# A COMPARISON OF NURSES' PERCEPTIONS OF THE CULTURE OF NURSING IN SUBURBAN COMMUNITY AND URBAN ACADEMIC HOSPITALS

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

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COLLEGE OF NURSING

BY

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To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Jacqueline J. Anderson entitled "A Comparison of Nurses' Perceptions of the Culture of Nursing in Suburban Community and Urban Academic Hospitals." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Nursing Science.

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ABSTRACT

JACQUELINE J. ANDERSON

A COMPARISON OF NURSES' PERCEPTIONS OF THE CULTURE OF NURSING IN SUBURBAN COMMUNITY AND URBAN ACADEMIC HOSPITALS

MAY 2009

The purpose of this research was to explore the differences in the perceptions of the culture of nursing of nurses in suburban community hospitals when compared to nurses in urban academic hospitals. A secondary goal was to identify potential demographic variables of the nurses or the hospitals that could influence the culture of nursing, regardless of the setting. This descriptive exploratory study used an across-methods triangulation design to compare the culture of nursing in suburban academic hospitals and urban academic hospitals.

The theoretical framework used for this study was Leininger's Culture Care Diversity and Universality Theory and the Sunrise Model. The quantitative data were collected using a demographic questionnaire and the Organizational Culture Assessment Instrument (OCAI). The qualitative data were collected using open-ended questions. A convenience sample of 164 nurses from the 4 suburban community hospitals and 187 nurses from the 2 urban academic hospitals completed the instruments.

The suburban community nurses had the following mean scores: (a) 28.83 for the clan culture, (b) 25.57 for the adhocracy culture, (c) 26.68 for the hierarchy culture, and (d) 26.33 for the market culture. The urban academic nurses had the following mean scores: (a) 28.03 for the clan culture, (b) 26.54 for the adhocracy culture, (c) 26.98 for the hierarchy culture, and (d) 27.10 for the market culture. The ANOVA substantiated this finding with no statistically significant difference in the mean scores of the four culture types.

Regression analysis was used to identify potential demographic variables of the nurses and the hospitals that may influence the culture type scores on the OCAI, regardless of the setting. Two variables, ethnic origin of the nurses and highest degree held in nursing were identified as factors influencing the culture scores, but the results were not strong enough to suggest a relationship. The qualitative analysis of the written answers to the open-ended questions revealed three themes: (a) relationships, (b) professionalism and empowerment of nursing, and (c) commitment to quality and patient safety. The themes and specific comments shared supported the ranking of the mean scores in each setting.

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# CHAPTER I

## INTRODUCTION

The study of culture in corporations has been present in the business literature for nearly 30 years. Culture is defined as the shared understanding learned by a group over time that allows the group to function (Sathe, 1983; Schein, 1983, 1986, 1993, 1996). Culture is characterized by those actions that are automatic or performed without conscious thought. Wilkins (1983) defined culture as "the taken-for-granted and shared meanings that people assign to their social surroundings" (p.25). Culture becomes powerful because it is the way the employees see how to behave without even actively thinking about it. It becomes second nature.

Corporate culture has been found to have an impact on a business's long term financial performance (Kotter & Heskett, 1992; Sovie, 1992). Studies by Heskett, Sasser, and Schlesinger (1997) and Rucci, Kirn, and Quinn (1998), linked the status of the workforce and the quality of interactions with customers to predictable and measurable financial outcomes. This same understanding is required of the culture of nursing in a hospital. The culture of nursing in hospitals can be a strong culture but may no longer be functioning effectively. Decreased nursing and patient satisfaction, increased nursing turnover, and lower quality performance are symptoms of an ineffective culture.

Particularly susceptible to culture is registered nurse (RN) turnover. Turnover is a significant issue both regionally and nationally. Statewide in Texas, the annual RN turnover increased to 18.2% in 2006 from 15.3% in 2004. National data reveals an average RN turnover rate of 21.3% (Texas Department of State Health Services, 2007-2008).

A 2002 report of hospitals in the Gulf Coast region of southeast Texas reported a median RN turnover rate of nearly 25% (The WorkSource, 2007). In 2006, this median rate had declined to 12%. The Gulf Coast area is unique with Houston being home to five Magnet hospitals. Additionally, the Gulf Coast regional report asked nurses about intent to leave. The median rate reported was 15%. The number of nurses who expressed intent to leave within the next year ranged from 3.3 – 25%.

A cultural understanding provides crucial information to the nursing leadership in an organization. In order to impact the problematic outcomes, nursing leadership will need to identify and assist nursing staff in unlearning the cultural assumptions and automatic behaviors that are ineffective. Through clear visioning and strategic planning, the unacceptable is replaced with desired assumptions and actions. The impact on quality and financial outcomes is measurable and results are shared throughout the organization.

## Problem of Study

An analysis of the culture reveals how nurses really work in the hospital. Nurses, who are successful in the community suburban hospitals, do not

necessarily have the same success in the urban academic setting. The complexity of the urban academic hospital could be overwhelming to the community suburban experienced nurse. Conversely, the nurse experienced in the urban academic setting faces challenges in the community setting. The lack of readily available support services and physicians around the clock may drive the nurse in the community setting to be more self-reliant and independent in her thinking. Identification of differences between the two cultures is critical to understanding how nursing develops in these different environments. The competition for nurses in these hospitals requires that we understand what attracts and keeps nurses in each setting. While every hospital and organization has unique aspects to its culture and the nursing culture within it, the geographic location and type of setting, can influence the culture of nursing. This cultural understanding provides important information to those leaders attempting to direct and shape the culture of nursing at their hospital in order to impact financial and quality outcomes. This cultural analysis will also aid nurses in selecting the hospital setting in which they will fit best. The purpose of this study was to explore the differences of the culture of the suburban community nurses when compared to the culture of the urban academic nurses.

## Rationale for the Study

Leininger (1994) identified values common to all nurses in the United States (U.S.). She also identified differences in the cultures of nurses working in different geographical areas of the U.S. Research conducted by Coeling (1992)

described the importance of finding the "right fit" for a nurse who is job hunting. She described cultural differences related to five critical areas: (a) group support, (b) helpfulness of nurses, (c) pace of work, (d) opportunities for professional growth and development, and (e) independent thinking. The success of the nurse in a particular unit or hospital is dependent on the individual and organization congruency in these five areas. A good match is linked to nursing retention and higher nursing satisfaction. Similar to Leininger's regional differences in culture, Coeling described differences at the hospital and unit level.

Research has linked nursing culture to retention of staff and improved quality and patient outcomes (Aiken, Havens, & Sloane, 2000; Cavanaugh, 1990; Curran & Miller, 1990; Gifford, Zammuto, & Goodman, 2002; Keuter, Byrne, Voell, & Larson, 2000; Kramer & Schmalenberg, 2004b; Larrabee, Janney, Ostrow, Withrow, Hobbs, & Burant, 2003; McClure, Poulin, Sovie, & Wandelt, 2002; McNeese-Smith, 1999; Rizzo, Gilman, & Mersmann, 1994; Tumulty, Jernigan, & Kohut, 1994; Urden, 1999). Nurses' perceptions of the culture, as identified by key characteristics such as autonomy, team cohesion, and work load, directly impacted intent to leave and nurse job satisfaction.

Studies begun in the 1980s and continuing today, demonstrate the significant impact of Magnet nursing cultures, as a type of nursing culture, on quality nursing care and improved patient outcomes (Aiken, 2002; Kramer & Schmalenberg, 1988a, 1988b, 2002, 2004a, 2004b, 2004c, 2004d; McClure et al., 2002). These studies evaluated an individual hospital or unit culture, or the

culture of a type of patient care unit across multiple hospitals. Few direct comparisons of nursing cultures in different settings were found. There was not sufficient information to determine if a difference exists. The majority of the work that has been done was in the academic setting. Little research has been done in the community setting.

## Theoretical Framework

The Culture Care Diversity and Universality Theory developed by Madeleine Leininger provided the theoretical framework for this study. Leininger stated that the purpose in developing a transcultural theory of nursing was to create a foundation that provided the nurse with the knowledge and skills to provide care that is in alignment with the values of the patient's culture (Leininger, 1991). The roots of the theory are taken from her interest and training in anthropology. Leininger defined culture as the "learned, shared and transmitted knowledge of values, beliefs, norms and lifeways of a particular group that guides an individual or group in their thinking, decisions, and actions in patterned ways" (p. 60). Care and the act of caring are fundamental to nursing worldwide. Leininger defined care as aid to others in times of real or anticipated need that lessens or potentially improves a human condition or lifeway, even impending death.

Nursing care that is culturally congruent requires an awareness of the culture of the client. It is the blending of what Leininger describes as generic care and professional care. The generic care reflects the emic or insider

knowledge of the client culture regarding care and is characterized by home remedies and folklore traditions of care. Professional care is the etic care or care provided from outside the client culture. This care represents the professional training and education that nurses receive in school.

There are three phases of transcultural nursing knowledge that allow the nurse to grow in the ability to provide this blended or culturally congruent care. The first phase is characterized by cultural awareness. During this phase, the professional nurse becomes aware and develops an increased sensitivity to the differences that exist between client and nursing cultures. In the second phase, the nurse uses the theory to discover and explain transcultural nursing through research. Finally in the third phase, the nurse applies the research findings to improve care for those from different client cultures.

Transcultural nursing care that is culturally congruent is provided in three ways. Culture care preservation and maintenance is the first approach. These nursing care actions retain or preserve the basic care values of a culture that aid in maintaining well-being. The second method is culture care accommodation and negotiation. These are nursing care actions that help people of a certain culture adapt or change behaviors to achieve optimal health outcomes. The third way to provide care is through culture care repatterning or restructuring. These nursing care actions are focused on modifying cultural norms to develop new norms for improving health and well-being. These changes are made while being sensitive to the cultural values and beliefs of the client.

The scope of transcultural nursing begins with the global human culture and may be applied down to the level of a group or individual culture. Leininger's theory provides assumptions for each level of culture. In Leininger's Sunrise Model to Depict Dimensions of the Theory of Culture Care Diversity and Universality (Figure 1), the rising sun in the model shows how care in culture is developed. It begins in the overall worldview and the culture is ultimately shaped by the cultural and social structure dimensions identified. The influential dimensions are classified as technological, religious, social, political and legal, economic and educational factors. The understanding of a culture according to these dimensions leads to the ability to provide care for a community, group, organization or individual that is culturally congruent.

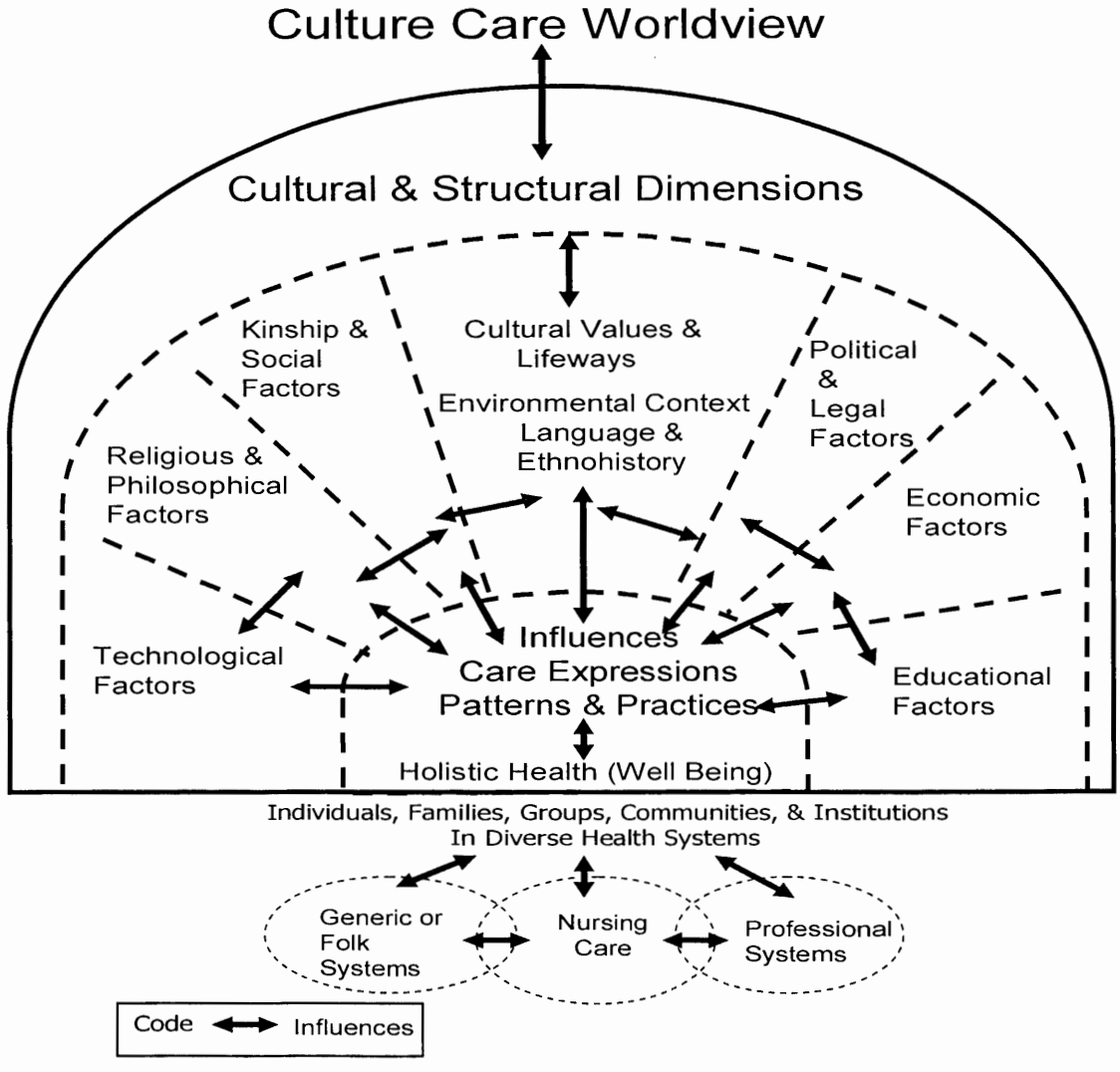


*Figure 1.* Leininger's Sunrise Model to depict the Theory of Culture Care Diversity and Universality. From: *Culture Care Diversity and Universality: A Theory for Nursing* by M. Leininger, 1991 New York: National League for Nursing.

Leininger identified six characteristics of any culture (1991). First, culture reflects the shared values that guide human behavior. Culture has a strong influence on the behavior of the individual members. Secondly, to be a culture, there must be overt as well as covert or implied rules of behavior. Artifacts or concrete goods comprise the third characteristic that provides symbols of special meaning to the culture. Family photographs or religious objects are examples of artifacts that mean something special to members of the culture. Fourth, a culture has traditional ceremonies and rites that are passed on from generation to generation. The fifth characteristic is the presence of insider knowledge that is not easily seen or understood by someone from outside the culture. Lastly, there is variation within each culture as well as among cultures. Leininger also describes the presence of subcultures. The subculture is very similar to the dominant culture but is comprised of a small group that may differ in some ways from the dominant culture in terms of behavior, values, beliefs, norms or ways of living.

The profession of nursing exhibits these characteristics of culture. Leininger recognized the importance of developing an understanding of the culture of nursing. She believed that knowledge of the culture of nursing serves as a historical guide to the profession as well as assists newcomers to better understand nursing. Nurses must be aware of the differences and similarities among nursing cultures regionally, nationally, and globally in order to be able to work well together. Nursing administrators must understand the culture of their

nursing organization in order to lead in a culturally sensitive and understanding manner.

Leininger's Sunrise Model to Depict Dimensions that Influence the Culture of Nursing (Figure 2) demonstrates the relevance of this framework to this study. The culture of nursing is influenced by the personal and organizational characteristics identified in the sunrise. These characteristics mold the universal culture of nursing into the hospital nursing culture. In this study, the cultural and social dimensions are represented by the organizational and personal demographic characteristics identified. The characteristics of individual RNs that influence culture as it develops include level of education, specialty certification, type of nursing unit worked and nursing position in the organization. Other important personal nurse factors are years employed in nursing, years at current hospital, and years in current unit. Organizational factors that have been found to influence nursing culture are number of beds, teaching status, and total number of RNs. The presence of a shared decision making model is another important organizational influencing characteristic. An organizational factor that has not been widely considered is the setting of the hospital.

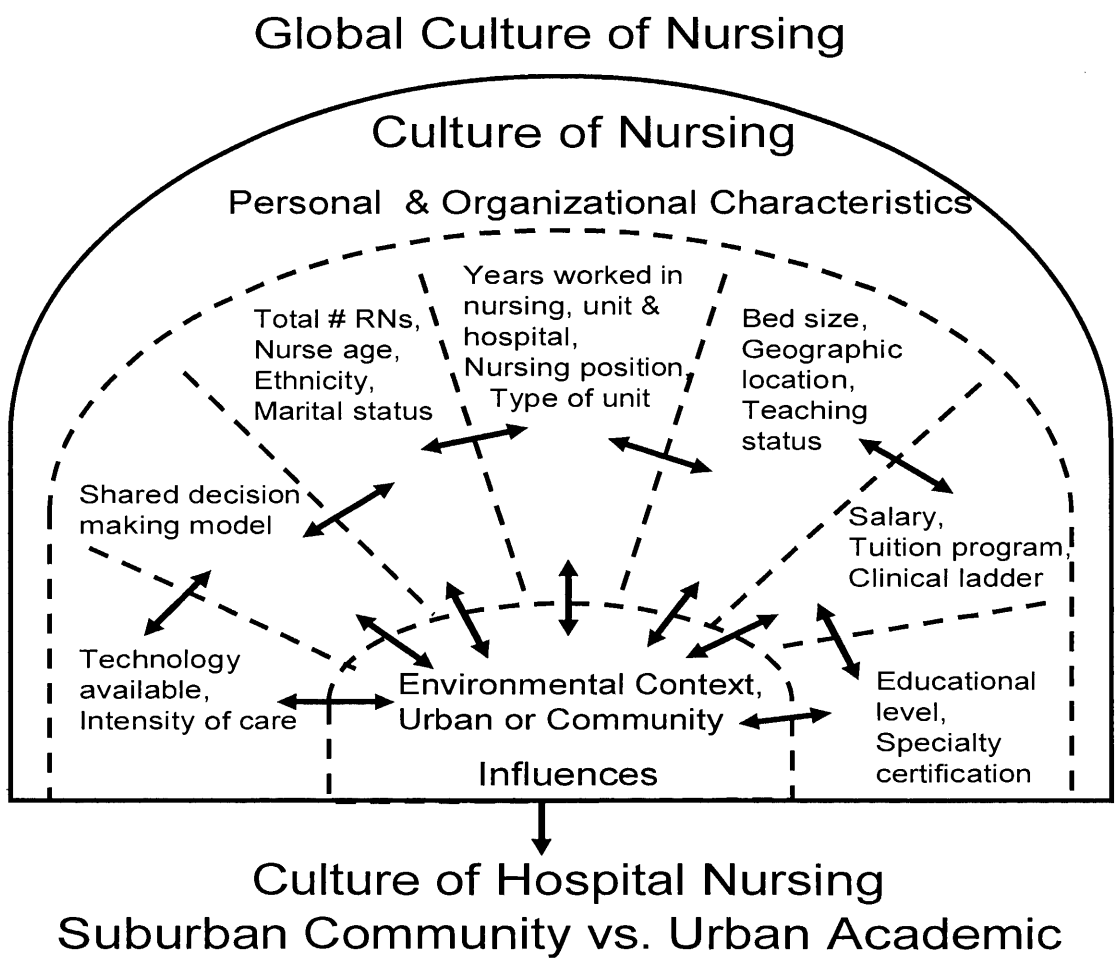


*Figure 2.* Leininger's Sunrise Model to depict dimensions that influence the culture of nursing.

## Assumptions

The following assumptions from the Theory of Culture Care Diversity and Universality were used to guide this study:

1. The culture of nursing has shared values with dominant features that characterize the nature, essence, and dominant attributes of the nursing profession and discipline (Leininger 1991, 1994).
2. The culture of nursing in a region or community is influenced by the social and cultural structure dimensions of technological, religious, social, political and legal, economic, and educational factors that lead to differences and similarities among nursing subcultures (Leininger, 1991).
3. The dominant features of a nursing culture can be identified and measured (Leininger, 1991).

## Research Questions

The following questions were answered in this study:

1. What are the differences in the culture of nursing between suburban community hospital nurses and urban academic hospital nurses?
2. What are the personal and/or organizational demographic characteristics that can influence the scores of the four types of the culture of nursing, regardless of the setting?
3. What are the perceptions of the nurses of the culture of nursing in the suburban community hospitals and the urban academic hospitals?

## Definitions

The following definitions have been derived from the Theory of Culture Care Diversity and Universality and were used to guide this study:

1. Culture of nursing: learned and transmitted lifeways, values, symbols, patterns, and normative practices of members of the nursing profession of a particular organization (Leininger, 1991). Operationally, the culture of nursing will be measured using the Organizational Culture Assessment Instrument (OCAI). This instrument assesses four types of culture: (a) clan, (b) adhocracy, (c) hierarchy, and (d) market.
2. Hospital Nurses: Registered Nurses (RNs) who work full time or part time (a minimum of 20 hours per week) including managers and supervisors.
3. Suburban community hospital: a hospital with 350 beds or less located in the suburban areas of a major metropolitan area.
4. Urban academic hospital: a hospital with 600 or more beds in a major metropolitan area that has residents and other physicians in training.
5. Personal and organizational demographic characteristics: These are the factors that influence the development of the nursing culture. Personal demographic factors are the characteristics of nurses surveyed in each hospital including age, education level,

years of nursing experience, years in current hospital, unit worked, type of unit, gender, nursing position, and specialty certification. Organizational demographics include the characteristics of the hospital where the nurses are employed including number of beds, total number of RNs, presence of a shared decision making model, tuition reimbursement, and teaching status.

6. Perceptions of nurses: themes identified about the culture derived from the written answers to open-ended questions completed by the RNs surveyed.

## Limitations

The limitations of this study were related to the acquisition of the sample. The nurses that completed the cultural assessment were a convenience sample of volunteers rather than a randomized sample. This sample may impact the generalizability of the findings to the broader nursing culture. Secondly, the type of nursing culture was self reported. Leininger's framework supports a cultural assessment that is a combination of self-report as well as field observations based in the traditions of anthropological research to truly gain a more complete understanding. A third potential limitation was the presence of Magnet designation in the two urban academic hospitals. If the urban academic culture is significantly different from the suburban academic culture of nursing, it will be difficult to determine if the differences are due to the environment or the presence of the Magnet culture.

## Summary

The study of corporate culture has demonstrated the link between the culture and the desired outcomes of quality and financial performance. Nursing culture has also been linked to quality and financial outcomes in hospital performance. RN turnover and intent to leave are examples of critical factors that can be influenced by nursing culture. Nursing leaders need a clear understanding of the nursing culture in order to lead effectively. Nursing culture can be impacted by many personal and organizational characteristics. The purpose of this study was to explore the differences of the culture of the suburban community nurses when compared to the culture of the urban academic nurses.

# CHAPTER II

## REVIEW OF THE LITERATURE

The purpose of this study was to explore the differences of the nursing culture of suburban community hospitals with the nursing culture of urban academic hospitals. Electronic databases including CINAHL, Medline, Sociological Abstracts, and Dissertation Abstracts International were searched for studies relevant to this topic. The literature on corporate culture will be discussed first. The literature on nursing culture will follow. Magnet culture as a potential descriptor of nursing culture will be explored. Finally, the characteristics of nursing culture and the impact culture has on nurse satisfaction, nurse retention, and quality patient outcomes will be discussed. The importance of this study in filling a gap in the nursing research on this topic will be demonstrated.

### Corporate Culture

Corporate culture has been reported in the business literature for the last 20 –25 years. Studies have examined the culture of specific industries such as engineering (Igo & Skitmore, 2006); professional baseball organizations (Choi, 2005); and institutions of higher learning (Obenchain, 2002). Whether assessments of individual companies or comparisons across an industry nationally or internationally (Al-Khalifa & Aspinwall, 2001) all findings emphasize the important role of culture in the ultimate success of the organization.

Sathe (1983) and Schein (1983, 1986, 1993, 1996) defined culture as the shared understanding learned by a group over time that allows the group to function. Culture was characterized by those actions that are automatic or performed without conscious thought. A cultural assessment must be in-depth to uncover these assumptions that are generally unspoken. Both authors emphasized the importance of understanding culture in order to plan any organizational change.

Two landmark cultural assessments utilized qualitative methods (Deal & Kennedy, 1982; Peters & Waterman, 1982). These studies evaluated data collected through observation and interview. A third series of studies utilized a combination of qualitative and quantitative methods (Kotter & Heskett, 1992).

Deal and Kennedy (1982) conducted an important study to determine the characteristics that differentiated successful corporations from unsuccessful ones. The two researchers interviewed consultants about companies that they had worked closely with and knew well. The study included both profit and non-profit corporations. Questions asked during interview included

1. Does company X have one or more visible beliefs? If so, what are they?
2. How do these beliefs affect day-to-day business?
3. How are the beliefs communicated to the organization?

A closer review of company documents and biographies of founders and leaders revealed "the people who built the companies for which America is

famous all worked obsessively to create strong cultures within their organization" (p. 8). Over a six-month period, Deal and Kennedy created profiles of nearly 80 companies. Analysis of the profiles revealed three key facts:

1. Only 33% of the companies had clearly articulated beliefs including financially oriented goals that were widely understood.
2. Of this group, two-thirds or 66% had corporate value statements.
3. The 18 companies with clear corporate values were top performers in their business. These top performing companies were identified as having "strong cultures" (p.7).

Deal and Kennedy identified five components critical to the development of culture: (a) business environment, (b) values, (c) heroes, (d) rites and rituals, and (e) the cultural network. Business environment refers to the world outside of the company in which the company must compete. The business environment can have the greatest influence on the corporate culture

Values are the core beliefs of an organization. In order to be successful, the values must be clear and concise. They should be the guiding principals by which staff members make decisions. Every employee in the organization must know and understand them. It is a critical part of a manager's job to share values, refine values, and keep them real in the organization.

Heroes are the legends of the organization. The stories of the heroes' actions exemplify the values and help to make the values tangible to the employees. Storytelling is an important component in the development of a

strong culture. Rites and rituals are the fourth element. These are the planned routines for daily work as well as the celebrations that honor staff. Rituals help employees to understand what is expected of them. Big parties and ceremonies are used to reinforce the values of the company—"what it stands for" (Deal & Kennedy, 1982, p. 15).

The fifth component of a strong corporate culture is the cultural network. This network is the informal communication system that spreads the word of the values, heroes, and other stories throughout the organization. Successful people in a company learn quickly how to work the network. These five components as identified by Deal and Kennedy (1982) provided a framework for the analysis of corporate culture.

In the second landmark study, Peters and Waterman (1982) reported the results of a research study they conducted to find out what made America's best run companies so successful. They defined successful companies as innovative companies. These companies, in addition to being unusually good at the production of new products, were "especially adroit at continually responding to change of any sort in their environments" (p.12).

The researchers studied 62 successful American companies. Qualitative analysis of the results of intense structured interviews and historical company documents was completed. Peters and Waterman found the presence of a strong culture in all of the organizations studied. The shared beliefs, which form the basis of the culture, were known throughout the organization. The study revealed

a greater sense of autonomy in the workers because the values were clear and well known. The employees were able to make the right decision at the right time. The top companies had a rich history of legends and tales of heroes that had started the business. This study supported the elements as outlined by Deal and Kennedy (1982).

Peters and Waterman (1982) further outlined eight characteristics that describe the culture of the successful companies. The first was "a bias for action" (p. 14). These companies acted quickly, expecting to make changes and not expecting perfection right out of the gate. This action orientation did not mean that they were not analytical or data driven in their business approach, but the companies were committed to moving ahead and not wasting time with over-analysis. The second characteristic was to stay "close to the customer" (p. 14). Companies consistently provided quality customer service by listening to customers and often made innovations based on customer input. Thirdly was the presence of "autonomy and entrepreneurship" (p. 14). These companies promoted creativity and innovation among the employees and leaders. They encouraged risk-taking in improving products and service. "Productivity through people" (p. 14) was the fourth characteristic. The top American companies valued their employees. The employees were viewed as the basis for quality, productivity, and innovation in the company.

Peters and Waterman (1982) identified the fifth characteristic as "hands-on, values driven" (p. 15). The core values of the organization were the reason

for success—from the top to the bottom of the organization. These values also provided the basis for the culture of the organization. The sixth characteristic was "Stick to the knitting" (p. 15). This focused approach referred to expanding or growing a business. Peters and Waterman noted that the most successful companies did not venture into areas that they did not know how to run. They stuck to the primary business which they knew well.

The seventh characteristic was "simple form, lean staff" (Peters & Waterman, 1982, p. 15). The organizations that were successful were not overloaded with upper management positions. The organizational charts were streamlined and not necessarily formalized. The eighth and final characteristic was identified as "simultaneous loose-tight properties" (p. 15). The companies named as excellent were centralized when it came to the core values but decentralized in their approach to work. Every staff member was expected to perform autonomously when it came to work as long as they abided by the guiding values. This study by Peters and Waterman (1982) supported the importance of a strong culture to the success of an organization.

Ten years later, Kotter and Heskett (1992) published a series of studies that investigated the link between corporate culture and organizational performance. The researchers selected nine to ten of the largest firms in 22 U. S. industries. They surveyed a total of 207 companies.

The first study looked at strength of culture as a factor in long-term economic performance. The study consisted of surveys and interviews of

company employees and interviews with external industrial analysts. Their findings demonstrated that the strength of culture could be related to performance for three reasons. First, the organizations exhibited clear goal alignment between the leadership and the employees. All levels of the organization were focused on the same outcome. The second reason was the high level of motivation that was created throughout the organization. Thirdly, the strong culture operated with a shared decision making structure that did not stifle creativity or innovation through a cumbersome bureaucracy. While important information was discovered, Kotter and Heskett did not believe that the concept of a strong culture fully explained the success in long-term performance.

The second and third studies reported in 1992 examined 22 of the 207 firms more closely. The second study by Kotter and Heskett looked for validation that the fit of the culture with the environment of the industry led to successful performance. The researchers named this type of culture as strategically appropriate. The results of their analysis found that while a strategically appropriate culture could take credit for successful short- to medium-term performance, the concept did not fully explain the link between culture and performance.

The third premise tested by Kotter and Heskett was that corporate culture must be adaptive; the culture must anticipate and change to meet the needs of customers in order to be successful in the long-term. Adaptive cultures have the characteristics of strong cultures and cultures that fit with the environment. The

leaders of adaptive cultures took these organizations to a new level. Interviews conducted with employees in these successful organizations used descriptors such as "leadership, entrepreneurship, prudent risk-taking, candid discussion, innovation, and flexibility" (p.47).

The differentiating characteristic of an adaptive culture is the attention to customers and included as customers are employees and stockholders. In the 22 firms studied, a survey question asked the respondents to rank on a scale of 1 – 7 (1 = definitely not, 7 = absolutely yes) how much the culture valued excellent leadership from its managers. The industrial analysts scored the high performing organizations at a mean score of 6.0 and the lower performing firms averaged 3.9. These same analysts were asked to rate the value each company placed on customers, stockholders, and employees on the same 1-7 scale. High performers scored means of 6.0, 5.7, and 5.8 respectively. The lesser performing companies scored 4.6 on valuing customers, 3.9 for stockholders, and 4.1 for employees. The leader and managers of an organization must show care to all these key constituents in order to see the long-term success evidenced by the adaptive cultures.

The studies by Deal and Kennedy, Peters and Waterman, and Kotter and Heskett, all identified characteristics of a successful organization's corporate culture. Leadership must clearly articulate a reason for being and keep the focus on all customers including employees and stockholders. The work environment

must not be overly bureaucratic or structured; successful companies involve employees in decision-making and encourage creativity and innovation.

## Cultural Assessment

Wilkins (1983) described the cultural audit as a way of understanding the culture of a company or a work group within the company. According to Wilkins, there are three challenges to overcome in the assessment of a culture. The first is that employees do not speak directly about the norms. They must be gleaned from observations of daily routines and rituals; and through listening to stories and legends of the organization. Second, employees may be reluctant to admit to behaviors incongruent with the values of the organization. Observation is critical to evaluating for inconsistencies between culture and values. Third, the researcher must be careful to evaluate that the cultural audit is revealing the true culture of the organization. It is possible that because of the size and diversity of the organization, the audit is describing a subculture rather than the overall culture.

Wilkof and Ziegenfuss (1995) described their cultural audit as a five-step tool that could be used in healthcare settings. The impetus for completing a cultural audit is usually the need for a change in the culture based on anticipated organizational or business changes. The first step was the "needs assessment" (p. 34). This step was characterized by the organization's leadership recognizing the need for possible change and setting goals for the audit. The second step was the "cultural diagnosis – cultural probe phase" (p. 35). This phase involved

data collection primarily through observation, interview, and review of pertinent organizational literature. Themes were identified and a cultural model was developed. The model was shared to elicit feedback from the group. The third step was "planning for change" (p. 37). This step was characterized by looking for fit or congruency within the organization between culture and other aspects; what should remain and what needs to be changed was defined; and finally, strategies for making change were identified. Steps four and five were "action" and "evaluation" (p. 38). Action was characterized by the organization moving itself toward the desired outcome and evaluation was taking a step back to see where the changes were successful and where more work was needed. The authors believed that this comprehensive audit process was well suited to healthcare organizations that were going through continuous changes whether through medical innovation, changes in payor strategies, or mergers and acquisitions of hospitals and healthcare systems. The corporate culture studies consistently identified the importance of culture in the success of any organization. Examination of the culture in health care and nursing demonstrated that culture was equally important in the success of hospitals.

## Nursing Culture

According to Leininger (1994), nursing has dominant cultural traits common to all nurses driven by the "professional norms, values and lifeways of professional nurses" (p. 18). These important values included independence, autonomy, self-reliance, use of advanced technology, and the empowerment and

professionalism of women as nurses. Leininger also identified regional differences in nursing in the United States, explained by the influences of the local culture in terms of education, economics, climate, and simply, way-of-life.

Del Bueno and Vincent (1986) described the importance of culture in the nursing and hospital work place. The assessment completed by these authors included the importance of studying the metaphors used by the members of the culture. For example, phrases such as "you have to earn your stripes" or "we are all one big happy family here" (p. 17-18) when used consistently, were very telling of the attitudes of the culture. Elements of the Deal and Kennedy (1982) model were used in this study that focused on the role of the manager in shaping culture. Del Bueno and Vincent concluded that in order to be successful, the manager must be aware of cultural influences. They also cautioned against a manager deciding that one culture was better than another. The important factor was the match between cultural values, the reality of the environment, and the match for the employees working there.

Studies of nursing culture over the last 12 years have linked culture to nursing and patient outcomes. Specific nursing outcome impacted by nursing culture were job satisfaction, nurse retention and safety. Patient outcomes reported were quality outcomes and patient satisfaction.

*Job Satisfaction*

A retrospective study by McDaniel (1995) looked for a positive correlation between organizational culture and work satisfaction related to ethics. The

researcher surveyed 250 randomly selected nurse managers and staff nurses form seven different sites in the same county in the northeast U.S. Of the 250 nurses surveyed (56 managers and 194 staff nurses), 209 (83.6%) returned complete packets. Culture type was assessed using the Organizational Culture Inventory (OCI) with an additional ethics subscale. McDaniel found that a nursing culture where commitment, autonomy, and enhanced decision making were strong reported higher nursing work satisfaction related to the ethics of care.

In a study conducted by Tumulty, Jernigan, and Kohut (1994), the researchers surveyed nurses in two acute care facilities. The sample of 159 registered nurses represented 40% of the total surveys distributed. The nurses completed the Index of Work Satisfaction and the Work Environment Scale. Adams and Bond (2000) conducted a mail-out survey fop nurses employed in 119 wards randomly selected from 17 hospitals across England. The Ward Organizational Features Scale (WOFS) was completed by 834 nurses (57% of the total sampled). Both Tumulty, Jernigan, and Kohut, and Adams and Bond found cohesiveness of a work group or a commitment to teamwork, as a reflection of the nursing culture, critical to RN job satisfaction.

Tzeng, Ketefian, and Redman (2002), tested the hypothesis that the higher the staff nurses' scores on strength of organizational culture, the higher the staff nurses' scores on job satisfaction. Additionally, the research team hypothesized that higher staff nurse job satisfaction would lead to higher inpatients' satisfaction with discharge information and overall inpatient care. The

Nursing Assessment Scale (NAS) which measures strength of organizational culture and nursing job satisfaction were mailed to all eligible RNs in a mid-western U. S. tertiary healthcare system. The response rate was only 28% with 520 nurses returning complete questionnaires. The patients completed the Nursing Services Inpatient Satisfaction Survey (NSISS) with a total of 345 returned surveys and a response rate of 36%. While the results must be used with caution due to the low response rates, the regression analysis did support the hypothesis as outlined. The strength of the type of culture predicted RN job satisfaction. The researchers identified that job satisfaction was, in turn, a predictor of patient satisfaction.

Verplanken (2004) completed a smaller survey of medical surgical units in a hospital in Norway. Fifty - six nurses completed questionnaires regarding job satisfaction, attitudes toward the ward worked, and a values assessment utilizing the Competing Values Framework. The cultural values of open discussion, empowerment, and participation resulted in higher satisfaction scores of the nurses.

A study by Shortell, et al. (1995) examined nursing culture in 61 hospitals. A 20-item questionnaire based in the Competing Values Framework identified the primary culture type. Cultures characterized by teamwork, innovation, and change had progressed significantly further in the implementation of quality improvement practices.

Organizational trust is a descriptor of nursing culture. Laschinger, Shamian, and Thomson (2001) described the positive impact trust has in nursing job satisfaction and nurse-assessed quality in a study of 3,016 nurses. Organizational attributes were measured using the Nursing Work Index (NWI). Results demonstrated that trust is created when nursing staff is allowed to practice in a culture that supports autonomy, and use of clinical expertise and judgment.

*Nurse Retention*

Cavanaugh (1990); Curran and Miller (1990); Gifford, Zammuto, and Goodman (2002); and Larrabee et al. (2003) all linked the importance of nursing and corporate culture to nurse retention. Shermont and Krepcio (2006) reported a clan or team culture reduced nurse turnover during the first year of employment from 54% to 4% in three medical-surgical units. A more recent study (Brooks, et al. 2007) identified the presence of a shared decision making model as an attribute of a positive nursing culture. Nursing cultures that exemplify autonomy, control over practice, shared decision making, and strong administrative support did have improved patient satisfaction and outcomes as well as improved nurse satisfaction and retention.

*Patient Outcomes*

Cultures that strongly value teamwork and co-worker support and organizational support consistently performed better. A study completed in 2004 linked type of culture to outcomes. Meterko, Mohr, and Young (2004) surveyed

8,454 employees in the Veteran's Administration Hospitals. The researchers controlled for size, teaching status, geographic location and urban or rural status. The teamwork culture had the strongest relationship to patient satisfaction. The higher the score on teamwork, the higher the scores on the patient satisfaction surveys.

*Nursing Unit Culture*

Important studies have assessed nursing culture at the unit level. These studies (Coeling & Wilcox, 1988; Conway & McMillan, 2002; Curran & Miller, 1990; Gifford, 2001; Mulcahy & Betts, 2005; Rizzo, Gilman & Mersmann, 1994; Shortell, Rousseau, Gillies, Devers, & Simon, 1991; Thomas, Ward, Chorba, & Kumiega, 1990; Zimmerman et al., 1993) reported similar findings to the hospital cultural assessments. The type and strength of the unit culture impacted nurse job satisfaction, patient satisfaction, and patient outcomes including risk adjusted mortality.

*Culture vs. Climate*

Four studies evaluated the relationship between organizational climate and work satisfaction (Keuter et al., 2000; Martin, Gustin, Uddin, & Risner, 2004; Stone, Larson, Monney-Kane, Smolowitz, Lin, & Dick, 2006; Urden, 1999). Though related concepts, organizational climate is not the same as organizational culture. Organizational climate reflects the perceptions of employees related to the culture or how they experience the culture of an organization (Gershon, Stone, Bakken, & Larson, 2004; Martin et al., 2004). All

four teams reported strong positive correlations between organizational climate and nursing job satisfaction. Way and MacNeil (2006) conducted a systematic review of the literature that reported work environment characteristics, as a reflection of culture, accounted for 20 – 40% of variation in nursing job satisfaction.

A study in 2002 by Clarke, Rocket, Sloane, and Aiken examined the relationship between organizational climate and employee safety. They surveyed 2,287 nurses in 13 hospitals using the Nursing Work Index – Revised (NWI-R). Hospitals with a climate that was lacking in administrative support and responsiveness experienced more employee injuries than those with more supportive climates.

## Magnet Culture

Magnet culture is a type of nursing culture that has been studied because of its positive impact on hospital nurses. A study commissioned by the American Academy of Nursing in 1981 was conducted by McClure et al. While the country was experiencing the largest number of RNs in decades, over 80% of U.S. hospitals continued to report RN shortages. This study was aimed at those hospitals that were not experiencing a shortage to identify what hospital organization and nursing service variables contributed to this success in the attraction and retention of nurses. A national sample of 41 hospitals was selected. The majority of the hospitals were not-for profit (78%) and 50% of the hospitals ranged in bed size from 201 – 500 beds.

Results indicated that participative management was the dominant leadership style practiced in the hospitals studied. Communication was open and easily moved both up and down the nursing organization. The directors of nursing were described as both visible and accessible to the staff. Nurse managers listened to the staff, communicated clearly about expectations, and treated all staff with respect. Nurse managers were also regarded as clinical experts by the staff. The organizational structure was flattened and decentralized with nurses involved in decision-making at all levels of the organization.

While staffing numbers and ratios were reported as positive, just as important was the quality of the staff. Well-educated, competent staff nurses were valued as peers. Personnel policies were competitive with flexible work schedules, opportunities for advancement, and the presence of career ladders that rewarded clinical expertise.

Predominant in Magnet hospitals was a professional practice model that provided for nursing autonomy and sufficient resources for consultation. All organizations utilized clinical nurse specialists that were accessible to the nursing staff. The nurses took pride in the control they exercised over their practice and the high quality of patient care that was provided. The role of the staff nurse as teachers to peers, through inservice education and orientation of new staff, to patients, and the community was valued. Professional development through formal education and the achievement of specialty certification was also encouraged and valued in the Magnet organizations.

These key findings ultimately led to the development of the formal Magnet Certification offered by the American Nurses Credentialing Center. Critical to the purpose of this study is the identification of organizational nursing values that shape organizational and nursing behavior that can lead to the retention of nursing staff. These characteristics of the Magnet culture reflect the dominant nursing cultural traits identified by Leininger such as autonomy, empowerment, advanced technology and respect for professionals.

Kramer and Schmalenberg (1988a, 1988b) applied the principles of successful companies outlined by Peters and Waterman (1982) in an assessment of Magnet hospitals in the U. S. The hospitals were ranked on a number of variables including staffing, RN turnover, and RN longevity. The authors also evaluated the number of baccalaureate educated nursing staff or staff currently enrolled in a baccalaureate-nursing program. Originally, 41 hospitals were identified as Magnet hospitals. This study utilized a 16-hospital subset selected to include all regions of the country. Data were collected through interviews of individuals and groups of over 800 staff nurses. Individual interviews were conducted with all the chief nurse executives. Group interviews were conducted with 273 head nurses, 225 clinical experts (clinical nurse specialists, educators, and instructors), and 102 assistant managers. There were remarkable similarities between the Magnet hospitals and the top performing organizations identified by Peters and Waterman (1982). In terms of culture, the magnet hospitals had nursing departments whose leaders maintained a strong

set of values. Examples of the values are quality of care; nursing autonomy, informal, open door communication styles; and value of education. Congruence between the values of the nursing department and the nursing staff was identified as a critical factor to the success of these hospitals.

In subsequent studies, Kramer and Schmalenberg (2004a, 2004b, 2004c, 2004d) further demonstrated the importance of nursing culture. In a comparison of Magnet hospitals (16 hospitals) to those not yet certified (14 hospitals), the Magnet hospitals consistently rated higher in a survey of 3,602 nurses. Examples included higher scores in education, competent peers, autonomy, control over practice, adequate staffing and manager support.

In the early 1990s, the American Nurses Credentialing Center (ANCC) created a Magnet designation by which the nursing divisions of hospitals could be recognized as meeting the criteria for Magnet status. Aiken, Havens, and Sloane (2000) conducted a study to evaluate if the newly designated hospitals were as successful in creating a culture and work environment as the original group of 41. Nurses at seven newly designated hospitals and 13 originally identified hospitals were asked to complete a 15-page, self-administered questionnaire. The sections included job characteristics, job outlook, and organizational characteristics as measured by the NWI-R, and job-related feelings using the Maslach Burnout Inventory. Of the 3,600 eligible medical – surgical staff nurses, 2,045 nurses (56%) completed the survey. The newly designated hospitals rated better in all areas related to lower burnout, increased

job satisfaction, and quality of care by the nursing staff than the originally identified Magnet hospitals. Of particular interest is the area of control over practice. Control over nursing practice includes autonomy, the importance of nursing in the organization and quality of patient care—the areas identified as critical to the overall culture or the hospital. In these areas also, these data revealed higher scores in the newly designated hospitals as compared to the originally identified group of Magnet hospitals.

A final study by Aiken and Patrician (2000) measured the attributes of an organization that lead to enhanced patient, staff nurse, and hospital outcomes. The NWI-R measures four subscales: autonomy, control, relationships with physicians, and organizational support. The results demonstrated that the magnet hospitals had better patient outcomes, decreased staff burnout, and higher organizational support.

The studies of the Magnet nursing culture demonstrate the impact that the culture of nursing has on important nursing and patient outcomes, such as nurse job satisfaction, nurse retention, and improved patient satisfaction. The cultures are characterized by strong nursing leadership with a clear vision and purpose, nursing control over practice, presence of a shared decision making model, and open communication. There is recognition of the employees as customers as well as the hospital patients. These characteristics were the same as those identified in the corporate culture of successful businesses. The Magnet studies

validated that the same characteristics that created a successful business culture also created a successful nursing culture.

### Urban vs. Community

A final study was conducted in 2006 by Hall, Doran, Sidani, and Pink. This study is important to this review as it is the only one that compared directly the teaching and community hospital settings. The objective of this study was to determine if there were any differences between the nurses' perception of work environment in the community and academic settings. The researchers measured the perceptions over an 18-month period to see if they changed over time. The nurses from 16 medical surgical units in 8 randomly selected public hospitals participated. A total of 980 nurses completed the instruments. The nurses that represented the academic hospitals made up 50.3% (493) of the respondents and 49.6% (487) represented the nurses in the community setting. The nurses in teaching hospitals scored significantly higher on an assessment of work environment in the areas of work quality, job satisfaction, nursing leadership, quality of care and job stress. Hall et al. (2006) attributed the difference to the unique challenges faced in the community hospital with fewer resources, fewer support services, and nurse staffing. These challenges influence the nursing culture and the community nurses' perceptions as reflected in lower work environment scores.

## Summary

The literature reviewed explored organizational culture at the hospital and nursing level. The Magnet culture, as one type of nursing culture, has been studied in depth. There was little literature that compares the nursing cultures of hospitals in varying locations and settings. The purpose of this study was to compare and contrast the nursing cultures of urban academic hospitals with suburban community hospitals. There was only one study at the time of this search that considered the differences that may be present.

# CHAPTER III

## PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

This descriptive exploratory study used an across-method triangulation design to assess the perceptions of nurses of their organizational culture. Method triangulation refers to the use of multiple methods to investigate a research question (Polit, Beck, & Hungler, 2001). In method triangulation, the primary method, which in this case is quantitative, must be rigorous enough to stand alone (Dabbs et al. 2004; Thurmond, 2001). Quantitative data regarding organizational culture was gathered using the Organizational Culture Assessment Instrument (OCAI).

Open-ended questions are meant to add depth and clarity to the cultural assessment. Open-ended questions were used to collect additional impressions related to the culture of nursing in each setting. This qualitative data was used to support, strengthen, and offer further explanation of the findings obtained through the quantitative surveys. This chapter contains information regarding the setting, sample, instruments, and treatment of the data. The results of a pilot study will also be reported.

## Setting

The study was conducted in two healthcare systems with multiple hospitals in a large urban area in the Southwest United States. Both systems have a large flagship urban hospital with an academic affiliation. The two systems also have a network of smaller suburban hospitals located throughout the community.

Healthcare system A is a non-profit system that consists of four hospitals. One is an urban academic hospital with over 1200 beds that provides tertiary level care. This hospital is a Magnet designated hospital. There are three community hospitals located in the surrounding community that range in size from 51 to 331 beds. All offer a full range of services, both inpatient and outpatient.

Healthcare system B is also a non-profit system. The system is comprised of an urban academic hospital and one community hospital. The urban academic hospital is licensed for over 900 beds and offers tertiary and quaternary care with services very similar to the urban academic hospital of healthcare system A. The urban academic hospital in Healthcare system B is also a Magnet designated hospital. The community hospital is a 91-bed facility that offers a full range of inpatient and outpatient services, very similar to the community hospitals of healthcare system A.

## Population and Sample

A convenience sample of regular full time and part time RNs was invited to participate. Staff nurses, nurse managers, supervisors, advanced practice nurses, and nurse educators were included. Temporary nursing personnel such as contract or agency RNs were excluded from the study.

A total sample of 320 participants was needed for this study. For each setting, suburban community, and urban academic, 160 subjects were required. The sample size was calculated using Cohen's (1988) ANOVA sample size tables based on a power of .80, effect size of .30 and an alpha of .05. In behavioral research studies, a power of .80 is a sound starting point (Cohen, 1988; Polit, Beck, & Hungler, 2001). The effect size was based on a review of nursing research studies conducted by Polit and Sherman (1990). The average effect size in the 62 nursing studies considered was small to moderate. This review emphasized the importance of power and adequate sample size.

## Protection of Human Subjects

This study was submitted for approval by the Institutional Review Board of Texas Woman's University and the Institutional Review Boards of the two hospital systems where the study was conducted (Appendix A). Completion of the demographic questionnaire and the OCAI by the nurse provided implied informed consent for participation.

The survey forms were anonymous and had no individual identifying information on them. There was a code that identified the hospital where the survey was completed. The surveys were kept in a locked file in the researcher's office when not in use. The completed surveys will be retained for a period of one year after the completion of the study. After one year, all surveys will be destroyed.

## Instruments

Four instruments were used to obtain data for this study. There were two demographic data questionnaires: one for each participating RN and one for each participating hospital. The Organizational Culture Assessment Instrument (OCAI) and the open-ended questions were used to collect the data regarding the nurses' perceptions of their culture.

### *RN Demographic Data Questionnaire*

The RN Demographic Data Questionnaire consisted of ten items (Appendix B). The hospital was already identified with a code to allow the researcher to divide the nurses into the two groups: suburban community and urban academic setting. The demographic items described the personal characteristics of the nurses that can influence the culture of nursing in the context of the setting as outlined in Leininger's model. These items were used to describe the sample of nurses and included: (a) age, (b) gender, (c) ethnicity, (d) nursing position, (e) employment status, (f) type of unit worked, (g) highest

nursing degree held, (h) specialty certification, (i) years employed in current unit, (j) years employed in current hospital, and (k) years employed in nursing.

The level of nursing education and specialty certification were collected in four studies of the culture of nursing (McClure et al., 2002; Kramer & Schmalenberg, 2002, 2004a, 2004c). Years employed in current unit, hospital and in nursing have been collected in multiple studies as an indicator of retention. Studies by Aiken (2002); Aikens, Havens, and, Sloane (2000); Curran and Miller (1990); Gifford, Zammuto, and Goodman (2002); and Kramer and Schmalenberg (2002, 2004b) have linked nursing tenure to the strength of the culture of nursing.

*Hospital Demographic Data Questionnaire*

The Hospital Demographic Data Questionnaire consisted of six questions (Appendix C). The items included the number of RNs, percentage that are baccalaureate educated overall, and annual RN turnover. The remaining questions described benefits that may attract nurses. All of these elements have been identified in the literature as potential influences of nursing culture (education preparation, tuition reimbursement, free parking, professional development models and shared decision making models). Annual nursing turnover was used as a potential reflection of the health of a nursing culture.

*Organizational Culture Assessment Instrument*

The Organizational Culture Assessment Instrument (OCAI; Appendix D) as published by Cameron and Quinn (2006) is rooted in the Competing Values

Framework (CVF). The CVF evaluates overall organizational effectiveness in two dimensions or continuums. The first dimension differentiates between flexibility and discretion in the organization at one end versus stability and control at the other end. All organizations fit somewhere on this continuum. The second dimension reflects the external focus and differentiation in the organization as opposed to internal focus and integration.

The axes of these two continuums create four quadrants or types of cultures. The OCAI measures six content dimensions that represent "how things are" in an organization (Cameron & Quinn, 2006, p. 151). These same six dimensions provide the score that is plotted to determine the dominant culture in an organization. The six categories are (a) dominant characteristics of the organization, (b) leadership style, (c) management of employees—work environment, (d) organizational glue, (e) strategic emphases that drive the organization, and (f) criteria for success in the organization. In each dimension, four statements are made. Utilizing a Likert-rating scale, the respondent is asked to rank each of the four statements in the importance and accuracy of the statement in relation to the culture of their organization. The original OCAI used an ipsative scale or forced choice rating method. Each respondent was asked to divide 100 points between the four statements in each category (Cameron & Quinn, 2006). While useful in an assessment of the culture of a single organization, an ipsative scale does not allow for traditional statistical analysis for

comparison. The forced choice scale results are not independent measures (Baron, 1996; Cornwell & Dunlap, 1994).

Cameron and Quinn (2006) recommend a Likert scale as an alternative when completing an assessment of multiple organizations. The investigator has utilized a six-point Likert scale with 6 = strongly agree and 1 = strongly disagree. A six-point scale was chosen to eliminate a middle score choice. The use of the six-point scale also provided a more discriminating range of responses with a minimum score of 6 and a potential maximum score of 36 (Polit, Beck, & Hungler, 2001).

The four types of culture identified by the OCAI are the (a) hierarchy, (b) market, (c) clan, and (d) adhocracy cultures. The hierarchy culture is characterized by formal structures and the presence of clear lines of decision-making authority. Rules, procedures, and control and accountability are viewed as critical to success. The market culture values competitiveness and productivity. The core business functions are related to conducting transactions with external customers. Success is measured by profitability, bottom-line results, strength in the market place, and secure customers. The market culture organization is a results-oriented workplace.

The clan culture is a family-oriented culture. Teamwork, employee involvement, and commitment to employees are typical characteristics of a clan culture. Customers are thought of as partners; and a manager's primary task is to empower employees. The fourth culture is the adhocracy culture. This type of

culture is most responsive to changing environments. The major goal in this organization is to foster flexibility, adaptability, and creativity in industries where uncertainty, ambiguity, and information overload are the normal state of affairs.

Cameron and Quinn (2006) report that over 80% of the organizations studied using the OCAI have developed a dominant cultural type. The 20% that do not have a clear dominant type are either not clear about their culture or have developed the four types almost equally.

The reliability for the OCAI has been established in previous studies. A study conducted by Quinn and Spreitzer in 1991 (as cited in Cameron & Quinn, 2006) surveyed 796 executives from 86 different firms. The Cronbach's alpha for the dominant culture types was reported as .74 for clan, .79 for adhocracy, .73 for hierarchy, and .71 for market. This same study validated the use of the Likert scale as a reliable instrument for assessing culture. A second study in 1991 conducted by Yeung, Brockbank, and Ulrich (as cited in Cameron & Quinn, 2006) had 10,300 respondents in 1,064 businesses. The results were similar with a Cronbach's alpha of .79 for clan, .80 for adhocracy, .76 for hierarchy, and .77 for market. While a .70 alpha is adequate for a relatively new tool, the above results are nearing the .80 alpha desired for more established tools (Ferketich, 1990). A study of an organizational assessment reported by Jones, DeBaca, and Yarbrough (1997) was completed in a hospital setting before and after implementation of a new model of patient care delivery using the OCAI. They

reported much higher Cronbach's alpha scores of .92 (clan), .91 (adhocracy), .92 (hierarchy), and .92 (market).

In another study in 1991, Cameron and Freeman (as cited in Cameron & Quinn, 2006) established evidence of concurrent validity in a study that assessed the culture of 334 four-year colleges and universities in the United States. Experts at each institution that could provide perspective on the cultural characteristics of their institution were identified. The congruence of the experts' identification of the dominant themes related to performance and the type of dominant culture identified by the OCAI results of 3,406 participants provided the concurrent validity required.

A total of 236 universities had one dominant culture type or congruent culture. The remaining 98 had incongruent cultures where one culture type was not dominant across the organization. Analysis of the university organizations was completed using congruence, strength of culture and culture type. Culture type was the only statistically significant factor in evaluating organizational performance.

Also in 1991, Quinn and Spreitzer (as cited in Cameron & Quinn, 2006) tested the OCAI for convergent and discriminant validity. Demonstration of convergent validity was accomplished through multitrait-multimethod analysis. Two instruments were used to assess organizational culture. One tool was the OCAI with the forced choice scoring of 100 points and the second used a Likert-type scale that was rated from 1-5. Correlation coefficients between the two

scores for each type of culture were significant ($p<.001$) and ranged from .212 to .515.

Quinn and Spreitzer conducted tests of discriminant validity in three ways. The first test compared culture scores of the same quadrants to those of different quadrants obtained by the different tools. Twenty-three of 24 comparisons resulted in a higher correlation. The second test evaluated correlations with the same quadrant scores obtained by the same method. A correlation was found in 16 of 24 comparisons. The third test for discriminant validity was to define the relationship within and between each of the methods. The researchers reported a Kendall's coefficient of concordance of .764 ($p<.001$) that indicated strong discriminant validity. The multitrait-multimethod analysis supported both convergent and discriminant validity.

A review of quantitative instruments for use in healthcare completed by Scott, Mannion, Davies, and Marshall (2003) described the strengths of the OCAI. The tool has a strong theoretical base in the Competing Values Framework. Easy and taking little time to complete, this tool assesses both the dominant culture and the strength of that culture type in comparison to the others. The Competing Values Framework identifies factors that influence cultural development in the same way that Leininger's Theory of Culture Care Diversity and Universality identifies influential factors. The Competing Values Framework has been used in healthcare settings though not specifically in

nursing. The tool has been demonstrated to be useful in assessing a culture and Leininger supports the assessment of the culture of nursing specifically.

*Open-Ended Questions*

Open-ended questions were included to allow for additional comments from the nurses that completed the OCAI (Appendix D). According to Polit, Beck, and Hungler (2001), the addition of open-ended questions to a structured tool provides expanded information in the respondents' own words. Additionally, Leininger's theoretical framework advocates an approach of observation and interview. The open-ended questions were derived from the literature on nursing culture. Qualitative studies reported by Coeling and Wilcox (1988), delBueno and Vincent (1986), and Conway and McMillan (2002) identified themes related to fit, collegial support, teamwork, and practice.

## Data Collection

After approval to commence the study was received from the Institutional Review Boards and the Chief Nursing Officers of the participating hospitals, the investigator attended shared leadership meetings, staff meetings and any meeting that was appropriate for reaching groups of nurses at the hospital. An introductory letter explaining the study was included on the top of each survey as well as a letter documenting participation for the nurse to retain for his or her records (Appendix E). The investigator waited to collect surveys that may be completed at that time. Each nurse who completed the survey packet was given a $5 Starbucks gift card for their time.

Survey packets were also given to the nurse managers and staff representatives to distribute to those not in attendance. Stamped, addressed envelopes were included for the nurse to return the completed surveys directly to the investigator. Additionally, the packets contained a stamped, addressed post card for the nurse to send separately with her name and address in order for the researcher to mail the Starbucks gift card. The forms had a hospital identifier on the demographic form. This allowed the investigator to report the return rate from each hospital; sort the returned surveys into the appropriate category for analysis; and allowed the investigator to contact each hospital for a reminder if the return rate was slow. The hospital demographic form was left with the Chief Nursing Officer or designee to complete and was also returned to the investigator in a stamped addressed envelope.

A pilot study was conducted at a specialty hospital located in a large urban area in the Southeastern U.S. Approval was obtained from the hospital administration and the Texas Woman's University Institutional Review Board. The purpose of the pilot study was to provide a cultural assessment of nursing at the hospital as well as to allow the investigator to assess the usefulness and feasibility of the tools selected for the larger study. The hospital had a total RN staff of 76. Overall, they reported 36 (47%) RNs with a BSN level of education. The annual reported RN turnover was 17%. The hospital did have a shared decision-making model, tuition reimbursement, and free parking. The hospital did not offer a clinical ladder or professional development model.

Fifty surveys were distributed for a desired sample of 30. The researcher presented the study to the staff nurse governance group at their monthly meeting. After all questions were answered, time was allotted for the attendees to complete the surveys. Eleven surveys were collected at the meeting. The remaining 39 were left with the unit representatives to distribute to their peers. These packets included a stamped, self-addressed envelope for convenient return to the investigator. The hospital demographic form was left with the Chief Nursing Officer for completion.

Twenty-four (48%) of the 50 packets distributed were returned. Four were excluded from the sample. Two did not meet the inclusion criteria. One was completed by an agency nurse and the other was completed by a Licensed Vocational Nurse (LVN). Two other surveys had been copied incorrectly and were missing pages.

The final sample number was 20. Females comprised 85% ($n$=17) of the sample. Ninety-five percent ($n$=19) of the staff was employed full time. The mean age of the nurses was 40 years old (range 26-59 years). Staff nurses were represented by 85% ($n$=17) of the respondents. Ten percent were in unit management positions ($n$=2) and 5% ($n$=1) were advanced practice nurses. The Associate degree was the most common initial nursing degree (65%, $n$=13) followed by a Bachelor's degree (25%, $n$=5) and a Diploma degree (10%, $n$=2) respectively. The Associate degree was also the dominant highest degree held (45%, $n$=9). Second was a Bachelor's degree (35%, $n$=7). A Master's degree and

a Diploma degree were equal at 10% (*n*=2) for highest degree held. Twenty-five percent (*n*=5) of the staff were certified in their specialty. Forty-five percent (*n*=9) of the nurses were Caucasian; 30% were Black/African American (*n*=6); 10% were Asian (*n*=2); and the remaining 15% were divided equally between Hispanic/Latino (*n*=1); Native Hawaiian/Pacific Islander (*n*=1), and Mixed Ethnicity (*n*=1).

The average number of years employed at the hospital was 1.4 years with 1.2 years in current unit. One nurse was excluded who reported 7 years in current unit as the hospital was not in existence 7 years ago. The average years employed in nursing was 11 years. Twenty-five percent (*n*=5) of the sample worked in the medical/surgical floors. Twenty percent (*n*=4) worked in the operating room, 15% (*n*=3) in the post anesthesia care unit, and 30% (*n*=6) reported other areas which included education, imaging or unspecified. Two did not report the area worked.

The OCAI provided scores for the four types of culture. The plot created by the instrument scoring for the pilot hospital is displayed in Figure 3. The Clan culture and the Adhocracy culture had nearly equivalent scores. The Clan culture score was 24.52 and is characterized by a strong sense of teamwork, employee involvement and empowerment, and a commitment to customers. Cameron and Quinn (2006) described the Clan as a family-oriented culture. Themes related to a Clan culture were identified in the answers to all six of the open-ended questions.

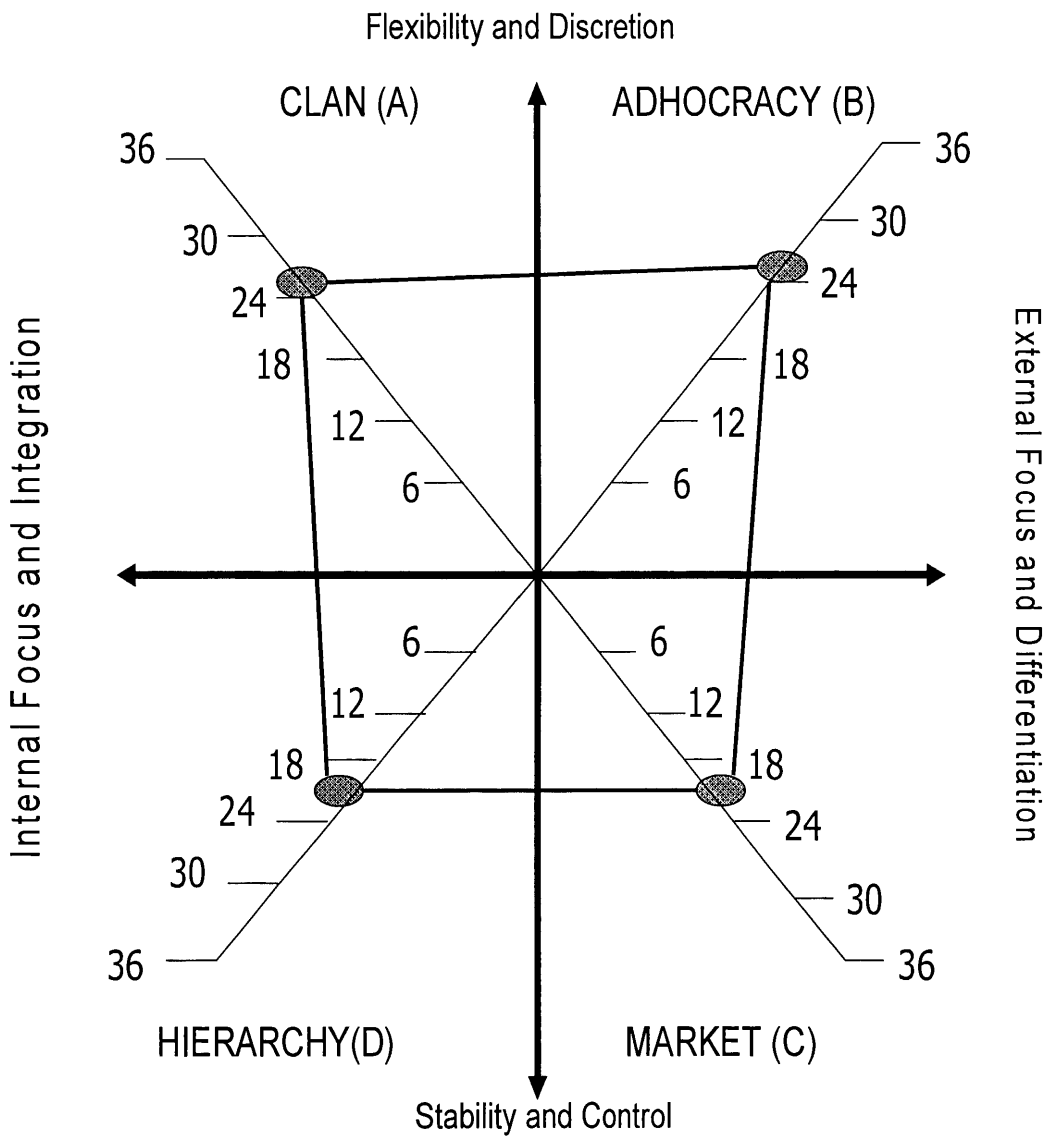


*Figure 3.* Pilot study organizational culture profile plot.

The Clan themes were (a) teamwork, team player; (b) support, relationship with manager; (c) excellence in patient care; and (d) friendly. Representative answers included "Teamwork is always at its highest level" and "Nursing structure is more personal." Another nurse wrote "Patient care is truly #1 at my facility."

The Adhocracy culture scored 24.37 and is the culture most responsive to changing environments. Characterized by flexibility and adaptability, these same themes were found in the written answers. "If some process... isn't working we can change it and try something new the next day." Flexible scheduling was a theme repeated often. Comments included "Voluntary call," "No holidays or weekends," and "Great schedule for kids."

The Market culture scored 22.81 out of 36. This culture is results-oriented and values competitiveness and productivity. The theme increased accountability was found in answers to question 6: If you could change one thing about your hospital, what would it be? "Ones who do not measure up would have consequences." "Those who do not contribute should be sent on." "Hold nonproductive employees accountable." According to these answers, this is one area the staff would like to see strengthened. Another Market theme identified was "low patient load" or low patient ratio. This is an important competitive edge for hospitals.

Finally, the lowest score was the Hierarchy culture (22.00). There were no themes identified specifically to hierarchy. One comment pointed to the absence

of this type of culture: "More freedom to do just about anything because of lack of structure." The lack of qualitative data was not unexpected as this was the lowest scoring of the four types of culture.

Based on the use of the tools and the analysis of the pilot data, the following changes were made to the study:

1. Remove "Preferred" culture selection on OCAI.

   The OCAI asked each nurse to rate the current culture and the culture as they would desire it to be in five years. This led to some confusion in completing the tool correctly and the majority of staff answered 5 or 6 for each preferred question. The preferred data were not being used in this study.

2. Reduce open ended questions from 6 to 4.

   The investigator removed question 2: Please describe the nurse who is successful in your hospital and question 5: Why do you stay at this hospital? Both questions elicited answers very similar in theme to question 1: What do you like best about nursing in your organization? Three of the 20 respondents also left question 2 blank. The remaining four questions provided helpful information in explaining the types of culture present.

## Treatment of Data

Analysis of the demographic data was completed with descriptive statistics of means, ranges, and frequencies. These values were calculated using Statistical Package for the Social Sciences (SPSS) for Windows, version 11.5.

The characteristics of the suburban community nurses and hospitals were described, as were the characteristics of the urban academic nurses and their hospitals.

The results of the OCAI were analyzed using the guidelines provided by Cameron and Quinn (2006). The results from each respondent were entered into a data spreadsheet for each of the twenty-four statements. The data derived from each individual survey was combined to calculate a mean for each of the four culture types for each of the two settings using SPSS. A visual profile of the suburban community and urban academic cultures was created by plotting the means onto the CVF continuum (Figure 4). Cameron and Quinn (2006) believe that visual display of the data for review and comparison can be more powerful than only looking at the statistical analysis of the numbers themselves.

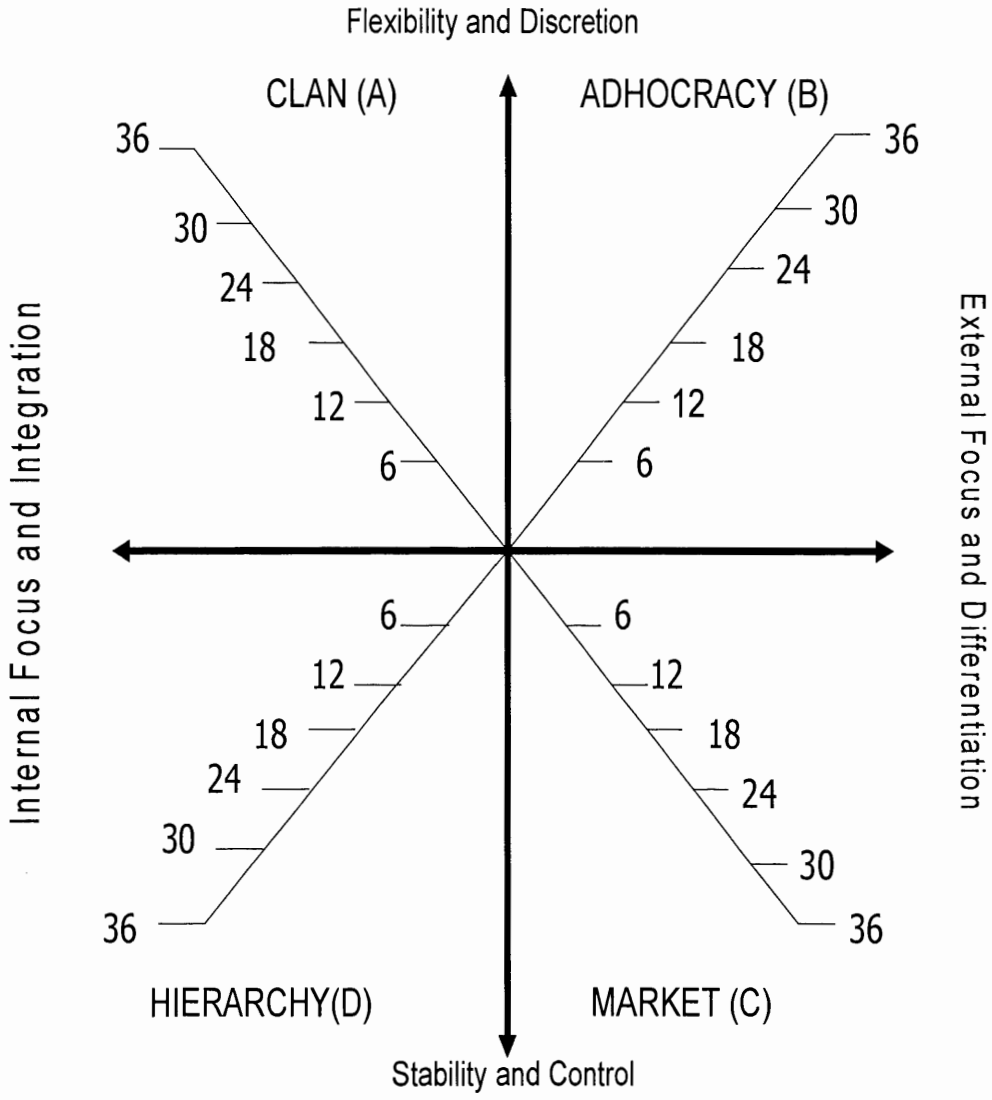


*Figure 4.* Organizational culture profile plot. From: *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* by K. S. Cameron and R. E. Quinn, 2006. San Francisco: Jossey-Bass, Inc.

A one-way analysis of variance (ANOVA) was performed to answer the first research question and determine if there was a statistically significant difference between the four culture scores of the suburban community and the urban academic nurses. The following assumptions regarding the use of ANOVA were considered. The independent variable must be mutually exclusive. The two groups of nurses being surveyed were exclusive, either suburban or urban. The dependent variable must be continuous. This Likert scale met Munro's (1997) definition of a continuous variable that must have a minimum of eleven dichotomous levels of data. The summation of the six-point Likert scale provides a potential range of scores from 6 to 36 that was used to calculate the mean for each subscale. The dependent variable must be normally distributed and demonstrate equal variance within the group. These assumptions were tested with the statistical analysis using SPSS.

When using ANOVA, a post-hoc test is required if values of significance are discovered. It is not possible to determine exactly which group means contributed the significant difference without comparing the group means through further testing (Munro, 1997; Polit, Beck, & Hungler, 2001). The Bonferroni post-hoc test was used. This test requires a more stringent alpha be met. The alpha, set at .05 for this analysis, was divided by the number of groups to determine the alpha required to be significant. When there are two groups, the required alpha was .025 (.05/2).

Regression analysis was used to answer research question two regarding the demographic factors of the nurses and the organization that may be influencing the nursing culture. Regression analysis is appropriate when the amount of influence exerted by different factors is unknown. The demographic variables from the RN and the hospital questionnaires were derived from the literature review and Leininger's theoretical framework for factors that can influence the development of a culture. The dependent variable remained the scores for the four culture types identified using the OCAI. This analysis explained the factors that may influence the culture of nursing as well as how strongly the culture was influenced.

The third research question about the nurses' perceptions was answered through thematic analysis of written responses to open-ended questions. The written answers were transcribed verbatim and sorted by question answered. The analysis involved the identification of repeated words and phrases that were "clustered" and "labeled as themes" (Speziale & Carpenter, 2003, p. 36). DeSantis and Ugarizza (2000) said that themes emerge from data as it is studied. Themes cannot be forced onto the data.

The value of this information is in the comments and the potential insight provided into the quantitative analysis of the OCAI results (Polit, Beck, & Hungler, 2001; Thurmond, 2001). This analysis included discussion of the themes that supported and/or contradicted the results of the OCAI cultural assessment.

## Summary

The purpose of this study was to describe the culture of nurses in the suburban community and urban academic hospitals and determine if there was a difference between the two groups. The independent variable was the location of the hospital: a suburban community hospital or an urban academic hospital setting. The dependent variable, the organizational culture as perceived by the nurses, was measured using the Organizational Culture Assessment Instrument (OCAI). Demographic data was collected on two separate questionnaires: one for each nurse that completed the OCAI and one for each hospital that has nurses that participated in the study.

An ANOVA was used to discover the differences that may be found between the scores of the types of culture of the two groups. Regression analysis was used to identify additional factors that may have influenced the culture of nursing. Open-ended questions were used to gather comments from the participants. The responses were analyzed through thematic analysis, searching for themes and patterns in the data. The findings of the written responses were used to further explain the quantitative analysis.

# CHAPTER IV

## ANALYSIS OF DATA

The purpose of this study was to explore the differences of the perceptions of nurses of the culture of nursing in suburban community hospitals when compared to urban academic hospitals. This descriptive exploratory study used an across-method triangulation design to assess the nursing culture. Data were collected using a demographic questionnaire and the Organizational Culture Assessment Instrument (OCAI) completed by each nurse participant. Four open-ended questions were used to collect qualitative data that were used to support the quantitative interpretation of the OCAI. Data were also collected for each hospital surveyed using a demographic questionnaire that was completed by the chief nursing officer (CNO) or designee.

A convenience sample of 320 nurses was required: 160 nurses in each of the two settings. The study was started after obtaining institutional review board approval at Texas Woman's University and the two health systems used. The researcher contacted the CNO at each of the six hospitals surveyed in order to obtain access to appropriate meetings of the nursing staff. Data collection was completed over a six-month period. A total of 571 questionnaire packets were distributed. Of the 571 distributed, 363 were returned. Twelve were excluded from the analysis. Two were completed by staff members who were not RNs and

the remaining ten had entire pages of the OCAI that were not completed. This resulted in a useable sample of 351 complete questionnaires. The response rate for the entire sample was 63.4%. The urban academic sample returned 187 questionnaires of 289 distributed, resulting in a return rate of 64.7%. The community suburban sample returned 164 questionnaires of 282 (58.2%) distributed. Fourteen nurses chose not to answer any of the open-ended questions: 4 were suburban community nurses and 10 were urban academic nurses. These questionnaires were included in the quantitative analysis.

The demographic description of the sample of nurses is displayed in Table 1. This includes the overall sample of nurses and the nurses in the suburban community and urban academic hospitals. A comparison of the sample groups was conducted using Chi-Square and ANOVA techniques. The samples were significantly different in five variables: (a) mean years worked in current unit, (b) mean years worked in current hospital, (c) ethnic origin, (d) highest nursing degree held, and (e) type of unit worked. There was not significant difference in total years worked in nursing. The difference between the unit and current hospital worked is due to the age of the suburban community hospitals when compared to the urban academic hospitals. The urban hospitals have been in existence for an average of 72.5 years. One of the suburban community hospitals was founded in 1948 (61 years ago) but the other three were established within the last 11 years. The difference in the type of unit worked is due to the convienence sampling and the responsiveness of the nursing

leadership in those areas to provide opportunities for their nursing staff to participate in the study.

Table 1

*Nursing Sample*

| Variables | Suburban Community ($n$ = 164) | Urban Academic ($n$ = 187) | Total ($N$ = 351) |
|---|---|---|---|
| Mean Age (years) | 43.3 (±9.42) | 41.8 (±10.62) | 42.5 (±10.08) |
| Mean Years Worked | | | |
| Nursing | 17.2 (±9.80) | 16.9 (±10.41) | 17.0 (±10.12) |
| Current Unit* | 4.2 (±4.63) | 7.2 (±7.08) | 5.8 (±6.22) |
| Current Hospital* | 5.1 (±5.57) | 10.8 (±9.73) | 8.1 (±8.51) |
| Gender | | | |
| Female | 148(90.2%) | 165(88.2%) | 313(89.2%) |
| Male | 16(9.8%) | 21(11.2%) | 37(10.5%) |
| Ethnic Origin* | | | |
| Asian | 35 (21.3%) | 55(29.4%) | 90(25.6%) |
| Black/African American | 13(7.9%) | 43(23%) | 56(16.0%) |
| Caucasian/White | 105(64%) | 73(39%) | 178(50.7%) |
| All Other | 11(6.7%) | 13(8.1%) | 24(6.9%) |
| Nursing Position | | | |
| Staff Nurse | 112(68.3%) | 120(64.2%) | 232(66.1%) |
| Unit Management | 39(23.8%) | 50(26.7%) | 89(25.4%) |
| APN/NP/CNS | 8(4.9%) | 13(7%) | 21(6.0%) |
| Highest Nursing Degree Held* | | | |
| Diploma | 4(2.4%) | 15(8%) | 19(5.4%) |
| Associate degree | 49(29.9%) | 28(15%) | 77(21.9%) |
| Bachelor's degree | 96(58.5%) | 101(54%) | 197(5601%) |
| Master's degree | 13(7.9%) | 42(22.5%) | 55(15.7%) |
| Doctoral degree | 2(1.2%) | 1(0.5%) | 3(0.9%) |
| Specialty Certification | 70(42.7%) | 90(48.1%) | 160(45.6%) |
| Work Status | | | |
| Full Time | 149(90.9%) | 172(92%) | 321(91.5%) |
| Part Time | 12(7.3%) | 8(4.3%) | 20(5.7%) |
| Type of Unit Worked* | | | |
| ICU/CCU | 28(17.1%) | 44(23.5%) | 72(20.5%) |
| Med/Surg/Tele | 40(24.4%) | 75(40.2%) | 115(32.8%) |
| Labor & Delivery/Pedi/Nursery | 24(14.7%) | 1(0.5%) | 25(7.1%) |
| Emergency Center | 4(2.4%) | 23(12.3%) | 27(7.7%) |
| Other | 67(40.9%) | 44(23.5%) | 111(31.6%) |

* $p$ = .000

The six hospitals are described in Table 2. All six of the hospitals reported having a shared decision making model for nursing; clinical ladder/professional development model; tuition assistance program; and 5 of the 6 offered free parking. The current RN vacancy rate was similar in all but one hospital. This hospital had recently opened an entire new and expanded hospital. The reported annual RN turnover was similar except for one outlier.

Table 2

*Characteristics of the Six Hospitals*

| Hospital | Total RNs | Total BSNs | Annual RN Turnover | Current RN Vacancy |
|---|---|---|---|---|
| Suburban Community | | | | |
| Hospital 1 (*n*=35) | 350 | * | 17.0 | 3.0 |
| Hospital 2 (*n*=31) | 373 | 125 | 15.1 | 21.5 |
| Hospital 3 (*n*=37) | 444 | * | 20.0 | 2.0 |
| Hospital 4 (*n*=61) | 348 | 163 | 16.4 | 5.0 |
| Urban Academic | | | | |
| Hospital 1 (*n*=76) | 1,936 | * | 10.9 | 9.7 |
| Hospital 2 (*n*=111) | 1,392 | 824 | 12.1 | 6.6 |

* = no data submitted

## Findings of the Quantitative Analysis

Research questions 1 and 2 were answered using quantitative descriptive and inferential statistics.

*Research Question 1*

The first research question was: "What are the differences in the culture of nursing between suburban community hospital nurses and urban academic hospital nurses?" The OCAI was used to measure the culture of nursing in the suburban community and urban academic settings. There are four types of culture identified: (a) clan, (b) adhocracy, (c) market, and (d) hierarchy. The answers to the 24 questions of the OCAI were summed according to each subscale for each individual nurse. These sums were used to calculate an aggregate subscale score mean for each of the two groups. The subscale means were plotted visually on the OCAI plot. The plots are shown in Figures 5 and 6.

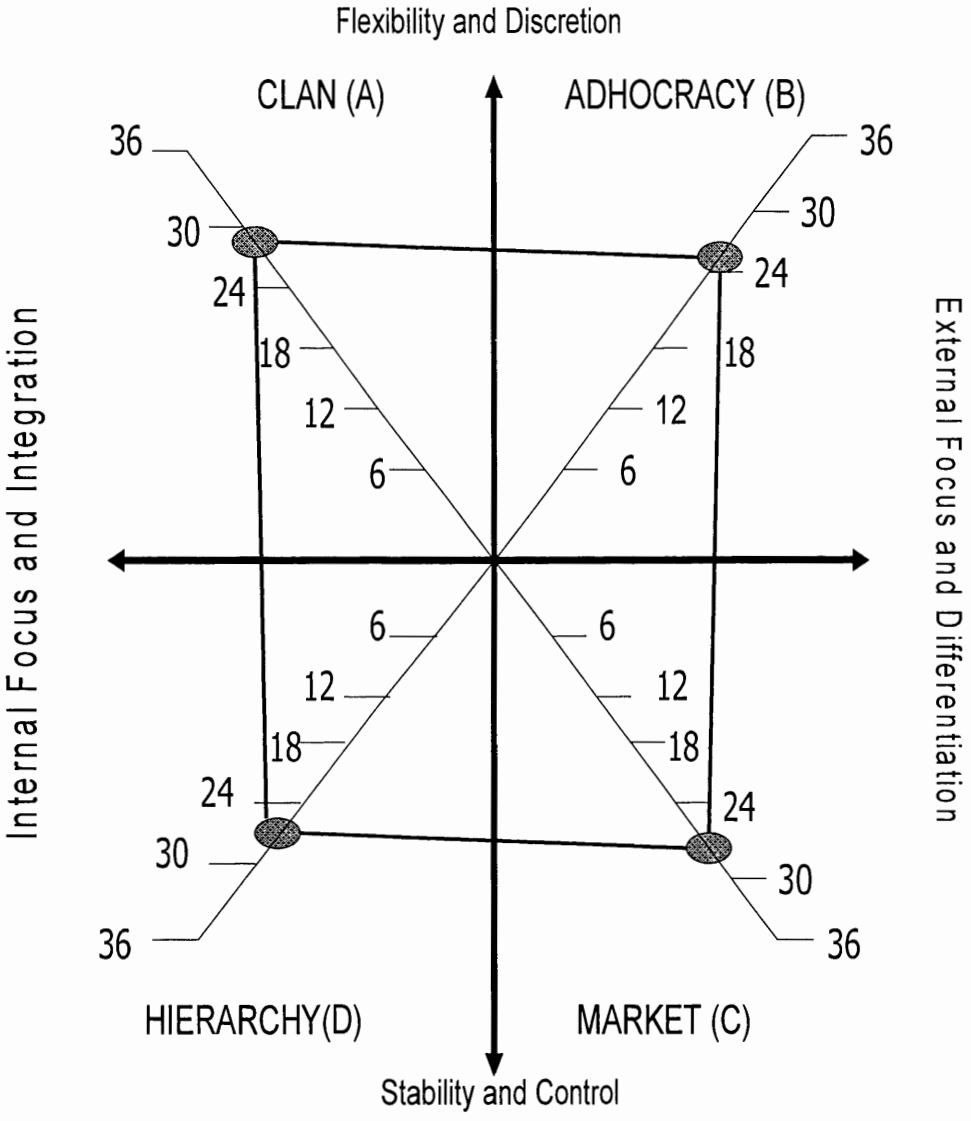


*Figure 5.* Organizational culture profile plot: suburban community nursing.

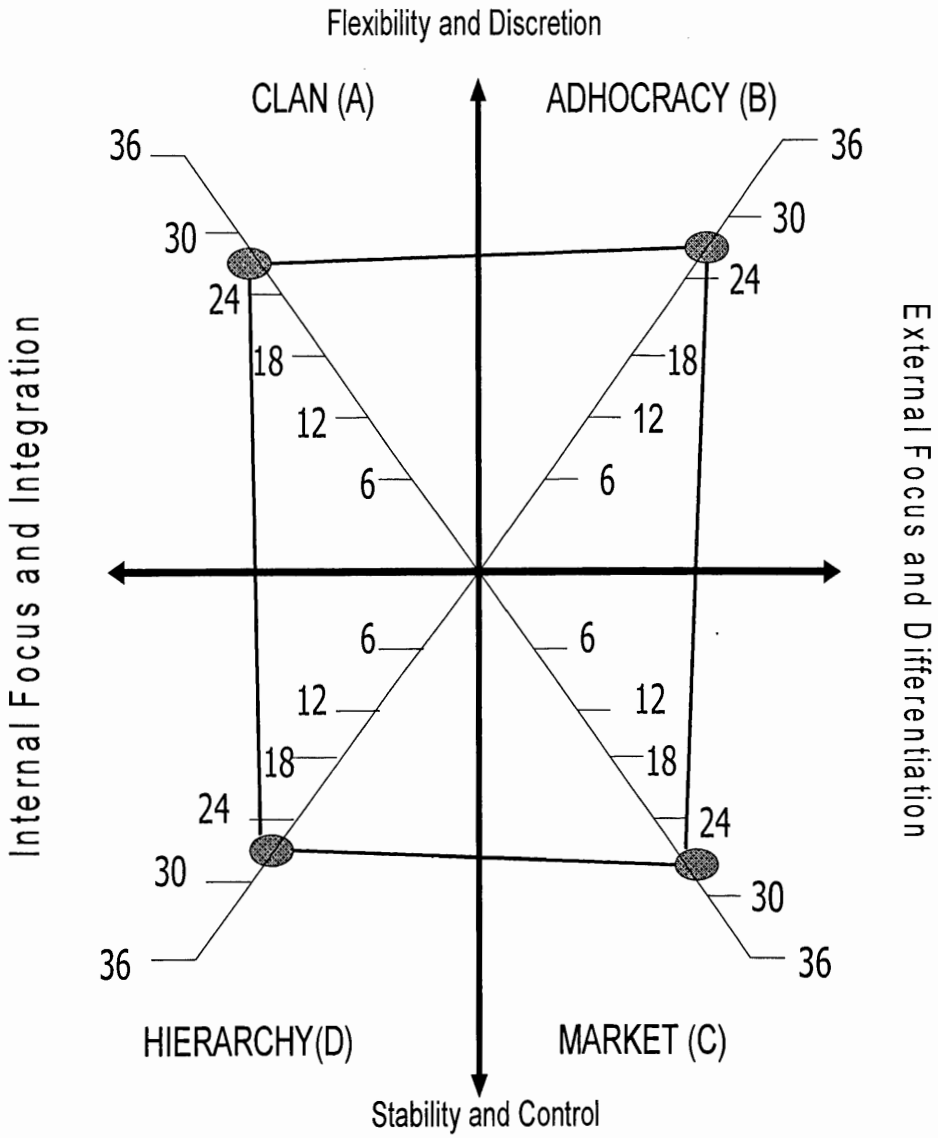


*Figure 6.* Organizational culture profile plot: urban academic nursing.

The mean scores for the four types of culture identified by the OCAI are seen in Table 3. The clan culture type was the dominant culture type in both settings. Cameron and Quinn (2006) would not characterize the clan culture score indicative of a strong culture as the score was within 10 points of the other culture types. The four culture types were essentially equally developed in both nursing settings.

A one way analysis of variance (ANOVA) was performed to determine if a statistical difference existed between the OCAI culture scores of the suburban community hospital and the urban academic hospital nurses. There are three assumptions that must be met to use an ANOVA. The sample met the first two requirements. The two groups of nurses were mutually exclusive. Secondly, the scores on the OCAI represented continuous data. The third assumption of the data is that it passes the test of homogeneity of variance. Levine's statistic was used to test this assumption (Table 4). The adhocracy culture scores violated this assumption ($p$ = .021). According to Field (2005), ANOVA is an adequately robust test under certain circumstances to overcome this lack of homogeneity. However, a Welch F is recommended when violation of this assumption occurs and was used to further analyze the difference in the means for the adhocracy culture type.

Table 3

*Levene's Test of Homogeneity of Variance*

| Culture Type | Levene Statistic | *df*1 | *df*2 |
|---|---|---|---|
| Clan | .778 | 1 | 346 |
| Adhocracy | 5.386* | 1 | 345 |
| Market | 1.342 | 1 | 344 |
| Hierarchy | 1.765 | 1 | 337 |

* $p < .05$

Table 4

*Comparison of Culture Types Scores*

| Culture Type | | *n* | Mean | *SD* |
|---|---|---|---|---|
| Clan | | | | |
| | Suburban Community | 161 | 28.83 | 5.84 |
| | Urban Academic | 187 | 28.03 | 5.25 |
| Adhocracy | | | | |
| | Suburban Community | 161 | 25.57 | 5.94 |
| | Urban Academic | 186 | 26.24 | 4.97 |
| Market | | | | |
| | Suburban Community | 160 | 26.33 | 5.46 |
| | Urban Academic | 186 | 27.10 | 5.12 |
| Hierarchy | | | | |
| | Suburban Community | 155 | 26.68 | 5.57 |
| | Urban Academic | 184 | 26.98 | 4.81 |

There were no statistically significant differences between the mean scores of the four types of culture for the suburban community hospital nurses and the urban academic hospital nurses. The results of the ANOVA are displayed in Table 5. The Welch F test of the adhocracy mean scores produced $F = 1.281$, $df1 = 1$, $df2 = 2$, and significance 0.259. No post hoc testing was required as there were no results of significance.

Table 5

*Analysis of Variance for Culture Types*

| Culture Type | *df* | *MS* | *F* | *p* |
|---|---|---|---|---|
| Clan | | | | |
| Between groups | 1 | 55.28 | 1.81 | .179 |
| Within groups | 346 | 30.54 | | |
| Adhocracy | | | | |
| Between groups | 1 | 38.90 | 1.31 | .252 |
| Within groups | 345 | 29.60 | | |
| Market | | | | |
| Between groups | 1 | 51.95 | 1.87 | .173 |
| Within groups | 344 | 27.86 | | |
| Hierarchy | | | | |
| Between groups | 1 | 7.61 | .28 | .594 |
| Within groups | 337 | 26.78 | | |

*Research Question 2*

"What are the personal and/or organizational demographic characteristics that can influence the scores of the four types of the culture of nursing, regardless of the setting?" was the second research question asked. The answer to this question was obtained using linear regression. The demographic variables included were based on findings from the review of the literature and the theoretical framework for this study, Leininger's Theory of Culture Care Diversity and Universality and the Sunrise Model to depict dimensions that influence the culture of nursing (Figure 2). These characteristics were selected as those that may influence the results of the OCAI, regardless of the setting worked.

The regression analysis was completed using the variables collected on the RN Demographic Data Questionnaire (Appendix A) and the Hospital Demographic Data Questionnaire (Appendix B). Dummy variables were created for gender (0 = female); type of unit worked (0 = Med/surg/tele); ethnic origin (0 = Caucasian/White); highest nursing degree held (0 = BSN); nursing position (0 = staff nurse); specialty certification (0 = no); and work status (0 = full time). The nurse variables were entered into the model first. The variables were all entered at the same time. The hospital variables were entered second. The current RN vacancy, annual RN turnover, and free parking (0 = yes) were entered. The variables of a shared decision making model, tuition assistance program, and clinical ladder/professional development model could not be used in the analysis as they were present in all of the hospitals sampled. Since the highest Pearson

correlation between any of the variables was .84, all of the remaining nurse and hospital variables could be used in the model.

The results of the regression analysis are displayed in Tables 6 and 7. Statistically significant findings were found within the nurse variables for Adhocracy, Market and Hierarchy culture types. The Adhocracy type of culture exhibited additional significance when the hospital variables were added to the model. The Clan culture type also developed significant variables when the hospital variables were added to the model. The amount of variance explained by the nursing variables was less than 10% in all four culture types. The highest variance was seen in the Hierarchy culture type scores (9.3%) and was least influential in the Clan culture type at 3.2%. The addition of the hospital variables to the model increased the amount of variance in the Adhocracy scores to 9.2%. The amount of variance in the Clan culture scores increased to 4.2% and the amount of variance was reduced in the scores of the other two types of culture when the hospital variables were added.

Table 6
*Regression Analysis*

| Model Summary | *R* | $R^2$ | Adj. $R^2$ | *df* (1,2) | *F* Change | ANOVA *F* |
|---|---|---|---|---|---|---|
| Clan (*n*=317) | | | | | | |
| Model 1 | .31 | .09 | .03 | (20, 296) | 1.53 | 1.53 |
| Model 2 | .33 | .11 | .04 | (3, 293) | 1.96 | 1.60* |
| Adhocracy (*n*=314) | | | | | | |
| Model 1 | .37 | .13 | .07 | (20, 295) | 2.26** | 2.26** |
| Model 2 | .40 | .16 | .09 | (3, 292) | 2.91* | 2.38*** |
| Market (*n*=314) | | | | | | |
| Model 1 | .36 | .13 | .07 | (20, 293) | 2.21* | 2.21** |
| Model 2 | .37 | .14 | .07 | (3, 292) | .57 | 1.99** |
| Hierarchy (*n*=312) | | | | | | |
| Model 1 | .39 | .15 | .09 | (20, 291) | 2.60*** | 2.60*** |
| Model 2 | .40 | .16 | .09 | (3, 288) | .44 | 2.31** |

* $p \leq .05$, ** $p \leq .01$, *** $p = .000$

Table 7
*Variables of Influence as Identified through Regression*

| | Standardized Beta Coefficient | *t* | 95% Confidence Interval Beta Lower | Upper | Partial Correlation |
|---|---|---|---|---|---|
| **Clan** | | | | | |
| Model 2 | | | | | |
| Staff (0) v. Mgr (1) | 0.20 | 2.78** | 0.74 | 4.31 | 0.15 |
| Med/Surg/Tele (0) v. L&D/Pedi (1) | 0.13 | 2.02* | 0.07 | 5.61 | 0.11 |
| White (0) v. Asian (1) | 0.26 | 3.85*** | 1.64 | 5.06 | 0.21 |
| Current RN Vacancy | 0.13 | 1.97* | 0.00 | 0.30 | 0.11 |
| **Adhocracy** | | | | | |
| Model 1 | | | | | |
| BSN (0) v. PhD (1) | -0.12 | -2.02* | -12.46 | -0.17 | -0.12 |
| White (0) v. Other (1) | 0.13 | 2.20* | 0.28 | 4.88 | 0.13 |
| White (0) v. Asian (1) | 0.35 | 5.48*** | 2.73 | 5.79 | 0.31 |
| Model 2 | | | | | |
| BSN (0) v. PhD (1) | -0.12 | -2.03* | -12.56 | -0.19 | -0.11 |
| White (0) v. Other (1) | 0.13 | 2.18* | 0.25 | 4.89 | 0.12 |
| White (0) v. Asian (1) | 0.36 | 5.43*** | 2.77 | 5.91 | 0.30 |
| Current RN Vacancy | 0.18 | 2.78** | 0.06 | 0.35 | 0.16 |
| **Market** | | | | | |
| Model 1 | | | | | |
| Staff (0) v. Mgr (1) | 0.18 | 2.58* | 0.52 | 3.87 | 0.15 |
| White (0) v. Other (1) | 0.13 | 2.16* | 0.23 | 4.98 | 0.13 |
| White (0) v. Asian (1) | 0.31 | 4.79*** | 2.22 | 5.30 | 0.27 |
| White (0) v. Black (1) | 0.13 | 2.17* | 0.18 | 3.71 | 0.13 |
| Model 2 | | | | | |
| Staff (0) v. Mgr (1) | 0.18 | 2.56* | 0.51 | 3.88 | 0.15 |
| White (0) v. Other (1) | 0.12 | 2.02* | 0.06 | 4.85 | 0.12 |
| White (0) v. Asian (1) | 0.29 | 4.45*** | 2.00 | 5.18 | 0.25 |
| White (0) v. Black (1) | 0.12 | 2.02* | 0.43 | 3.60 | 0.12 |
| **Hierarchy** | | | | | |
| Model 1 | | | | | |
| BSN (0) v. PhD (1) | -0.12 | -2.02* | -12.46 | -0.17 | -0.12 |
| White (0) v. Other (1) | 0.13 | 2.20* | 0.28 | 4.88 | 0.13 |
| White (0) v. Asian (1) | 0.35 | 5.48*** | 2.73 | 5.79 | 0.31 |
| Model 2 | | | | | |
| BSN (0) v. PhD (1) | -0.12 | -2.03 | -12.56 | -0.19 | -0.12 |
| White (0) v. Other (1) | 0.13 | 2.18* | 0.25 | 4.89 | 0.13 |
| White (0) v. Asian (1) | 0.36 | 5.43*** | 2.77 | 5.92 | 0.31 |

Model 1 = Nurse variables
Model 2 = Nurse + Hospital variables
(0), (1) signifies dummy coding
* $p \leq .05$, ** $p \leq .01$, *** $p = .000$

A common variable to all four culture types was ethnic origin. The groups of Asian and Other were identified in all four analyses. The Black/African American group was significant in the Market culture type scores. The nursing position held in the organization was a significant variable in the Market and Clan culture types –particularly the unit management positions. Highest nursing degree held was an influential factor in the Hierarchy and Adhocracy culture types. The significant difference was in the PhD prepared group when compared to the BSN prepared group. The only hospital variable of significant influence was current RN turnover in the Adhocracy and Clan culture scores. Though statistically significant, the influence of the variables must be viewed with caution as the amount of variance explained was small and the partial correlations were not strong.

Due to the differences found between the two groups of nurses regarding highest nursing degree held and ethnic origin, these differences were explored further. Organizational Culture Profile Plots were completed to compare the groups. The culture type scores of the nurses who held a diploma or associate degree as their highest nursing degree were compared to the scores of those nurses who hold a BSN or higher. The mean scores were similar in the two education groups. The second comparison made was based on ethnic origin of the nurses. The nurses were divided into three groups: Caucasian/white, Asian, and all other ethnic groups. The profile plot of the Asian origin nurses is seen in Figures 7. The Asian group of nurses had higher mean scores than the

other two ethnic groupings. The White Caucasian nurses had lower mean scores than both of the two comparison groups. Further investigation is needed to determine if these were significant differences between the groups.

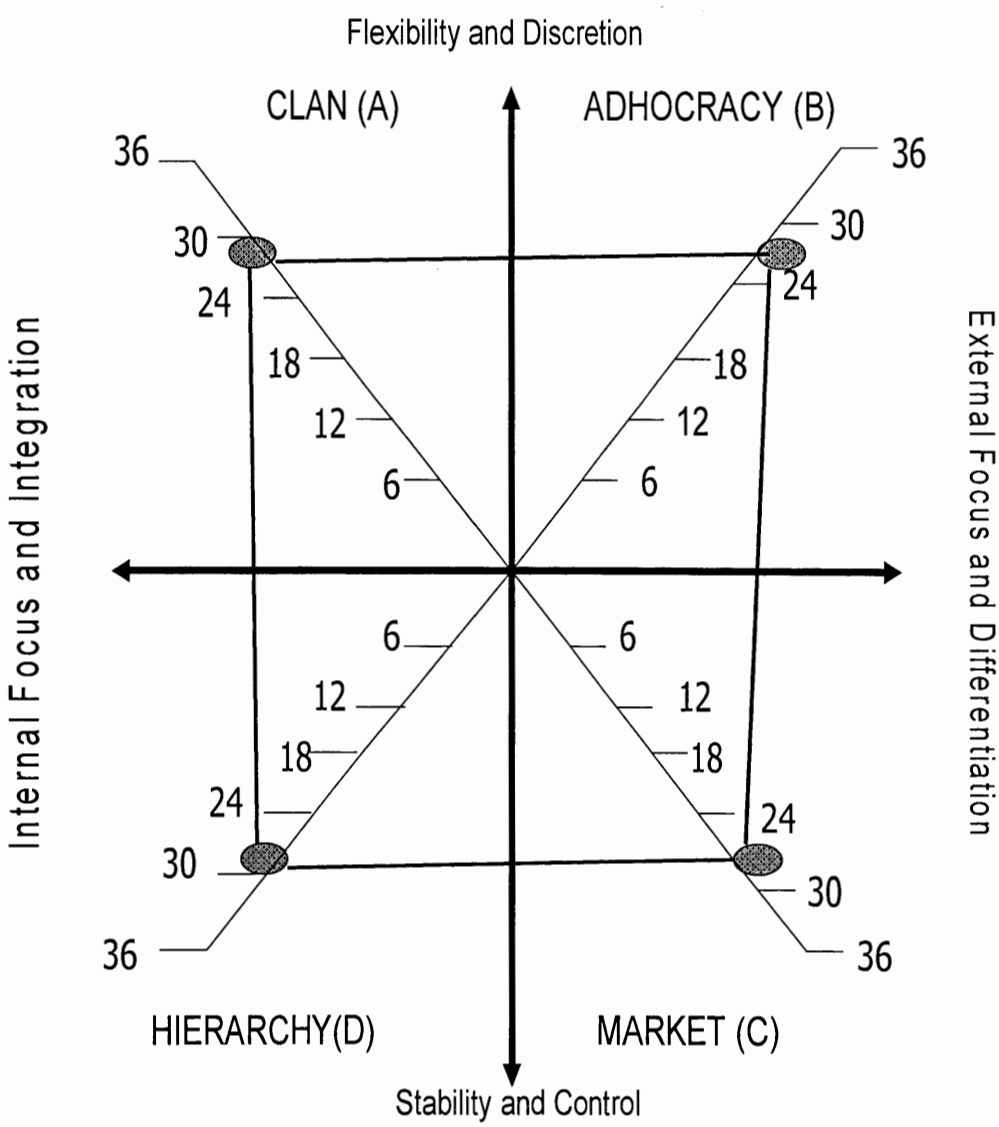


*Figure 7.* Organizational culture profile plot: Asian nurses.

## Findings of the Qualitative Analysis

The qualitative results were obtained from the written answers to the open-ended questions at the end of the OCAI. These results will be discussed in the answer to the third research question.

### *Research Question 3*

The third research question, "What are the perceptions of the nurses of the culture of nursing in the suburban community hospitals and the urban academic hospitals?" was answered through the use of four-open ended questions. The written answers to the questions were transcribed verbatim and organized according to setting and question. The analysis began with a general review of all of the answers to the questions to get a feel for the responses received. On subsequent readings, repeated words or phrases were identified and grouped or clustered into themes. The four questions were

1. What do you like best about nursing in your organization?
2. What could I find out about your hospital by "hanging out" for a couple of days?
3. How is this nursing organization different from others you have worked in?
4. If you could change one thing about nursing at your hospital, what would it be?

### *Relevant Themes*

Three categories of themes were identified that were common to both the suburban community and urban academic nurses perception of the culture of

nursing in response to the open-ended questions. The categories were (a) relationships, (b) professionalism and empowerment of nursing, and (c) commitment to quality and patient safety.

*Relationships.* The category of relationships includes two concepts that were common to both settings, teamwork and feels like a family. Openness of leadership was a third concept in relationships that was specific to the suburban community nurses' perceptions. Teamwork was the word most often used in answer to the open-ended questions regardless of the setting. The word was used alone or with an adjective such as "great", "interdisciplinary", or "excellent". Example responses to open-ended questions 1-3 included "My team that I work with. It is a good & dependable team"; "Teamwork. Not anyone is left alone & drowning with pts bedside care. Everyone is a good team player"; and "Great teamwork throughout the hospital among the nurses and ancillary support."

Nurses in both settings used descriptors of their hospital having a family-like feel to it. The nurses said that there was a "close knit family atmosphere", "a sense of family", or "extended family". Supporting statements were "This hospital has a caring & family feel to it."; "You will find that we are an extended family. If one falls – we all fall"; and "Everyone knows everyone. Like a family".

Openness of leadership was characterized by an accessibility of hospital administration and leadership to the nurses. This description was unique to the suburban community nurses. Phrases such as "open door policy" and "approachable" were commonly used. Additional supporting statements were

"The openness of administration. An open door policy is a great benefit. Admin. wants to hear your opinion"; "The management team is highly visible and very easy to approach"; and "The administrators are visible on the unit and not intimidating". Another nurse wrote "We can approach the supervisor easily".

*Professionalism and empowerment of nurses.* The concept of professionalism and empowerment of nursing was described as (a) nursing has a voice, (b) respect and autonomy, (c) availability of development opportunities, (d) need for educational requirements and opportunities, and (e) pride.

Multiple nurses in both settings wrote that what they liked best or what made their hospital different was a shared governance or shared leadership model. The respondents explained that the shared decision making model has provided a vehicle for staff input, created a sense of empowerment in nursing, and improved two-way communication. Evidence of this in the written statements included: "Our nurses have a voice in our organization"; "Nurses have a voice in any change or implementation of new policies"; "I love that the frontline staff has a voice"; and "The power of nursing – it has a strong voice". Other related comments talked about the high regard that nursing commanded in the organization. "I believe that our organization holds the profession of nursing in higher esteem than other organizations" and "Values nursing as a profession".

The urban academic nurses wrote about the respect and autonomy that they felt in their hospital, in their role as a nurse, and from physicians. They wrote about independence in their ability to care for their patients and use protocols.

One nurse wrote "We are free to decide on our own discretion in anything patient related". Two additional descriptive statements were "I like best that ability to work independently of others and to be allowed to care for patient without anyone looking over my shoulder"; and "I have lots of autonomy and I feel good being a nurse in an organization that allows me to utilize my critical thinking skills and feel as though my efforts count".

The availability of development opportunities described by the urban academic nurses was related to staff development and continuing education, formal advanced education, and career growth opportunities. One nurse wrote "different trainings available to update one's skills" and another wrote about the presence of "advanced technology and learning experiences". This theme was best summarized by a nurse who wrote "Given the opportunity... to try new things, to be creative, to seek out new opportunities, educational assist., professional development, etc.".

The suburban community nurses identified a need for more BSN prepared and specialty certified nurses. One nurse wrote "Due to the increasing complexities of today's patient I would actively encourage continuing education & possible require all ICU nurses have a CCRN". Others simply wrote "More BSNs". The nurses also expressed a desire for more educational opportunities: "Provide more educational opportunities to staff"; More classes available"; and "Encourage more training and inservices to enhance knowledge and skills". This

is in direct contrast to the urban academic nurses who reported having multiple opportunities for education and professional development.

The suburban community nurses wrote about the "strong sense of pride" you would see in their hospital. They wrote "Many nurses are proud to work for Hospital A-2"; and "Pride in working here". Another nurse wrote "You will find the best people to work with and that...are very proud in what they do and where they work."

*Commitment to quality and patient safety.* Both groups of nurses described their nursing organizations as committed to the highest standards of quality patient care. They wrote about the core values of excellence and customer service in their organizations. Supporting statements include: "Everyone works toward the common goals of patient safety and patient satisfaction"; "Patient care & safety is 1st & foremost"; "Commitment to providing the best care possible for patients"; and "Commitment to quality care & a consistent drive to improve efficiency".

Barriers to providing quality care were also identified. These were (a) staffing, (b) charting, (c) fast pace, and (d) need for quicker decision making. Both the suburban community and urban academic nurses identified staffing as an area they would make changes. The desire to decrease the nurse to patient ratio was the most widely used phrase in both groups. Two of the urban nurses also wrote "Nurse in charge w/ no patient assignment" and "Provide nurse practitioners to all areas". A suburban community nurse wrote "(require) all RN

(staff) on my unit". There were also comments in the answers of the suburban community nurses to the other open-ended questions that were supportive of the nurse to patient ratio in their setting, such as, "4 – 1 staffing ratio"; "Low nurse to patient ratio"; and "Safe nurse pt ratios on med – surg 4:1".

The amount of charting required, the type of charting – paper vs. computer, and the time required for either documentation system were the issues that both groups of nurses would change. Several described "redundant charting" or "less double charting w/ the computers AND paper". Most would have less paper charting and make the computer system mandatory for all disciplines. As with everything, there were some who did not like the current computer system in their hospital. The reasons for the frustration expressed were consistent: "Nurses are expected to chart too much trivial information and it does distract from patient care"; "Less paperwork, more time with patients"; "The amount of charting to be done. It takes away from your time @ the bedside"; and "Cut down on computer charting to increase time at the bedside".

Another unique theme identified by the urban academic nurses was the fast pace of their hospitals and the stress that this causes. Some of the stress was attributed to the high acuity of the patients and the nurse to patient ratio was "sometimes too high". The observations noted were "It's mostly busy people [that] are always on the go" and "It's a very busy changing facility that is trying to hardwire processes to get the best outcomes for patients and staff".

The urban academic nurses also expressed frustration that it often took so long for decisions to be made in their organizations. One nurse wrote that she would change "Getting a decision made without having to wait for weeks or even longer". Other supporting statements included: "Quicker decision-making – there are too many layers that have to be gone through prior to making any change"; and "The bureaucracy. Sometimes it is difficult to make decisions regarding simple operations because of the 'politics'."

## Study Findings Across Methods

After completion of the analysis of the open-ended questions, the resulting themes were compared to the findings of the OCAI. The OCAI measures four types of culture: (a) clan, (b) adhocracy, (c) market, and (d) hierarchy. The suburban community nurses scored highest on the clan type of culture with a mean score of 28.83. The urban academic nurses had a nearly identical mean score at 28.03. The suburban community nurses had a second highest mean score of 26.68 on the hierarchy culture type. Ranking third was the Market culture type with a mean score of 26.33 and the adhocracy culture type had the lowest mean score of 25.57. The urban academic nurses ranked the market type as second highest with a mean score of 27.10. They ranked hierarchy as the third highest (26.98) and the adhocracy was lowest with a mean score of 26.54. In both settings, there was not a strong dominant culture identified. The strength of the culture type is determined by the range of difference of one mean score from the others (Cameron & Quinn, 2006). The range of scores for the four

culture types were close, the suburban community nurses had a range of 3.26 from highest to lowest. The urban academic scores differed by a range of only 1.49. According to Cameron and Quinn (2006), 20% of organizations may not have a single dominant culture. Either the mission, vision and values of the organization have not been clearly defined throughout the organization or there has been a deliberate effort to address all types equally.

The regression analysis did identify some statistically significant variables that could influence the development of each of the four culture types in the culture of nursing. The results must be used with caution as they account for only a small amount of the variance in the scores. The quantitative findings of the OCAI are better supported by the qualitative findings of the open-ended questions.

*Clan Culture*

Both the suburban community and the urban academic nurses rated the clan culture type highest. The clan culture describes a family-like organization. According to Cameron and Quinn (2006), adjectives like friendly, extended family, and teamwork most closely describe a clan culture. This type of organization encourages employee participation; has strong shared values and goals; and the major task of managers is to empower employees. This score was supported by the analysis of the answers to the open-ended questions. The predominant themes of relationships, professionalism and empowerment of nursing, and commitment to quality and patient safety across both nursing

cultures in answer to all of the questions were reflective of the clan culture type. Phrases and words like "teamwork," "friendly," and "family-like" were used repeatedly in the written responses of the suburban community nurses. Teamwork occurred in 72 individual responses. References to friendly or family-like occurred 131 times. The urban academic nurses referred to teamwork in 44 responses and friendly and family-like were used 41 responses. A suburban community nurse wrote "I love my co-workers. We work together cohesively. Teamwork on the night shift". Another wrote that what was best about nursing at this hospital was the "Camaraderie of nurses – not only the ones in your own department but also with other departments". Others wrote "It's a big family that are dedicated, concerned, flexible, and committed"; "Nurses are being treated as extended family members"; and "This hospital has a caring & family feel to it. Everyone shows interest in you".

The urban academic nurses also had similar descriptions. Teamwork was a common theme: "The uniqueness of the culture which is highly based on the level of teamwork"; "Teamwork is a vital component of our unit; especially when things get very busy"; "Cohesiveness of unit, great teamwork"; and "Nurses and all staff are endeavoring to help one another and being family". One nurse wrote "People are committed to the organization & several have many, many years of service & would not want to be any place other than Hospital X due to the family atmosphere".

Professionalism and empowerment of nursing as reflected in the phrase "Nursing has a voice" was also evidence of a clan culture type. The clan culture encourages the input and suggestions of employees. An urban academic nurse wrote "The shared leadership model provides opportunity for staff nurse representatives to share concerns, opportunities for change, and staff suggestions". A suburban community nurse responded "I like the fact that this organization values the VOICE/opinion of the staff nurse". Openness of leadership reported by the suburban community nurses and respect and autonomy and the development opportunities reported by the urban academic nurses are all additional characteristics of the clan culture type.

*Market Culture*

The market culture type was second highest in the urban academic setting and ranked third in the suburban community setting. The market type of culture is characterized by a results orientation. According to Cameron and Quinn (2006), market dominant organizations are focused on the external environment and their interactions with their customers. The development of a secure customer base is one of the primary objectives. In health care, this is the equivalent of market share and participation in payor plans and contracts. A common theme in both settings was "Commitment to quality and patient safety". A commitment of this type allows a hospital to differentiate itself in the marketplace. Urban academic nurses wrote "That we are extremely results oriented"; "Commitment to quality care and a consistent drive to improve efficiency"; and "We face new

challenges with a 'can do' attitude". Examples of responses from the suburban community nurses included: "Strong commitment to increase the quality of care we give"; "We are concerned with quality & service for all clients. We have a daily meeting with the management team regarding patient flow. Patient satisfaction is one of our major goals"; "You would find that providing excellent patient care is our number one concern"; and "An environment where you are made to feel important for your participation in our goal to be the best!".

*Hierarchy Culture*

The hierarchy culture type was ranked second by the suburban community nurses at 26.68 and third by the urban academic nurses at 26.98. The hierarchy culture is characterized by structure and a clear chain of command for decision-making. There are standardized operating procedures and policies (Cameron & Quinn, 2006). The practice of nursing in a hospital setting lends itself to this type of culture. Clinical policies, procedures and protocols are critical to the delivery of patient care. There is little room for employee discretion in following policy and procedure. The comments from the suburban community nurses recognize hierarchy in their culture but not in a positive way. Example comments were "change is very difficult"; "It takes management a long time to get anything done"; "Policies are lacking"; and "unclear policies – not easily accessible". The urban academic nurses answered that one would find out about "polices and procedures" and that their hospital is "political" if one observed for a few days. Another nurse would change to a "More user friendly [intranet] page for

new policies, procedures, new units, new products, etc.". There was also a theme in answer to the question about what the urban academic nurses' would change in their hospitals that described the need for "quicker decision-making". While the requirement for policies is accepted by both groups, the urban academic nurses view the hierarchy aspects of their culture as impeding necessary changes. The suburban community nurses' comments would support the need for more structure around policies and procedures.

*Adhocracy Culture*

Both groups of nurses scored the adhocracy culture type the lowest. The suburban community nurses scored a mean score of 25.57 and the urban academic nurses scored a mean score of 26.54. The adhocracy culture type is characterized by an emphasis on rapid growth, readiness for change and a commitment to innovation. According to Cameron and Quinn (2006), organizations where the adhocracy culture is dominant value flexibility and creativity in an environment that is generally uncertain and ambiguous. There is no centralized authority as in the hierarchy culture. Risk-taking is also valued.

In answer to the question of what they would change if they could, two urban academic nurses wrote that they would "increase risk-taking". Another had a different recommendation about how to control change:

> I would change the way new information or changes are disseminated. I would have a department that is solely committed to change. Meaning, any new change in forms or protocols would have to go

to this department. The department would keep a grid of all changes introduced to ensure we are not overloading the people and inundating them w/ information.

The suburban community nurses also had comments about change in their environment. One nurse wrote "that when they have something to change – create, that it wouldn't take 3 committees, and months of meetings" and another asked for "less formal procedures." By contrast, another suburban community nurse would "Slow things down, pace is very fast for creating new projects".

## Summary of Findings

This chapter presented a description of the sample and the quantitative and qualitative findings for each of the three research questions. The total number of nurses that participated in the study was 351. There were 164 nurses in the suburban community setting and 187 nurses in the urban academic setting. Descriptive statistics were used to describe the sample of nurses in the two groups. The nurses completed the OCAI for the assessment of the culture of nursing and answered four open-ended questions. The suburban community nurses' mean scores for each culture type were: clan 28.83; market 26.33; hierarchy 26.68; and adhocracy 25.57. The mean scores for each culture type for the urban academic nurses were: 28.03 for the clan culture; 27.10 for the market culture; 26.98 for the hierarchy culture; and 26.54 for the adhocracy culture.

A comparison of the mean culture scores produced by the OCAI was conducted using ANOVA. There was no significant difference between the scores of the suburban community and urban academic nurses. Regression analysis was used to identify potential demographic variables of the nurses and the hospitals that may influence the culture type scores on the OCAI, regardless of the setting. While some significant variables were identified, the results are not strong enough to suggest a relationship. The qualitative analysis of the written answers to the open-ended questions revealed three themes: (a) relationships, (b) professionalism and empowerment of nursing, and (c) commitment to quality and patient safety. The themes and specific comments shared supported the

ranking of the mean scores in each setting. The answers to the open-ended question provided additional insight into the four types of culture assessed.

# CHAPTER V

## SUMMARY OF THE STUDY

An understanding of the culture of nursing in a hospital is instructive in understanding the nursing and patient outcomes of the organization. Nursing cultures that exhibit autonomy, control over nursing practice, shared decision making, and strong administrative support report improved patient and nursing outcomes (Aiken, Havens, & Sloane, 2000; Cavanaugh, 1990; Curran & Miller, 1990; Gifford, Zammuto, & Goodman, 2002; Keuter, Byrne, Voell, & Larson, 2000; Kramer & Schmalenberg, 2004b; Larrabee, Janney, Ostrow, Withrow, Hobbs, & Burant, 2003; McClure, Poulin, Sovie, & Wandelt, 2002; McNeese-Smith, 1999; Rizzo, Gilman, & Mersmann, 1994; Tumulty, Jernigan, & Kohut, 1994; Urden, 1999). Patient outcomes reported were lower rates of infections and higher patient satisfaction with care. Nursing outcomes that were influenced by culture were intent to leave and nurse job satisfaction.

Only one study reviewed compared the culture of nursing in the community to the academic setting. The results of this study conducted by Hall, Doran, Sidani, and Pink (2006) revealed lower work environment scores reported by the nurses in the community setting. The authors attributed the differences to the unique challenges in the community hospitals with fewer resources to support the staff nurses. The purpose of this study was to explore the differences of the

culture of the suburban community nurses when compared to the culture of the urban academic nurses.

## Summary

This descriptive exploratory study used an across-methods triangulation design to compare the culture of nursing in suburban academic hospitals and urban academic hospitals. The theoretical framework used for this study was Leininger's Culture Care Diversity and Universality Theory and the Sunrise Model. The quantitative data were collected using a demographic questionnaire and the Organizational Culture Assessment Instrument (OCAI). The qualitative data were collected using open-ended questions. A convenience sample of 164 nurses from the 4 suburban community hospitals and 187 nurses from the 2 urban academic hospitals completed the instruments.

The average age of the suburban community nurses was 43.4 years as compared to the urban academic nurses whose age averaged 41.8 years. The majority of nurses in both groups reported working as staff nurses: 68.3% of the suburban community sample and 64.2% of the urban academic sample. The suburban community nurses reported an average of 4.2 years worked in their current unit; 5.1 years worked in their current hospital; and 17.2 years worked in nursing. The urban academic nurses reported 7.2 average years worked in their current unit; 10.8 average years worked in current hospital; and an average of 16.9 years worked in current hospital. The highest degree held by the majority of

nurses in both settings was a bachelor's degree in nursing: 58.5% in the suburban community hospitals and 54% in the urban academic hospital.

The resulting mean scores of the subscales of the OCAI were compared using an ANOVA. A regression analysis was used to determine if the demographic characteristics of the nursing samples and the hospitals that participated were influential in predicting the culture type scores obtained on the OCAI. The open-ended questions were analyzed through the process of clustering repeated words and phrases. Three research questions were explored in this analysis.

The first research question asked what the difference was between the culture of nurses in the suburban community and urban academic settings. The data used to answer this question were collected using the OCAI. The OCAI identifies four types of culture: (a) Clan, (b) Adhocracy, (c) Hierarchy, and (d) Market. The results of the OCAI revealed that the clan culture type was a dominant culture type in both settings but not a strongly developed type when compared to the other three types. The four types of cultures were developed nearly equally.

The suburban community nurses had the following mean scores: (a) 28.83 for the clan culture, (b) 25.57 for the adhocracy culture, (c) 26.68 for the hierarchy culture, and (d) 26.33 for the market culture. The urban academic nurses had the following mean scores: (a) 28.03 for the clan culture, (b) 26.54 for the adhocracy culture, (c) 26.98 for the hierarchy culture, and (d) 27.10 for the

market culture. The ANOVA substantiated this finding with no statistically significant difference in the mean scores of the four culture types.

The second research question explored the relationship of the demographic characteristics of the nurses and the hospitals that may influence the culture of nursing, regardless of the setting. Regression analysis was used to answer this question. The nurse variables were entered into the model first, followed by three hospital variables. Ethnic origin, nursing position, highest nursing degree held, type of unit worked and current RN vacancy were the variables that may influence the type of culture score. The results accounted for a small amount of the variance and the partial correlations were not strong.

The third research question, "What are the perceptions of the nurses of the culture of nursing in the suburban community hospitals and the urban academic hospitals?" was answered through the use of four-open ended questions. The analysis of the written answers revealed three themes: (a) relationships, (b) professionalism and empowerment of nursing, and (c) commitment to quality and patient safety.

There were no significant differences in the culture type scores on the OCAI between the nurses in the suburban community and urban academic hospital settings. The comments on the open-ended questions supported the clan culture type as the strongest in both settings. Regardless of the setting, there may be nursing and hospital variables that can influence the development of the culture of nursing.

## Discussion of the Findings

The mean scores on the OCAI of the four types of cultures were nearly equally developed in both the suburban community and urban academic settings. The values and relationships of the scores were similar also. The closeness of the mean scores may reflect the applicability and need for all four types in the healthcare setting.

The clan culture had the highest score. While not different enough to be considered dominant, the subsequent themes reported by the nurses in both settings would support this culture type as most important to them. According to Deal and Kennedy (1982), communication of core values, such as excellence and caring, and the involvement of employees in decision making are critical to the culture of successful organizations. The importance to the staff of a shared decision making model for nursing that gives nursing a "voice" in the organization as in the 6 hospitals studied is congruent with the nursing literature (Meterko, Mohr, & Young, 2004; Verplanken, 2004). Leininger's theoretical framework identified the empowerment of nursing as one characteristic common to nursing cultures globally.

Teamwork was the most dominant theme reflective of a clan culture. It is a positive finding as the presence of teamwork was indicative of increased RN job satisfaction (Adams & Bond, 2000; Tumulty, Jernigan, & Kohut, 1994). The themes of teamwork, nursing has a voice, and commitment to quality and patient safety are also significant characteristics reported in the Magnet culture of

nursing (Aikens, Havens, & Sloane, 2000; Aikens & Patrician, 2000; Kramer & Schmalenberg, 1988a, 1988b, 2004a, 2004b, 2004c, 2004d; McClure et al., 1981). The family-like feel of the culture of nursing is another characteristic of clan culture and reflects the cohesiveness of the nursing team. Leininger's Culture Care Diversity and Universality Theory described caring and the act of caring as fundamental features of the practice of nursing worldwide. These behaviors were supported by the clan culture type findings. The qualitative analysis would support a stronger mean score in the clan culture type.

A consideration of a potential gender bias must be included in the discussion of the clan culture type. The sample of nurses was predominantly female in both settings. The OCAI scores and the descriptions of family-like, close-knit work groups could also be attributed to female descriptors.

The adhocracy culture type represents a culture where creativity and innovation are valued. Peters and Waterman (1982) identified autonomy, quick action, and the ability of the employee to do the right thing at the right time as key components of a strong and successful culture. The lower scores in this study do not mean that these qualities do not have a place in these nursing organizations. These traits are valued in solving problems related to customer service and work flow. In the provision of quality and excellent patient care, there are evidence based guidelines and accepted standards of care that must be followed in order to achieve the desired outcomes. This standardization and hardwiring of

processes in care does not allow for creativity and individualization in the technical work that nurses do.

The hierarchy culture type is a required type in healthcare. As mentioned above, structure in policies and procedure is necessary but the work environment should not be overly bureaucratic. A sense of autonomy and shared decision making with employees increases the success of the organization (Kotter & Heskett, 1992) and increases nursing job satisfaction (Laschinger, Shamian, & Thomson, 2001; McDaniel, 1995). The hierarchy as evidenced in layers in the organization was different in the two settings according to the answers to the open-ended questions. The theme of "openness of leadership" from the suburban community nursing responses and the "quicker decisions" theme of the urban academic nurses are both related to this culture type. The themes reflect the different structures that are present between the two settings. Although Magnet hospitals tend to be flatter nursing organizations, the urban academic hospitals are larger and more complicated organizations.

The market culture plays a significant role in healthcare culture also. Customer service has to be an important part of the culture for the hospital to be successful. Deal and Kennedy (1982) found the environment in which a business is competing may have the greatest influence on the culture. Strong cultures are adaptive and responsive to changes in their environment (Kotter & Heskett, 1992). The hospital must also be responsive to the needs of physicians and employees as customers. After consideration of the applicability of the four types

of culture identified by the OCAI, it is apparent that all of the types have a place in a hospital nursing culture.

Of note is the similarity of the cultural assessment scores in both settings. This may be due to the fact that the hospitals surveyed belong to only two healthcare systems. Both of the urban academic hospitals are Magnet hospitals. The nursing and corporate cultures of these systems are strong enough to form and influence the culture of nursing regardless of the location of the hospital.

Another factor may be the lack of sensitivity of the OCAI in assessing nursing culture specifically. The process of choosing an appropriate quantitative tool at the time of this study was difficult. The tools were primarily organizational assessment tools. The OCAI was chosen over other quantitative instruments due to the ease of use and the type of questions asked. The OCAI had been used in other studies to assess the culture of nursing in hospitals (Shortell, et. al., 1995) and nursing homes (Scott-Cawiezell, Jones, & Moore, 2005).

The finding of the regression analysis that there are variables that may influence the culture of nursing are congruent with Leininger's framework and the Sunrise Model to Depict Dimensions that Influence the Culture of Nursing (Figure 2), and the literature regarding the characteristics of Magnet organizations (McClure, et. al., 1981). The characteristics of the nurses that may influence the development of the culture of nursing were (a) ethnic origin, (b) highest nursing degree held, (c) nursing position; and (d) type of unit worked.

The ethnic origin of the two settings was significantly different and the Asian culture appeared to be the most influential when compared to the Caucasian/white grouping. The mean scores for the four types of culture were higher in the Asian nurses across both settings. The Caucasian/white group scored lowest of the three groups in the four culture types. Ethnic origin is central to Leininger's theoretical framework. None of the literature reviewed for this study spoke to the impact of ethnic origin on the culture of nursing.

Highest nursing degree held may be significant but the differences were in the BSN as compared to PhD prepared group. In the entire sample, the PhD prepared nurses numbered 3 (0.9%). This sample size is too small to be truly meaningful. There were differences based on the nursing position. This is not unexpected as nursing management and leadership may have a different view of the culture than the bedside staff nurse. The type of unit worked was significant when comparing the medical/surgical/telemetry grouping to the labor and delivery/pediatrics unit group. This finding is in agreement with the studies that discussed the importance of the unit culture (Coeling, 1992; Coeling & Wilcox, 1988; Conway & McMillan, 2002; Curran & Miller, 1990; delBueno & Vincent, 1986; Gifford, 2001; Mulcahy & Betts, 2005; Rizzo, Gilman, & Mersmann, 1994; Shortell, Rousseau, Gillies, Devers, & Simon, 1991; Thomas, Ward, Chorba, & Kumiega, 1990; Zimmerman et al., 1993). The unit culture can impact nurse job satisfaction, patient satisfaction, and patient outcomes. Nurses' perceptions of the culture, as identified by key characteristics such as autonomy, team

cohesion, and work load, directly impacted intent to leave and nurse job satisfaction.

The current RN vacancy was below 10% for all of the hospitals except for one. This community suburban hospital recently expanded the hospital and this could account for the vacancy rate that is considerably higher than the rest at 21.5%. The number of BSN prepared nurses may be a significant factor but it could not be evaluated in this analysis because of the incomplete response from the hospitals surveyed. All of the hospitals reported a shared decision making model for nursing; clinical ladder or professional development model; tuition assistance; and five of the six had free parking. Conducting the study in hospitals that are not part of the same healthcare system and not located within the same competitive market for nurses may provide a sample where more differences in the demographic variables between the groups of nurses and the hospitals are possible. This would allow for clearer identification of the characteristics that may be truly significant. Further exploration of the specific characteristics of the nurses and the organization they work for would be needed.

The results of this study found more commonalities than differences between the suburban community and the urban academic cultures of nursing. There was only one study found at the time of the literature review that compared the culture of nursing in community hospitals to teaching hospitals (Hall, Doran, Sidani, & Pink, 2006). These researchers reported that the nurses in teaching hospitals scored higher in the work environment assessment in the areas of

nursing leadership, quality of care, job stress, and quality of work. They attributed the lower work environment scores of the community nurses to a lack of resources, support services, and staffing. These results are not supported by the findings of this analysis. There was no significant difference in the quantitative assessment of the culture of nursing. The qualitative analysis of the open-ended questions found the three common themes which were in direct contrast to this study. The urban academic nurses did report a greater abundance of opportunities for education and professional development and the community suburban nurses recognized a lack of support for advanced education and certification. This was the only similar finding to the previous study. The urban academic nurses actually described a more stressful, fast paced environment than did the suburban community nurses.

Additional limitations of this study may be that the OCAI is not sensitive enough to assess the specific characteristics and nuances of a culture of nursing within an organization. The results can be attributed to a strong organization or a strong nursing organization within that setting. The Likert-scale tool is not sensitive enough to really capture culture. Some nurses who completed the survey marked all 5s or 6s. The original OCAI was developed as a tool with an ipsative scale. The respondent was asked to divide 100 points between the four choices for each question. Other than giving all choices 25 points, the respondents are forced to rank them in some order. This type of scale does not

allow for quantitative analysis in the traditional sense as the responses are not independent responses.

The commonalities found across the different settings are congruent with Leininger's theoretical framework. The overarching culture in the Sunrise Model is the global culture of nursing. Leininger described the regional culture of nursing as the next subset. Hospital and unit cultures are the smallest cultural groups and are apt to be the most influenced by a local corporate culture. The Sunrise Model to depict the Theory of Culture Care and Universality (Figure 1) identified factors that are significant in the development of culture. Examples of the technological factors, kinship and social factors, economic factors or educational factors that might impact the culture of nursing were specifically named in the Sunrise Model to depict the culture of nursing (Figure 2). The demographic variables collected from the participating nurses and hospitals were selected from the factors that Leininger theorizes support and influence the culture of nursing at the local level.

The corporate culture in these healthcare systems may be too strong to allow for the assessment of the culture of nursing. The nursing leadership in these hospitals was successful in incorporating the values of the healthcare system into the real work of the nursing staff. Multiple nurses referred to the institutional or corporate values in the open-ended questions.

## Conclusions

With consideration of the limitations of this study, the following conclusions can be drawn from this analysis:

1. The culture of nursing was not significantly different between the suburban community and urban academic hospitals that participated in this study, possibly attributed to the fact that they were members of the same two healthcare systems.
2. A strong corporate culture can influence the culture of nursing.
3. The OCAI may not be sensitive enough to assess the culture of nursing separately from the corporate culture of a hospital.
4. The culture of nursing may be best assessed through qualitative methods as suggested by Leininger and others. While the OCAI results were similar for both settings, there were differences identified in the information obtained through the open-ended questions.
5. Educational preparation, nursing position, type of unit worked, ethnic origin, and current RN vacancy, representative of elements identified in Leininger's theory, may influence the type of nursing culture present as measured by the OCAI, regardless of the setting.

## Implications

The implications for nursing of these results are:

1. A strong nursing and corporate culture can be developed across a hospital system, in multiple hospitals and settings. It is important to

know that the traits of a corporate and nursing culture can be transplanted from hospital to hospital.

2. All 4 types of culture measured by the OCAI may be important in the hospital setting to the success of the organization. As discussed, each of the four types of culture has characteristics that are useful and/or necessary in a hospital setting.
3. There may be deliberate programs and actions that can be established by nursing leaders to develop the culture of nursing. The culture of nursing has been linked to important nursing and patient quality outcomes, and a nursing leader can influence these outcomes through strengthening or changing the culture of nursing.
4. Cultural sensitivity and awareness may be an important skill for the nursing leaders in the development of a strong nursing culture. As suggested by the results, the ethnic origin of the nursing staff may be an important factor in the development of a culture of nursing.

## Recommendations for Further Study

Recommendations for further study are listed below:

1. Repeat the study in suburban community and urban academic hospitals that are not part of the same healthcare system to see if differences in culture are present that could be more clearly attributed to the setting.

2. Develop a cultural assessment tool sensitive enough to assess the culture of nursing separately from the corporate culture.
3. Further in-depth study of demographic characteristics of the nurses and the hospitals that may influence the development of the culture of nursing, such as ethnic origin, educational preparation, and current RN vacancy.
4. Identify and test specific strategies that could be used by nursing leaders to develop stronger cultures of nursing in hospitals, regardless of the setting based on relationships, professionalism and empowerment of nursing, and commitment to quality and patient safety.
5. Conduct ethnographic studies using Leininger's methods to identify the characteristics of the hospital nursing culture.

## Summary

The purpose of this descriptive, across-methods triangulation study was to explore the difference in the perceptions of nurses of the culture of nursing in suburban community hospitals when compared to urban academic hospitals. The results of the Organizational Culture Assessment Instrument (OCAI) revealed no significant differences between the mean scores for the four culture types between the settings. Analysis of the demographic variables to determine potential factors that could influence the culture of nursing regardless of the

setting was conducted. Ethnic origin and highest nursing degree may be significant factors, but the relationship was not strong.

Three themes were identified in the qualitative analysis of the four open-ended questions that supported the mean scores of the OCAI. The themes were relationships, professionalism and empowerment of nursing, and commitment to quality and patient safety. The perceptions of the nursing of the culture of nursing was more similar than different in the two settings compared. Further study is needed to explore the factors that influence the development of the culture of nursing.

REFERENCES

Adams, A., & Bond, S. (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing, 32*(3), 536-543.

Aiken, L. H. (2002). Superior outcomes for magnet hospitals: The evidence base. In M.L. McClure & A.S. Hinshaw (Eds.). *Magnet hospitals revisited: Attraction and retention of professional nurses* (pp. 61-81). Silver Spring, MD: American Nurses Association

Aiken, L. H., Havens, D. S., & Sloane, D. M. (2000). The magnet nursing recognition services program: A comparison of two groups of magnet hospitals. *American Journal of Nursing, 100*(3), 26-36.

Aiken, L. H., & Patrician, P. A. (2000). Measuring organizational traits of hospitals: The revised nursing work index. *Nursing Research, 49*(3), 146-153.

Al-Khalifa, K. N., & Aspinwall, E. M. (2001). Using the competing values framework to investigate the culture of Qatar industries. *Total Quality Industries, 12*(4), 417-428.

Baron, H. (1996). Strengths and limitations of ipsative measurement. *Journal of Occupational and Organizational Psychology, 69,* 49-56.

Brooks, B. A., Storfjell, J., Omoike, O., Ohlson, S., Stemler, I., Shaver, J., et al. (2007). Assessing the quality of nursing work life. *Nursing Administration Quarterly, 31*(2), 152-157.

Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and changing organizational culture: Based on the competing values framework.* San Francisco: Jossey-Bass.

Cavanaugh, S. J. (1990). Predictors of nursing staff turnover. *Journal of Advanced Nursing, 15,* 373-380.

Choi, Y. (2005). Analysis of organizational culture in professional baseball organizations based on the competing values framework: A cross-cultural study. *Dissertation Abstracts International, 67*(01). (UMI No. 3201621)

Clarke, S. P., Rockett, J. L., Sloane, D. M., & Aiken, L. H. (2002). Organizational climate, staffing, and safety equipment as predictors of needlestick injuries and near-misses in hospital nurses. *American Journal of Infection Control, 30*(4), 207-216.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (*2nd ed.). Hillside, NJ: Lawrence Erlbaum.

Coeling, H. V. E. (1992). Fitting in on the unit: Work culture is the key. *Nursing, 22*(7), 74-76.

Coeling, H. V. E., & Wilcox, J. R. (1988). Understanding organizational culture: A key to management decision-making. *Journal of Nursing Administration, 18*(11), 16-23.

Conway, J., & McMillan, M. (2002). Exploring the culture of an ICU: The imperative for facilitative leadership. *Nursing Leadership Forum, 6*(4), 117-123.

Cornwell, J. M., & Dunlap, W. P. (1994). On the questionable soundness of factoring ipsative data: A response to Saville and Wilson (1991). *Journal of Occupational and Organizational Psychology, 67,* 89-100.

Curran, C. R., & Miller, N. (1990). The impact of corporate culture on nurse retention. *Nursing Clinics of North America, 25*(3), 537-549.

Dabbs, A. D. V., Hoffman, L. A., Swigart, V., Happ, M. B., Iacono, A. T., & Dauber, J. H. (2004). Using conceptual triangulation to develop an integrated model of the symptom experience of acute rejection after lung transplantation. *Advances in Nursing Science, 27*(2), 138-149.

Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures.* Reading, MA: Addison-Wesley.

del Bueno, D. J., & Vincent, P. M. (1986). Organizational culture: How important is it? *Journal of Nursing Administration, 16*(10), 15-20.

DeSantis, L. & Ugarriza, D. N. (2000). The concept of theme as used in qualitative research. *Western Journal of Nursing Research 22*(3), 351-372.

Ferketich, S. (1990). Focus on psychometrics: Internal consistency estimates of reliability. *Research in Nursing and Health, 13*(6), 437-440.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage.

Gershon, R. R. M., Stone, P. W., Bakken, S., & Larson, E. (2004). Measurement of organizational culture and climate in healthcare. *Journal of Nursing Administration, 34*(1), 33-40.

Gifford, B. D. (2001). The competing values framework: Understanding the impact of organizational culture on the quality of worklife. *Organizational Development Journal, 19*(3), 58-68.

Gifford, B. D., Zammuto, R. F., & Goodman, E. A. (2002). The relationship between hospital unit culture and nurses' quality of work life. *Journal of Healthcare Management, 47*(1), 13-25.

Hall. L. M., Doran, D., Sidani, S., & Pink, L. (2006). Teaching and community hospital work environments. *Western Journal of Nursing Research, 28*(6), 710-725.

Heskett, J. L., Sasser, W. E., & Schlesinger, L. A. (1997). *The service profit chain.* New York: The Free Press.

Igo, T., & Skitmore, M. (2006). Diagnosing the organizational culture of an Australian engineering consultancy using the competing values framework. *Construction Innovation, 6,* 121-139.

Jones, K. R., DeBaca, V., & Yarbrough, M. (1997). Organizational culture assessment before and after implementing patient focused care. *Nursing Economic$, 15*(2), 73-80.

Keuter, K., Byrne, E., Voell, J., & Larson, E. (2000). Nurses' job satisfaction and organizational climate in a dynamic work environment. *Applied Nursing Research, 13*(1), 46-49.

Kotter, J. P., & Heskett, J. L. (1992). *Corporate culture and performance.* New York: The Free Press.

Kramer, M., & Schmalenberg, C. (1988a). Magnet hospitals part I: Institutions of excellence. *Journal of Advanced Nursing, 18*(1), 13-24.

Kramer, M., & Schmalenberg, C. (1988b). Magnet hospitals part II: Institutions of excellence. *Journal of Advanced Nursing, 18*(2), 11-19.

Kramer, M., & Schmalenberg, C. (2002). Staff nurses identify essentials of magnetism. In M.L. McClure & A.S. Hinshaw (Eds.). *Magnet hospitals revisited: Attraction and retention of professional nurses.* Silver Spring, MD: American Nurses Association. (pp. 25-59).

Kramer, M., & Schmalenberg, C. (2004a). Essentials of a magnetic work environment: Part 1. *Nursing, 34*(6), 50-54.

Kramer, M., & Schmalenberg, C. (2004b). Essentials of a magnetic work environment: Part 2. *Nursing, 34*(7), 44-47.

Kramer, M., & Schmalenberg, C. (2004c). Essentials of a magnetic work environment: Part 3. *Nursing, 34*(8), 44-47.

Kramer, M., & Schmalenberg, C. (2004d). Essentials of a magnetic work environment: Part 4. *Nursing, 34*(9), 44-48.

Larrabee, J. H., Janney, M. A., Ostrow, C. L., Withrow, M. L., Hobbs, G. R., & Burant, C. (2003). Predicting registered nurse job satisfaction and intent to leave. *Journal of Nursing Administration, 33*(5), 271-283.

Laschinger, H. K. S., Shamian, J., & Thomson, D. (2001). Impact of magnet hospital characteristics on nurses' perceptions of trust, burnout, quality of care, and work satisfaction. *Nursing Economic$, 19*(5), 209-219.

Leininger, M. (1994). The tribes of nursing in the U.S.A. culture of nursing. *Journal of Transcultural Nursing, 6*(1), 18-22.

Leininger, M. M. (Ed.). (1991). *Culture care diversity and universality: A theory of nursing.* New York: National League for Nursing Press.

Martin, P. A., Gustin, T., Uddin, D. E., & Risner, P. (2004). Organizational dimensions of hospital nursing practice: Longitudinal results. *Journal of Nursing Administration, 34*(12), 554-561.

McClure, M. L., Poulin, M. A., Sovie, M. D., & Wandelt, M. A. (2002). Magnet hospitals: Attraction and retention of professional nurses (The original study) (pp. 1-24). In M.L. McClure & A.S. Hinshaw (Eds.) *Magnet hospitals revisited: Attraction and retention of professional nurses.* Silver Spring, MD: American Nurses Association.

McDaniel, C. (1995). Organizational culture and ethics work satisfaction. *Journal of Nursing Administration, 25*(11), 15-21.

McNeese-Smith, D. K. (1999). A content analysis of staff nurse descriptions of job satisfaction and dissatisfaction. *Journal of Advanced Nursing, 29*(6), 1332-1341.

Meterko, M., Mohr, D. C., & Young, G. J. (2004). Teamwork culture and patient satisfaction in hospitals. *Medical Care, 42*(5), 492-498.

Mulcahy, C., & Betts, L. (2005). Transforming culture: An exploration of unit culture and nursing retention within a neonatal unit. *Journal of Nursing Management, 13,* 519-523.

Munro, B. H. (1997). *Statistical methods for healthcare research.* Philadelphia: Lippincott – Raven.

Obenchain, A. M. (2002). Organizational culture and organizational innovation in not-for-profit, private and public institutions of higher education. *Dissertation Abstracts International, 63*(1). (UMI No. 3039605)

Peters, T. J., & Waterman Jr., R. H. (1982). *In search of excellence: Lessons from America's best-run companies*. New York: Warner Books.

Polit, D. F., Beck, C. T., & Hungler, B. P. (2001). *Essentials of Nursing Research: Methods, Appraisal, and Utilization* (5th ed.). Philadelphia: Lippincott, Williams & Wilkins.

Polit, D. F., & Sherman, R. E. (1990). Statistical power in nursing research. *Nursing Research, 39*(6), 365-369.

Rizzo, J. A., Gilman, M. P., & Mersmann, C. A. (1994). Facilitating care delivery redesign using measures of unit culture and work characteristics. *Journal of Nursing Administration, 24*(5), 32-37.

Rucci, A. J., Kirn, S. P., & Quinn, R. T. (1998). The employee-customer-profit chain at Sears. *Harvard Business Review, 76*(1), 82-97.

Sathe, V. (1983). Implications of corporate culture: A manager's guide to action. *Organizational Dynamics 12*(3), 5-22.

Schein, E. H. (1983). The role of the founder in creating organizational culture. *Organizational Dynamics, 12*(2), 13-29.

Schein, E. H. (1986). What you need to know about organizational culture. *Training and Development Journal*, *40*(1), 30-33.

Schein, E. H. (1993). Learning clinical research in the study of organizational culture. *Journal of Counseling & Development, 71*, 703-708.

Schein, E. H. (1996). Three cultures of management: The key to organizational learning. *Sloan Management Review, Fall*, 9-20.

Scott, T., Mannion, R., Davies, H., & Marshall, M. (2003). The quantitative measurement of organizational culture in health care: A review of the available instruments. *Health Services Research, 38*(3), 923-945.

Scott-Cawiezell, J., Jones, K., & Moore, L. (2005). Nursing home culture: A critical component in sustained improvement. *Journal of Nursing Care Quality, 20*(4), 341-348.

Shermont, H., & Krepcio, D. (2006). The impact of culture change on nurse retention. *Journal of Nursing Administration, 36*(9), 407-415.

Shortell, S. M., O'Brien, J. L., Carman, J. M., Foster, R. W., Hughes, E. F. X., Boerstler, H., et al. (1995). Assessing the impact of continuous quality improvement/total quality management: Concept versus implementation. *Health Services Research, 30*(2), 377-401.

Shortell, S. M., Rousseau, D. M., Gillies, R. R., Devers, K. J., & Simons, T. L. (1991). Organizational assessment in intensive care units (ICUs): Construct development, reliability, and validity of the ICU nurse-physician questionnaire. *Medical Care, 29*(8), 709-723.

Sovie, M. D. (1993). Hospital culture – Why create one? *Nursing Economic$, 11*(2), 69-75, 90.

Speziale, H. J. S., & Carpenter, D. R. (2003). *Qualitative research in nursing: Advancing the humanistic imperative* (3rd ed.). Philadelphia: Lippincott, Williams & Wilkins.

Stone, P. W., Larson, E. L., Mooney-Kane, C., Smolowitz, J., Lin, S. X., & Dick, A. W. (2006), Organizational culture and intensive care unit nurses' intention to leave. *Critical Care Medicine, 34*(7), 1907-1912.

Texas State Health Plan Update. (2007-2008). *Chapter 1: The case for health workforce planning in Texas.* Retrieved March 6, 2008, from http://www.dshs.state.tx.us/chs/shcc/stateplan2005/stplan0708 chap1.pdf

Thomas, C., Ward, M., Chorba, C., & Kumiega, A. (1990). Measuring and interpreting organizational culture. *Journal of Nursing Administration, 20*(6), 17-24.

Thurmond, V. A. (2001). The point of triangulation. *Journal of Nursing Scholarship, 33*(3), 253-258.

Tumulty, G., Jernigan, I. E., & Kohut, G. F. (1994). The impact of perceived work environment on job satisfaction of hospital staff nurses. *Applied Nursing Research, 7*(2), 84-90.

Tzeng, H., Ketefian, S., & Redman, R. W. (2002). Relationship of nurses' assessment of organizational culture, job satisfaction, and patient satisfaction with nursing care. *International Journal of Nursing Studies, 39,* 79-84.

Urden, L. A. (1999). The impact of organizational climate on nurse satisfaction. *Nursing Leadership Forum, 4*(2), 44-48.

Verplanken, V. (2004). Value congruence and job satisfaction among nurses: A human relations perspective. *International Journal of Nursing Research, 41,* 599-605.

Way, M., & MacNeil, M. (2006). Organizational characteristics and their effect on health. *Nursing Economic$, 24*(2), 67-76.

Wilkins, A. L. (1983). The culture audit: A tool for understanding organizations. *Organizational Dynamics*, 24-38.

Wilkof, M., & Ziegenfuss Jr., J. T. (1995). Culture audits: A tool for change. *Health Progress*, 34-38.

Work Environment Workgroup of the Gulf Coast Health Services Steering Committee (2007). *The Ideal Hospital Project's work environment survey 2006-2007 annual report*. Houston, TX: The WorkSource.

Zimmerman, J. E., Shortell, S. M., Rousseau, D. M., Duffy, J., Gillies, R. R., Knaus, W. A., et al. (1993). Improving intensive care: Observations based on organizational case studies in nine intensive care units: A prospective, multicenter study. *Critical Care Medicine, 21*(10), 1443-1451.

# APPENDIX A

Human Subjects Review Committee Permission to Conduct Study

And

Agency Permission to Conduct Study

*Institutional Review Board*
832-355-3347

July 17, 2008

Jacqueline J. Anderson, RN, MSN
[redacted]

**Project #2905**
"A Comparison of Nurses' Perceptions of the Culture of Nursing in Suburban Community and Urban Academic Hospitals"

Dear Ms. Anderson:

This letter will inform you that, under the expedited review process of the St. Luke's Episcopal Hospital Institutional Review Board, you are granted approval (pending the August 20, 2008 meeting of the committee) of the above referenced study.

This letter will serve as verification that the St. Luke's Episcopal Hospital Institutional Review Board operates in accordance with all applicable laws, regulations and guidelines for clinical trials and under Federal Wide Assurance No. FWA00002312 issued April 8, 2002. We maintain compliance with the FDA Code of Federal Regulations, International Conference of Harmonization (ICH) and Good Clinical Practice (GCP) guidelines. Continued review will be required as follows:

a. Annually
b. Prior to any change in protocol
c. Promptly after unanticipated problems (adverse events)
d. After any other unusual occurrence

The method of review will be by written summary.

Sincerely,

Frank A. Redmond, M.D., Ph.D.
Chair
Institutional Review Board

FAR/are


## *AGENCY PERMISSION FOR CONDUCTING STUDY*

The St. Luke's Episcopal Hospital Nursing Research Council grants the privilege of the use of its facilities to:

Jacqueline J. Anderson, RN, MSN

For the purpose of studying the following problem:

"A Comparison of Nurses' Perceptions of the Culture of Nursing in Suburban Community and Urban Academic Hospitals"

The conditions mutually agreed upon are as follows:

1. The investigator will submit a copy of the final report to the NRC. Send to:
   Claudia Smith, PhD(c), RN, NE-BC
   Director, Nursing Research
   St. Luke's Episcopal Hospital
   6720 Bertner, MC4-278
   Houston, TX 77030

2. The Nursing Research Council will require the investigator to present findings in a poster or podium presentation at an approved SLEHS nursing function.

3. The names of consultative or administrative personnel in the agency may be identified in the final report.

4. Other: _____

_____

7-30-08
Date

Jacqueline Anderson
Principal Investigator

7-28-08
Date

Claudia D. Smith RN, PhD(c)
Director, Nursing Research

7/28/08
Date

Karen K. Myers
VP & Chief Nursing Officer,
Luke's Episcopal Hospital

P.O. Box 20269 Houston, Texas 77225-0269 www.stlukestexas.com

Methodist The Methodist Hospital Research Institute

August 5, 2008

NOTIFICATION OF INITIAL APPROVAL

| | |
|---|---|
| From: | Susan M. Miller, MD, MPH<br>TMHRI IRB Chair |
| To: | Dr. Terry Throckmorton |
| CC: | Jacqueline Anderson |
| Re: | Study# Pro00002105<br>IRB0708-0232 Nurses' Perceptions of Culture |

The Institutional Review Board reviewed your Request for Expedited Review and the above numbered protocol has been **FULLY APPROVED.** The study is approved from 8/2/2008 through 8/1/2009. Your approved documents are listed below.

- TMH Protocol No. Pro00002105

- Waiver of Written or Signed Consent

Please note that prior to starting any experiments, it is your responsibility to give a copy of this document to all research personnel involved in the project and to discuss the project with each employee. Please ensure that only the most current IRB approved consent may be used during the study. Any changes to the protocol or consent must be approved by the IRB before the changes can take place.

Sincerely,

Susan M. Miller, MD, MPH

*This e-mail is the property of The Methodist Hospital and/or its relevant affiliates and may contain confidential and privileged material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by others is strictly prohibited. If you are not the intended recipient (or authorized to receive for the recipient), please contact the sender and delete all copies of the message. Thank you.*

The Methodist Hospital Research Institute
6565 Fannin Street
Houston, TX 77030
(713-441-1261)

TWU
TEXAS WOMAN'S UNIVERSITY
DENTON DALLAS HOUSTON

**Office of Research**
6700 Fannin Street
Houston, TX 77030-2343
713-794-2480 Fax 713-794-2488

August 15, 2008

Ms. Jacqueline Anderson
College of Nursing - Rebecca Krepper Faculty Advisor
6700 Fannin Street
Houston, TX 77030

Dear Ms. Anderson:

*Re:* *"A Comparison of Nurses' Perceptions of the Culture of Nursing in Suburban Community and Urban Academic Hospitals"*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and was determined to be exempt from further review.

Any changes in the study must receive review and approval prior to implementation unless the change is necessary for the safety of subjects. In addition, you must inform the IRB of adverse events encountered during the study or of any new and significant information that may impact a research participant's safety or willingness to continue in your study.

Sincerely,

John D. Radcliffe

Dr. John Radcliffe, Chair
Institutional Review Board - Houston

APPENDIX B

RN Demographic Data Questionnaire

RN Demographic Data Questionnaire

Hospital:_____

Please place an X after the correct answer. Please answer with a number for years of age and experience. All responses will be kept confidential.

1. **Age**:_____(years)

2. **Initial Degree in Nursing**:

   Diploma (1):_____
   Associate degree (2):_____
   Bachelor's degree (3):_____

3. **Highest degree held**:

   Diploma (1):_____
   Associate degree (2):_____
   Bachelor's degree (3):_____
   Master's degree (4):_____
   Doctoral degree (5):_____

4. **Specialty certification**:

   Yes (1):_____
   No (2):_____

5. **Nursing position**:

   Staff nurse (1):_____
   Unit Management (2):_____
   APN/NP/CNS (3):_____

6. **Employment status:**
   Full time (1):_____
   Part time (2):_____

7. **Gender**: M(1):_____ F(2):_____

8. **Years employed at current hospital**:_____

9. **Years employed in current unit**: _____

10. **Years employed in nursing:**_____

11. **Type of Unit**:

    ICU/CCU (1):_____
    Med/surg (2):_____
    Telemetry(3):_____
    Emergency Dept (4):_____
    L&D/Post partum (5):_____
    Pediatrics/nursery (6):_____
    Operating Room (7):_____
    Other (8):_____

12. **Ethnicity:**

    American Indian/Alaskan Native (1)_____
    Asian (2)_____
    Black/African American (3)_____
    Caucasian/White (4)_____
    Hispanic/Latino (5)_____
    Native Hawaiian/Pacific Islander (6)_____
    Mixed Race or Ethnicity (7)_____

# APPENDIX C

## Hospital Demographic Data Questionnaire

Hospital Demographic Data Questionnaire

Hospital :_____

1. Total number of Registered Nurses (RNs):_____
2. Number BSN:_____
3. Annual RN Turnover(%):_____
4. Shared decision making model: Yes (1):___ No (2):___
5. Tuition reimbursement: Yes (1):___ No (2):____
6. Clinical ladder/Professional Development Model: Yes (1):___ No (2):___
7. Free parking: Yes (1):____ No (2):____

# APPENDIX D

## Organizational Culture Assessment Instrument

"A Comparison of Nurses' Perceptions of the Culture of Nursing in Suburban Community and Urban Academic Hospitals"
Jackie Anderson, RN, MSN

Organizational Culture Assessment Instrument

The Organizational Culture Assessment Instrument (OCAI) consists of six items. Each item has four statements. Please rate the four statements on a 1-6 scale, depending on how similar your nursing organization is NOW to each statement. The highest score is a 6, which means that you strongly agree that the statement describes your nursing organization. The lowest score is a 1, which means that you strongly disagree that the statement describes your nursing organization. Circle the number that best describes your nursing organization today
1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree

***1. Dominant Characteristics***

A. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.

1 2 3 4 5 6

B. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.

1 2 3 4 5 6

C. The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement –oriented.

1 2 3 4 5 6

D. The organization is a very controlled and structured place. Formal procedures generally govern what people do.

1 2 3 4 5 6

***2. Organizational Leadership***

A. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.

1 2 3 4 5 6

(1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree)

B. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.

1 2 3 4 5 6

C. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.

1 2 3 4 5 6

D. The leadership in the organization is generally considered to exemplify coordinating, organizing or smooth-running efficiency.

1 2 3 4 5 6

***3. Management of Employees***

A. The management style in the organization is characterized by teamwork, consensus, and participation.

1 2 3 4 5 6

B. The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.

1 2 3 4 5 6

C. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.

1 2 3 4 5 6

D. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.

1 2 3 4 5 6

***4. Organization Glue***

A. The glue that holds this organization together is loyalty and mutual trust. Commitment to this organization runs high.

1 2 3 4 5 6

(1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree)

B. The glue that holds this organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.

1 2 3 4 5 6

C. The glue that holds this organization together is the emphasis on achievement and goal accomplishment.

1 2 3 4 5 6

D. The glue that holds this organization together is formal rules and policies. Maintaining a smooth-running organization is important.

1 2 3 4 5 6

***5. Strategic Emphases***

A. The organization emphasizes human development. High trust, openness, and participation persist.

1 2 3 4 5 6

B. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.

1 2 3 4 5 6

C. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.

1 2 3 4 5 6

D. The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.

1 2 3 4 5 6

***6. Criteria of Success***

A. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.

1 2 3 4 5 6

(1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, 6 = Strongly Agree)

B. The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.

1 2 3 4 5 6

C. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.

1 2 3 4 5 6

D. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.

1 2 3 4 5 6

Please answer the following questions. Use the back of the page if you need more room.

1. What do you like best about nursing in your organization?

2. What could I find out about your hospital by "hanging out" for a couple of days?

3. How is this nursing organization different from others you have worked in?

4. If you could change one thing about nursing at your hospital, what would it be?

This is the end of the questionnaire. Thank you.

# APPENDIX E

Introductory Letter to Participants


**Nelda C. Stark College of Nursing**
6700 Fannin
Houston, TX 77030-2343
713 794-2100 Fax 713 794-2103

*Pioneering Nursing's Future:*
*An Adventure in Excellence*

DATE

A COMPARISON OF NURSES' PERCEPTIONS OF THE CULTURE OF NURSING IN SUBURBAN COMMUNITY AND URBAN ACADEMIC HOSPITALS

Dear Nursing Colleague,

My name is Jackie Anderson, and I am a doctoral nursing student at Texas Woman's University in Houston. I am asking for your help in conducting a research study to examine the nursing culture in suburban community and urban academic hospitals. I think that it is important that we understand the differences in nursing culture that may be present in different settings.

This doctoral dissertation will be conducted in two major hospital systems. A total sample of 320 nurses is needed for this study. I will need 160 nurses from the suburban community hospitals and 160 nurses from the urban academic hospitals. You must be a registered nurse in a staff, advanced practice, or management position working part time or full time to participate. Supplemental, contract or prn staff are not eligible.

Two surveys are attached to this letter. The RN Demographic Data Questionnaire is a 12-question survey that asks necessary questions about you. The Organizational Culture Assessment Instrument is a 24-question survey that is used for assessing a work culture. There are also open-ended questions for you to write answers.

There is a potential risk of loss of confidentiality of your questionnaire responses. To reduce that risk, please do not put your name or any other identifying information anywhere on the forms.

Please compete the surveys and return to me in the attached stamped envelope. These questionnaires will take approximately 30 - 45 minutes to complete. Return of your completed questionnaires will indicate you consent to participate in this study.

Participants will receive a $5.00 Starbucks gift card for completing the survey. Please send the enclosed postcard and mail separately from the questionnaires. The gift card will be mailed to you. The separate post card keeps any identifying information separate from the questionnaires.

All information obtained from the surveys will be reported in the aggregate without any individual identifying information. Participation is completely voluntary. This study has been approved by (INDIVIDUALIZED FOR INSTITUTION) and the Texas Woman's University Institutional Review Board. There will be no direct benefits from participating in this study. Documentation of participation for personal files is included in this packet. Please call me at 713-863-0329 for any questions or concerns you may have. If you wish to report a problem about this research, you may call the TWU Office of Research and Grants at 713-794-2480. Thank you for your time and participation.

Jackie Anderson, RN, MSN
Doctoral Student
Texas Woman's University

# APPENDIX F

Documentation of Participation

June 2008

_____RN participated in the data collection for the study entitled: "A COMPARISON OF NURSES' PERCEPTIONS OF THE CULTURE OF NURSING IN SUBURBAN COMMUNITY AND URBAN ACADEMIC HOSPITALS".

Jackie Anderson, RN, MSN
Doctoral Nursing Student
Texas Woman's University