for protecting human participants, and regulatory agencies. All documents will be destroyed three years after completion of the study.

Voluntary nature of the study:

Your participation in the study is voluntarily. If you chose to participate or not to participate in the research, it will not affect your current status or any potential privileges. There is no penalty or loss of benefit if you chose not to participate. Also, you can withdraw from the study at any point in time.

Contacts and questions:

This research is conducted by Amany Farag, Ph D. (candidate) at Frances Payne Bolton School of Nursing. If you have any further concerns or questions you can either contact me at 216-952-9973, or by e-mail: aaf9@case.edu; or you may contact the responsible investigator Susan Tullai-McGuinness, PhD, RN at 216-368-6335, or by e-mail: sxt32@case.edu

If you would like to talk to person(s) other than the researcher about; (1) questions, concerns or complaints regarding this study, (2) research participant rights, (3) other human subjects' issues, please contact Case Western Reserve University's Institutional Review Board at (216) 368-6925 or write: Case Western Reserve University; Institutional Review Board; 10900 Euclid Ave.; Cleveland, OH 44106-7230.

Thank You for your time and for your valuable participation!

Amany Farag, RN, PhD (candidate)
Frances Payne Bolton School of Nursing
Case Western Reserve University
10900 Euclid Ave
Cleveland, OH 44106

APPENDIX E



Frances Payne Bolton School of Nursing
Case Western Reserve University
10900 Euclid Ave
Cleveland, OH 44106

Dear Colleague:

Last week, a survey entitled “Generations at Work” was placed in your mail box. If you have already completed and returned the survey, please accept my sincere thanks. If not, please complete the survey and mail it back to the researcher at the address listed above. Your valuable opinions are much appreciated. It is only by asking professional people like you that I can better understand how nurses from different age groups perceive their work environment and plan for the future of their nursing carrier.

If you did not receive a questionnaire, or if it has been misplaced, please contact me, at 216-952-9973, or e-mail me at aaf9@case.edu and I will provide you with another copy.

Thank you for your time, and effort

Amany Farag
RN, PhD (candidate)

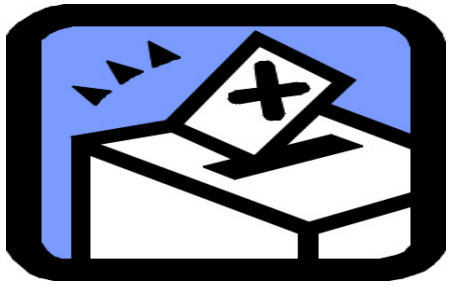
APPENDIX F

Generations at Work Study

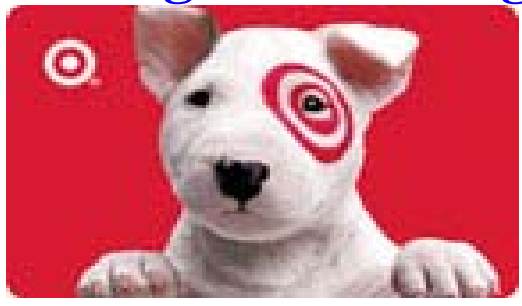
We are waiting for your opinion; you can do it



Your colleagues did it
You can do it TOO!!



Your gift is waiting for you,



APPENDIX G

Generations at Work Study
LAST CALL



Dear Colleagues

**The Last Day for Mailing
The Completed Survey is**

06/15/2007

**Thank You for Your
Participation!**

**Amany Farag RN, PhD candidate
(216) 952-9973, aaf9@case.edu**

APPENDIX H

Generations at Work Study



**Amany Farag RN, PhD candidate
Principal Investigator**

As a token of my appreciation a \$5 Target gift card will be mailed to you after receiving the completed survey. Please write your name and address either on this form or on the return envelop. Your name and address will be separated from your data and will be shredded after mailing the gift card

Thank your for your time!

Name: -----

Address:-----

APPENDIX I-1

Descriptive Statistics for Professional Values, Terminal and Instrumental Values for the Four Age Cohorts (Silent, Boomers, Gen-Xers and Millinneals)

Age groups	Mean	SD	95% CI	Skewness	Kurtosis
Professional values					
Silent generation	4.1	.46	3.7-4.6	-.61	-.58
Baby Boomers	3.9	.48	3.8-4.0	-.86	3.2
Gen-Xers	3.8	.47	3.8-3.9	-.16	-.46
Millinneals	3.9	.47	3.7-4.1	-.9	2.6
Terminal generational values					
Silent generation	4.1	.58	3.5-4.6	-.34	-1.8
Baby Boomers	4.2	.54	4.1-4.3	-.20	-.31
Gen-Xers	4.2	.54	4.1-4.3	-.24	-.21
Millinneals	4.3	.45	4.1-4.5	.33	-.51
Instrumental generational values					
Silent generation	3.9	.61	3.3-4.5	-.44	-.65
Baby Boomers	4.0	.49	3.9-4.4	-.20	-.02
Gen-Xers	3.9	.54	3.9-4.0	.07	-.58
Millinneals	4.0	.50	3.8-4.3	.22	-.94

APPENDIX I-2

Descriptive Statistics for the Nurses' Four age cohorts (Silent, Boomers, Gen-Xers and Millinneys) Perceptions to their Nurse Managers' Three Main Leadership Styles

Age groups	Mean	SD	95% CI	Skewness	Kurtosis
Transformational leadership style					
Silent generation	2.2	1.15	1.2-3.3	-.05	-.2.1
Baby Boomers	2.5	.83	2.4-2.6	-.48	-.45
Gen-Xers	2.3	.90	2.2-2.5	-.58	-.40
Millinneys	2.5	.83	2.1-2.8	-.44	-.38
Transactional leadership style					
Silent generation	2.3	1.0	1.3-3.2	.37	-1.1
Baby Boomers	2.3	.68	2.2-2.4	-.19	-.23
Gen-Xers	2.2	.69	2.1-2.3	-.17	-.10
Millinneys	2.4	.65	2.1-2.7	.22	.81
Passive avoidant leadership style					
Silent generation	1	.85	.1-1.7	.49	-.64
Baby Boomers	1.1	.79	1.0-1.3	.41	-.73
Gen-Xers	1.3	.95	1.1-1.4	.65	-.25
Millinneys	1.1	.95	.76-1.5	.36	-1.23

APPENDIX I- 3

Descriptive Statistics for the Nurses' Four Age Cohorts (Silent, Boomers, Gen-Xers and Millinneals) Perceptions to their Two Main Unit Climate Dimensions

Age groups	Mean	SD	95% CI	Skewness	Kurtosis
Warmth and belonging climate					
Silent generation	1.9	.55	1.4-2.4	.62	-.81
Baby Boomers	2.0	.55	1.9-2.1	.14	-.55
Gen-Xers	2.2	.57	2.1-2.2	.31	.07
Millinneals	2.2	.47	2.0-2.4	.02	.01
Administrative support climate					
Silent generation	2.2	.64	1.6-2.8	1.0	1.2
Baby Boomers	2.3	.51	2.2-2.4	.14	-.65
Gen-Xers	2.5	.49	2.4-2.5	.11	.21
Millinneals	2.4	.51	2.2-2.6	.07	-.48

APPENDIX J

Descriptive Statistics for Leadership Styles and Climate for Nurses Representing the Two Age Groups (Silent and Boomers vs. Gen-Xers and Millennials)

Age groups	Mean	SD	95% CI	Skewness	Kurtosis
Transformational leadership					
Silent & Boomers	2.53	.83	2.40- 2.67	-.41	-.60
Gen-Xers & Millennials	2.39	.89	2.27- 2.51	-.54	-.39
Transactional leadership					
Silent & Boomers	2.32	.71	2.21- 2.44	-.13	-.31
Gen-Xers & Millennials	2.29	.69	2.20- 2.38	-.15	-.14
Passive- Avoidant					
Silent & Boomers	1.17	.77	1.04- 1.30	.38	-.70
Gen-Xers & Millennials	1.29	.95	1.16- 1.41	.64	-.30
Warmth and belonging					
Silent & Boomers	2.00	.54	1.91- 2.0	.13	-.56
Gen-Xers & Millennials	2.20	.55	2.21- 2.27	.33	.16
Administrative Support					
Silent & Boomers	2.33	.51	2.24- 2.41	.13	-.66
Gen-Xers & Millennials	2.50	.50	2.44- 2.57	.06	.02

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