Perceptions of leadership effectiveness in the management of intergenerational work-values conflict: An antecedent of organizational citizenship behavior of perioperative registered nurses

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2008
ABSTRACT

Perceptions of Leadership Effectiveness in the Management of Intergenerational Work-Values Conflict: An Antecedent of Organizational Citizenship Behavior of Perioperative Registered Nurses

By

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M.S.B.A, Texas A & M University – Texarkana, 2000
B.A.A.S., Texas A & M University – Texarkana 1998

Dissertation Submitted in Partial Fulfillment
Of the Requirements for the Degree of
Doctor of Philosophy
Public Policy and Administration
Health Services Specialization

Walden University
2008
ABSTRACT

Studies reveal a progressive net decrease in the nursing profession across four generations, creating a shortage that poses a critical threat to the health care delivery system and to the health and safety of patients within that system. Research also suggests that generational cohorts reflect social change in attitudes toward work-life balance, organizational commitment, personal-professional relationships, autonomy, focus on career advancement, and actions that represent organizational citizenship behavior (OCB). Previous research grounded in theoretical frameworks of organizational behavior, leadership, and social capital indicates that leadership support of workforce diversity and effectiveness in conflict management influence OCB. However, little research explores the links between intergenerational work-values conflict (IWVC), job satisfaction, and OCB. Accordingly, this exploratory correlational study investigated linkages connecting OCB, job satisfaction, and perceptions of leadership effectiveness in the management of IWVC among 89 perioperative registered nurses, who replied to an online adaptation of established survey instruments. Correlation and regression analyses indicated that higher levels of OCB reflected increased job satisfaction and were associated with perceptions of leadership effectiveness in management of IWVC. Findings support study hypotheses that leadership management of IWVC plays an influential role in OCB. This exploratory study extends existing research and presents a model for examining leadership, OCB, and social change in nursing. Increased knowledge and understanding of these relationships may serve as a catalyst for positive social change by improving intergenerational relationships, job satisfaction, nurse retention, and positive patient care outcomes.
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DEDICATION

This dissertation research study is dedicated in honor and memory of my parents, Lynn A. and Shirley M. Wright, who instilled in me a passion for reading and a love of learning.
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I want to express my deep love and appreciation to my husband, Durell A. Hiller, III, who has supported and encouraged me throughout this long journey. He has given up nearly five years of his time, energy, and resources to sustain me through the many challenges that have presented along the way. In the midst of all the self-doubt, frustration, and anxiety, he provided a sanctuary of constant reassurance and love.

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A popular song that resonated throughout the decades of the 1960s and 1970s was a ballad sung by the Kingston Trio entitled, “Where have all the flowers gone?” The song portrayed the cyclical changes of life, in which birth and death are inextricably intertwined. The theme song for the 21st century may very well be entitled, “Where have all the nurses gone?”

Nurses have been present people’s lives for centuries. They have been there for the birth of a child, through the growing years, maturity, old age, and eventually death. Each event represented an occasion of celebration or sorrow, of endurance or frailty, of nurturing or solace. Times change; people change. As petals on a flower that age, fall, blow away, and are eventually assimilated into the environment, nurses are falling away from the profession – many may never return.

To answer the question of why a dedicated nurse would choose to either leave the nursing profession entirely or to select out for an alternate career, it is necessary to examine underlying factors that may contribute to that decision. By gaining this knowledge, nursing leaders may then be able to implement proactive strategies to address problems at their root, before it is too late. Perioperative nursing is a multifaceted nursing specialty that is practiced in a complex, technologically impregnated environment. Within this setting, faces are hidden behind blue masks, shielding nurses’ individuality. To the patient, differences in the nurse’s age, educational level, or generation are hidden behind that mask.
Each generational cohort displays a different, yet valuable contribution to this world of perioperative nursing. The organizational loyalty and stoicism of the Veteran and Baby Boomer generations were conceived in times of war and civil strife. Commitment to relationships and ease with technology exhibited by the Generation Xers and Nexters find a basis in early emphasis as latchkey children. They were allowed significant independence, which was enhanced by technological advances in communication and equipment (Clausing, Kurtz, Prendeville, & Walt, 2003). Members of older generations (Veterans and Baby Boomers) represent a wealth of nursing knowledge and experience that makes patients feel cared for and safe in the midst of stainless steel and LCD screen monitoring devices. Younger generations demonstrate a comfort level communicating through these advanced technologies, which provide patients with a sense of security that machines do not dominate actions. Eyes, voice, and touch by these unique nurses provide the channels of communication that bring an element of humanness into an otherwise sterile world. Yet, each cohort represents a unique set of work values, attitudes, and behaviors that present the potential for conflict. If conflict is not managed through effective leadership strategies, one more element in an already discordant, stressful environment is added to the growing list of reasons to leave nursing.

Problem Statement

The presence of a national nursing shortage over 126,000 registered nurses has created a threat to the health and safety of patients who enter the health care delivery system (Murray, 2002, p. 81). There are issues, which serve as drivers that have led to
this nursing shortage. Four generations now work together for the first time in the operative arena. Each generational cohort represents a set of different work values, which may serve as catalysts for social change. Intergenerational work values are exhibited through differences toward work-life balance, organizational commitment and loyalty, personal-professional relationships, autonomy, and focus on career advancement (Dunn-Cane, Gonzalez, & Stewart, 1999). There is a demonstrated lack of intergenerational understanding of cohort work values, which presents fertile ground for conflict, stress, disengagement, and decreased organizational citizenship behavior (OCB) by perioperative registered nurses. OCB represents voluntary actions outside of the job role that enhance organizational effectiveness.

Studies indicate that situational variables, such as those associated with diversity and conflict represented by a multigenerational workforce, may contribute to decreased job satisfaction (Chu, Lee, Hsu, & Chen, 2005; Hendel, Fish, & Galon, 2005; Hu, Herrick, & Hodgkin, 2004; Kalliath & Morris, 2002). Research by Chu et al. (2005) revealed that job satisfaction and commitment are significant contributing factors that influence the level of expressed or exhibited OCB of nursing professionals. According to Chu et al., the composition of the work group unit (multigenerational work team) should also be considered as a factor that influences job satisfaction through the stability of intragroup relationships, relationships with leaders, and demonstration of OCB actions that positively affect the organization. Nurses who demonstrated higher levels of OCB behaviors, such as altruism, also reported higher levels of job satisfaction and exerted extra effort on behalf of the organization. It was proposed through this research study that
decreased levels of expressed or exhibited OCB by perioperative registered nurses is a reflection of decreased job satisfaction and may be an antecedent in the decision by nurses to leave nursing.

Many factors contribute to changes in OCB such as job satisfaction (related to opportunities for professional development and identification of positive patient outcomes), job stress (related to long work hours, lack of autonomy, or patient-nurse ratios), and management of intergenerational work values conflict. Several research studies examined the influence of leadership support and management of work-related conflict on employee actions that reflect OCB. Findings indicate that OCB is affected by job satisfaction, by employee perceptions of leadership support and encouragement of individual work (performance, potential, and aspirations), and by perceived fairness in the management of job conflict (Chu et al., 2005; Hendel, Fish, & Galon, 2005; Kupperschmidt, 2006; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Smith, Organ, & Near, 1983; Stuenkel, Cohen, & de la Cuesta, 2005). This study contributes to the body of knowledge needed to understand OCB as a factor in nurse retention by examining the relationship between perceived effectiveness of leadership strategies in conflict management of generational work value differences and expressed or exhibited OCB by perioperative staff nurses.

Background of the Problem

A wave of concern and outrage over patient safety within the health care delivery system surged to the forefront in 1999, through multichannel media exposure of patient injuries and deaths due to compromised care. According to the sentinel report by the
Institute of Medicine (IOM), patient safety is defined as the “freedom from accidental injury” due to medical care planning, interventions, or errors (Kohn, Corrigan, & Donaldson, 1999, p. 18). The IOM reported that patient injuries or death related to breaches in care by health providers annually exceeded 98,000 reported incidents (Kohn, et al., 1999, p. 15). Wanzer and Dunlap (2001) asserted that this figure represents only reported cases; yet, it surpasses the combined number of patient deaths attributable to either the disease process or associated complications of AIDS/HIV, motor vehicle accidents, and breast cancer (p. 17).

Key contributing factors to adverse events such as infection, increased length of stay, patient injuries, or death have been identified as failures in the “planned action to be completed as intended or the use of a wrong plan to achieve an aim … problems in practice, products, procedures, and system” (Health Grades, 2005, p. 3). Other research supports the findings by Health Grades (2005). There are indications that a decrease in the availability of professional nurses, who are educationally and experientially qualified to care for patients that are more acutely ill or that require complex treatments (e.g. technologically advanced surgical procedures), create additional potential of adverse events and impairment of patient safety (Baumann & Blythe, 2003; Kane et al., 2007; Needleman et al., 2006; Strachota et al., 2005). Research by Needleman et al. (2006) confirmed these findings and demonstrated that increased hours of patient care provided by professional registered nurses improved not only the quality of patient care and patient care outcomes, but also decreased the costs associated with the delivery of patient care. As noted by Needleman et al., costs associated with adverse events such as infection,
injury, or death exceeded costs associated with proactive intervention through the use of professionally qualified and educated nurses.

**Nursing as an Integral Component of the Health Care Delivery System**

Nursing is an integral component of the practice setting and represents a distinct community of professionals within the health care delivery system (Burroughs & Eby, 1998; Seago, 2002). It is an area that presents fertile ground for medical errors or injuries. According to Needleman, Buerhaus, Stewart, Zelevinsky, and Mattke (2006) patient safety and health outcomes have improved significantly since the release of the IOM report in 1999 (p. 204). However, Needleman et al. (2006) asserted that increasing pressure on the health care sector to reduce costs often outweigh efforts to improve the quality of patient care. Nurse staffing in health care delivery systems, particularly hospitals, represents a major component of costs associated with patient care (Seago, 2002). Needleman et al. emphasized that positive patient health outcomes are proportional to the number of registered nurses providing direct patient care.

Unfortunately, there is a demonstrated nursing shortage.

At the present time there are over 2.6 million registered nurses working in the United States, of which over 1.5 million work full-time (Huston, 2003). Murray (2002) indicated, however, that there are currently over 126,000 vacant registered nursing positions (p. 81). Research by Murray (2002) revealed that factors creating the current nursing shortage include alterations in the classification of employment (full-time versus part-time or contingent nurses); availability of nursing faculty to meet the needs of enrollment demands for nursing students; increasing age of the existing workforce and
patient population; mobility and opportunities for career choices; and integration of advanced technologies in health care delivery that do not match the skills, training, and education of the current nursing workforce. According to Stanton (2004) there is a negative correlation between the number of registered nurses available for patient care interventions and the presence of vacant positions. This imbalance relates not only to the number of available registered nurses, but to the fact that many older nurses have moved from direct patient care to administrative roles, leaving bedside positions vacant. Hart (2006) noted that by 2016 over 50% of the current nursing force will retire, leaving a critical void in the capability of the remaining workforce to meet the health needs of the population (p. 10).

**Workplace Conflict and Stress**

Recent nursing research studies indicate a positive correlation between workplace conflict and job stress (Cox, 2001; Hendel, Fish, & Galon, 2005; Kalliath & Morris, 2002; McVicar, 2003). The degree to which conflict is dysfunctional or functional correlates to the effectiveness of communication, willingness to resolve conflict issues, and intra-group relationships (Cox, 2001). One issue that has become a major generator of conflict is that of intergenerational work-values conflict (IWVC), which involves differences in work values represented by four generations of nurses working together for the first time in history (Clausing, Kurtz, Prendeville, & Walt, 2003).

Numerous research studies have been conducted on generational differences in the value systems of nursing personnel (Clausing, Kurtz, Prendeville, & Walt, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Hu, Herrick, & Hodgin, 2004). One of the key...
factors that contributed to those differences was the era in which the nurse was born and subsequently entered the workforce (Clausing, Kurtz, Prendeville, & Walt, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Hu, Herrick, & Hodgin, 2004). The four primary categories of generations identified in a literature review of generational work value differences included: the Silent or Veterans Generation (1925 to 1945); the Baby Boomers (1946 to 1964); the Generation Xers (1965 to 1975); and the Nexters (1976 to 2000). Generational divergence in work values may be attributed to several distinct, yet interrelated areas: a) attitude, b) orientation towards work-life balance, c) commitment to length of work in one institution and loyalty to the organization, self, or career; and d) acceptable workplace behavior as a nursing professional (Clausing et al., 2003; Dunn-Cane et al., 1999; Hu et al., 2004). According to Dunn-Cane et al. (1999) each generation reflects a distinct set of beliefs, values, and behavioral characteristics that govern the actions and perceptions of individuals contained within that set (p. 930).

The relationships and interactions between nurses, as well as between nurses and physicians, are influenced by value system differences between generational cohorts. Nurses from the younger generations (GenXers or Nexters) demonstrate a greater sense of independence and confidence in ability to contribute positively to organizational decision-making processes. They resent the control represented through micromanagement by nurse leaders or physicians (Wieck, 2004). Wieck (2004) asserted that there is evidence of little tolerance by younger nurses for surgeon harassment, which traditionally “went with the job.” The impact of this attitudinal change on nurse-surgeon interactions and relationships creates an area rife with conflict.
The influence of generational work-value differences permeates the nursing workforce. Perioperative nursing professionals, however, are affected to a greater degree, due to its older workforce in that specialty. The average professional registered nurse is over 45 years old (Hart, 2006, p. 10). For perioperative nurses, the average age is closer to 50 (Clausing et al., 2003). Wieck (2004) emphasized that nursing leadership must optimize the talents, skills, and abilities of a multigenerational, diverse nursing workforce to achieve greater nurse satisfaction and retention and to improve patient care outcomes. Intergenerational recognition, understanding, and respect for cohort work-value differences are essential to establishing positive intra-and inter-group relationships and reducing conflict (Kupperschmidt, 2006). Organizational leadership holds the key to creating a balance in the workplace between meeting the needs of the organization and meeting the needs of a changing and very diverse workforce (Ackfeldt & Coote, 2005; Helland & Winston, 2005). This assertion is supported by Clausing et al. (2003), who emphasized that leader awareness of generational differences in work values and respect for those differences are critical aspects of effective communication that addresses the needs reflected by each generation. Individual consideration is reflected through leader actions that demonstrate consideration for the individual as a person, as well as a member of a specific generational cohort.

Leadership Behaviors

Murray (2002) emphasized that discovery of solutions to the current and predicted nursing shortage rests with nursing leaders. These leaders must be willing and able to address the issues with proactive, innovative, yet realistic answers to complex problems.
Critical to the development of alternative solutions to the nursing shortage is an examination of antecedent factors that contribute to a nurse’s decision to leave the profession. As a result of this process, nursing leaders will be able to identify preventive measures that can create a working environment that welcomes registered nurses to the profession as a long-term commitment, not through a revolving door.

Hendel, Fish, and Galon (2005) emphasized that the approach needed by nursing leadership towards conflict management is that of collaborative problem solving. This approach incorporates participant input, active engagement in identification of alternative solutions, and acceptance of responsibility for consequences of a selected course of action. This process requires honest, open communication of relevant information between parties, with the understanding that each participant possesses knowledge and experience from which others may benefit (Deutsch, 1973).

Factors that contribute to the framework for collaborative problem solving include the development of excellent communication skills; the ability to relate to nurses as individuals, as well as representatives of a specific work-value cohort; recognition of the need to provide challenging career paths; and the ability to motivate each generational cohort according its needs (Hendel, Fish, & Galon, 2005). These factors also exemplify a transformational leadership approach, which engenders the leader with the ability to adapt to changing circumstances, to be flexible in relating to individuals from different generations, and to provide a sense of direction and vision that motivates participants.

Bass et al. (2003) asserted that implementation of transformational leadership within highly complex, stressful, and potentially fragmenting situations can provide the
impetus to increase cohesion, drive direction, and solidify commitment towards a shared goal. With respect to the surgical team, the goal is that of improving the health of the patient through surgical intervention.

Loke (2001) emphasized that nursing leadership plays a vital role in enhancing the strength of organizational commitment and sense of community by followers. As noted by Podsakoff, MacKenzie, Paine, and Bachrach (2000) organizational commitment has been identified as a component of OCB and is associated with increased job satisfaction, decreased absenteeism, and lower turnover rates. In addition, Smith, Organ, and Near (1983) observed that supportive leadership that demonstrates consideration and respect for organizational members as individuals, fosters an environment supportive of extra role behavior or OCB.

According to Burroughs and Eby (1998) the workplace serves as a community for individuals and provides a rich resource for personal growth, identity, and support. Leadership is a critical element of this community. Smith et al. (1983) asserted that leader-modeled behavior creates a template that organizational members seek to emulate. Leadership provides the direction and momentum that serves as a sustaining and balancing force within an environment that is in a constant state of flux. Within the highly volatile health care environment and challenges presented by an acute nursing shortage, organizational commitment and associated OCB serve to create a work environment or community conducive to nurse retention (Burroughs & Eby, 1998; Murray, 2002).
Organizational Citizenship Behavior (OCB)

OCB theory is considered a relatively new area of research within the disciplines of organizational theory and behavior (Vigoda-Gadot, Beeri, Birman-Shemesh, & Somech, 2007). The generally accepted premise of OCB theory is that behaviors which constitute OCB can be described as discretionary actions taken by employees that are considered “extra-role,” or outside of the requirements of a job description. These actions promote effective functioning of the organization (Bateman & Organ, 1983).

Katz and Kahn (1978) asserted that demonstrations of OCB represent an undercurrent that maintains the operation of complex social mechanisms within the organization. Katz and Kahn posited that formal organizational structures provide only a basic framework for functional processes; it is the social system illuminated in behavioral patterns of organizational members that represent the “psychological bonds” that hold the organization together (p. 68). This description addresses three major components of OCB: voluntary or discretionary actions by employees; behavior that is not mandated or prescribed within the parameters of the job description; and benefits to the organization from the OCB actions of organizational members (Chu, Lee, Hsu, & Chen, 2005, p. 313). Katz and Kahn (1978) asserted that OCB is an essential, but not formally mandated, component of organizational effectiveness.

An extensive literature review on OCB by Podsakoff, MacKenzie, Paine, and Bachrach (2000) revealed that it is multidimensional in construct. Key themes identified by Podsakoff et al. include helping behavior (altruism), sportsmanship (organizational compliance), organizational loyalty (commitment), individual initiative, self
development, and civic virtue. (p. 516). Helping behavior (altruism) is described as voluntary actions of organizational members that directly or indirectly intend to assist another individual in attaining identified objectives (Smith, Organ, & Near, 1983). As noted by Poksakoff et al. helping behavior encompasses actions such as courtesy, peacemaking (prevention or resolution of conflict), and cheerleading (acts of encouragement and support) that voluntarily assist others in ways not prescribed by a job description (p. 518).

Sportsmanship (organizational compliance) is defined as behavior that demonstrates tolerance for inconveniences and impositions related to the work environment without whining or undue complaints (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). According to Podsakoff et al. (2000) this characteristic of OCB extends organizational courtesy into the realm of adhering to rules and regulations without undue criticism. In addition, sportmanship acknowledges the need for rational structure for organizational effectiveness.

Organizational loyalty (commitment) involves actions by organizational members that indicate positive involvement with the organization, congruence with established organizational goals, and “a willingness to exert considerable effort on behalf of the organization and a strong desire to maintain membership of the organization” (Loke, 2001, p. 194). Examples of behavior that demonstrate organizational loyalty and commitment include personal contributions in an effort towards positive change and a sense of spirit or esprit de corps as described by Fayol (1967).
Individual initiative is characterized by actions that illustrate conscientiousness, personal industry, persistence, and constructive suggestions for organizational improvement (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). According to Brief and Motowidlo (1986) initiative also takes the form of organizational member resistance to directives that are considered improper, unethical, or not in alignment with organizational policies or procedures (p. 715).

Civic virtue involves actions that reflect responsible, constructive involvement in the political arena internal and external to the organization (Podsakoff et al., 2000). LePine, Erez, and Johnson (2002) emphasized that willingness of organizational members to become actively involved in the political processes may be a key factor in organizational competitiveness.

*Job Satisfaction*

Research by Organ and Bateman (1983) indicated a positive correlation between indicators of job satisfaction and OCB. Job satisfaction indicators exerting the most reliable effects were supervisory influence and opportunities for advancement in the organization (Organ & Bateman, 1983, p. 591). As noted by Organ and Bateman, the positive correlation between job satisfaction and OCB was statistically more significant than the positive correlation between job satisfaction and job performance. The strength of the relationship between job satisfaction and OCB was estimated to be related to the fact that OCB represents behavior that is considered extra-role, or beyond the requirements and expectations of the job (Organ & Bateman, 1983, p. 392). The origins of this extra-role designation have roots in the research of Barnard (1968) on the
relationship between net satisfaction, incentives, and contributions by organizational members. According to Barnard member contributions are not restricted to those formally designated by the organization, but are instead distinctly related to the willingness (cooperativeness) of members to engage in actions that either work to the advantage or disadvantage of the organization.

Blau (1964) asserted that an underlying basis for OCB is social exchange theory, in which situational variables present opportunities for individuals to engage in reciprocal behavior with others who have benefited them in the past. This behavior is considered pro-social and a reflection of the attitudes of an individual towards the organization, outside of the parameters of job expectations and/or performance. According to Blau a key factor in this reciprocal relationship between the individual and the organization relates to job satisfaction, which is derived from positive leadership influence and interactions, specifically at the immediate supervisory level. Bateman and Organ (1983) supported this assertion by noting that leader-follower relationships perceived as supportive or considerate had a positive influence on the level of job satisfaction reported by employees (p. 593). The assertion was sustained by the extensive research study conducted by Smith, Organ, and Near (1983) on the antecedents to OCB. However, Smith et al. (1983) emphasized that leader supportiveness also exerted a direct effect upon OCB, separate from its effect upon job satisfaction. Smith et al. posited that direct influence of leadership supportiveness related to the “mutually agreeable work relationships,” which result in coordinated efforts by followers to comply with organizational directives as a social exchange mechanism (p. 662).
Organizational leadership has emerged not only as a dominant factor in the effectiveness of organizations, but also as a key determinant in job satisfaction. Job satisfaction is derived from relationships that are developed from positive interactions within the organization between organizational leaders and members that are based on mutual respect, trust, and the ability to generate a sense of hope for the future (Ackfeldt & Coote, 2005; Farh, Podsakoff, & Organ, 1990; Helland & Winston, 2005; Hodson, 2005; Konovsky & Pugh, 1994). A review of the literature also revealed a strong correlation between actions that constitute OCB and perceptions by organizational members of effective, supportive leadership within the organization (Bateman & Organ, 1983; Chu, Lee, Hsu, & Chen, 2005; Hodson, 2005; Smith, Organ, & Near, 1983; Williams, Pitre, & Zainuba, 2002).

An important aspect of organizational leadership and organizational citizenship behavior is the development of a sense of community between members of an organization. As noted by Burroughs and Eby (1998) the organization serves as a workplace community, which reflects a certain geographic location comprised of formal and informal structures and networks for individuals who share a common association. For nursing professionals, that association exists within various organizations operating as the health care delivery system. Research by Sarason (1974) indicated that organizational members establish a sense of community through interactions, relationships, shared meaning, and efforts to achieve identified goals. As noted by Putnam (2000) community can be described in numerous ways, but the core of
community lies in the establishment of a sense of belonging associated with social networks that “constitute our personal stock of social capital” (p. 274).

This sense of community then becomes a source of social capital for the broader community within which the organization exists (Putnam, 2000).

Theoretical Framework for the Study

Organizational Citizenship Behavior (OCB)

This study is grounded on the primary framework of OCB. As a relatively new area of research within the disciplines of organizational theory and behavior, it is considered in the developmental stage (Vigoda-Gadot, Beeri, Birman-Shemesh, & Somech, 2007). The publication of the first articles on OCB theory appeared in the early 1980s (Organ & Ryan, 1995). The initial research examined OCB from an individual perspective. Examples of OCB identified by Bateman and Organ (1983) in their seminal research include assisting co-workers with problems; accepting the chain of command as a normal part of work without undue complaint; maintaining the orderliness and cleanliness of the work area, even with the presence of janitorial staff; or promoting a positive work climate through modeled behaviors (p. 588). Since that time, several layers of analysis have developed in OCB theory, shifting from a singular focus at the individual level to an aggregate (e.g. group and organizational) level that more accurately reflects the dynamic interactions and interrelationships that exist within the organization (Vigoda-Gadot et al., 2007).

According to OCB theory as defined by Bateman and Organ, although not formally mandated or recognized by the organization, OCB contributes to the overall
effectiveness, functioning, and successful attainment of organizational goals and objectives. OCB actions help to enhance the work environment, creating a community in which individuals want to work and interact with others. Smith, Organ, and Near (1983) supported this perspective on OCB theory with the assertion that OCB actions “lubricate the social machinery of the organization” (p. 654).

Contributing Theories

Contributing theories underlying this study included those of social capital and sense of community proposed by Putnam (2000) and Sarason (1974); work-related motivational theories (Herzberg, 1968); job content (Hackman & Oldham, 1980); leadership and conflict management (Bass, 1973; Deutsch, 1973; Hendel, Fish, & Galon, 2005; Vivar, 2006); and generational cohort differences in nursing (March & Simon, 1958; Parsons, 1960; Pfeffer, 1978; Wieck, 2004). Each of these theories contributes to the discipline of organizational behavior and to the understanding of organizational citizenship behavior as a component of that discipline. In aggregate, these theories also contribute to an in-depth understanding of interaction and interrelationships between the organization as a subset community of the broader community (society) within which an organization exists and serves as a source of social capital.

Social Capital and Sense of Community

Social capital is a concept that reflects the interaction and relationships between individuals within society and those actions that are facilitated by those ties (Adler & Kwon, 2002; Putnam, 2000). According to Adler and Kwon (2002) social capital represents the “goodwill engendered by the fabric of social relations and that can be
mobilized” towards identified goals of the community (p. 17). Putnam posited that social capital is grounded in the social networks, reciprocal interactions, and relationships between members of a community. These interrelationships exist in diverse situations between different participants and are directed towards numerous ends (Burroughs & Eby, 1998; Putnam, 2000).

As noted by Putnam (2000) social capital is not uni-dimensional in construct, but is comprised of both individual and collective components. The individual component represents the interests, abilities, and contributions that are available or are exchanged within the framework of the community in which the individual lives (Putnam, 2000; Edmondson, 2003). Social capital on the individual level may not necessarily be realized at the collective or community level, depending upon the motivation of the individual to exert efforts inwards towards self-interest and achievements, or direct those efforts in a direction that benefits the community (Edmondson, 2003). Putnam noted that in contrast, the collective component of social capital in its most positive form represents generalized reciprocal efforts that are directed towards the “public good” and benefit the community at large. These efforts reflect the psychological contract between the individual and the community, described by Sarason (1974) as a sense of community.

A community can be generally be identified as an association of individuals, living and working together in a particular geographic location, who create reciprocal informal and formal networks to achieve designated goals (Adler, & Kwon, 2002; Burroughs & Eby, 1998; Edmondson, 2003; Putnam, 2000). Development of a sense of community is generated from social interactions and the cumulative collection of reactive
processes that occur in response to situations that occur within the community (Burroughs & Eby, 1998; Edmondson, 2003; Van Deth, 2001). This sense of community mirrors the collaborative nature of social solidarity, wherein members of the community look beyond the needs of self to the external welfare of the organization and community (Burroughs & Eby, 1998).

**Social Capital as a Resource for the Policy Process**

Studies show that social capital as a collective construct represents conscious, reciprocal efforts directed towards improving the community and general welfare of the public (Adler, & Kwon, 2002; Burroughs & Eby, 1998; Edmondson, 2003; Putnam, 2000; Sarason, 1974). As noted by Burroughs and Eby (1998) and Sarason (1974) development of a sense of community provides a basis for social capital and reflects a sense of cohesion between community members. The nursing profession represents a community, which exists as a subsystem within the overall health care delivery system. According to Sabatier (1991) subsystems (communities of interest or networks) exercise a distinct source of influence throughout the policy process. Kingdon (2003) and Anderson (2003) supported this assertion by emphasizing that professional communities of interest often serve as a significant power base that influences policy agenda, selection of policy alternatives, and ultimately, policy implementation.

Findings by Cohen and Milone-Nuzzo (2001) indicated that integration of health policy in nursing curricula serves as a critical factor in the development of active, meaningful roles by nursing professionals that positively influence the policy process of the health care delivery system. Within the context of nursing as a professional
community of interest that is intricately involved in the health care policy process, Brewer (2005) and Skocpol, Ganz, and Munson (2000) found that participation at the individual level (such as that associated with nurses or other public employees) serves as a catalyst in the development of social capital through actions that have been described as organizational citizenship behaviors. In addition, research studies reveal that actions directed towards the public good at the individual level are “crucial in forming and sustaining social capital in society at large” (Brewer, 2005, p. 20).

**Work-related Motivational Theory**

Factors in the work environment that enhance employee motivation contribute to job satisfaction, which is considered an antecedent of OCB (Chu, Lee, Hsu, & Chen, 2005). A significant contribution to the area of work motivation and job satisfaction is the research conducted by Frederick Herzberg. The Two-Factor Theory of Motivation developed by Herzberg was based upon extensive employee interviews on their perceptions of positive and negative attributes of the work environment (Syptak, Marsland, & Ulmer, 1999). According to Herzberg (1968) two dimensions of work motivational theory contribute to employee job satisfaction: maintenance (hygiene) factors and motivating factors. Maintenance (hygiene) factors reflect physiological or “animal” needs of the individual that represent an innate drive for pain avoidance associated with environmental stimuli, as well as learned or conditional drives to fulfill basic biological needs (Herzberg, 1968). According to Herzberg these factors are essential only to the extent that their presence precludes dissatisfaction, but do not create satisfaction. Examples of maintenance factors include salary, benefits, environmental
working conditions, or personal and professional relationships (Herzberg, 1968). Within the context of generational differences as a source of conflict, stressors on interpersonal relationships between nurses would present a dissatisfier factor as defined by Herzberg.

The second dimension of work motivation outlined by Herzberg (1968) was identified as motivating factors. According to Herzberg this dimension is only associated with human behavior and represents an individual’s inner desire or drive to succeed. Motivating or growth inducing factors associated with work include elements such as recognition, growth, advancement, job content, and achievement (Herzberg, 1968, p. 31). These factors have been identified in the literature review as key elements in improving job satisfaction of nurses (Bratt, Broome, Kelber, & Lostocco, 2000; Chu et al., 2005; Todd & Kent, 2006). Within the context of OCB, individual initiative and self development are key characteristics that contribute to development and exhibited OCB (Podsakoff, MacKenzie, Paine, and Bachrach, 2000). A work environment that fosters individual recognition, opportunities for growth, and job content relative to the expectations and qualifications of the individual is also one that supports development of OCB. Leadership recognition of individual abilities, differences, and contributions to the organization has also been identified as an instrumental factor in promoting job satisfaction (Smith, Organ, & Near, 1983).

Job Characteristics Model

Job content was noted by Herzberg (1968) as a contributing factor to job satisfaction. Hackman and Oldham (1980) explored this theory through an in-depth examination of work design and developed a work re-design model based upon this
This model was identified as the Job Characteristics Model (JCM). The underlying premise was that work (jobs) could be restructured to effectively meet the needs of the organization as well as the needs of organizational members (Hackman & Oldham, 1980, p. 71). Hackman and Oldham posited that a job was segmented into five areas that could serve as internal motivators: skill variety, task identity, task significance, autonomy, and feedback (p. 83). Hackman and Oldham asserted that if employees were well suited to the job, liked the job, and achieved satisfaction through that job, there would be very little need for directive leadership on the job.

With respect to generational differences, interpersonal relationships, and job satisfaction, leadership knowledge and recognition play key roles in creating a positive correlation between nurse ability, expressed interests, and job fit. Kupperschmidt (2006) asserted that awareness by leaders and followers of intergenerational differences, interests, and abilities creates an environment conducive to establishing positive intra-and inter-group relationships and reducing conflict. Hackman and Oldham (1980) asserted that awareness of the five dimensions of a job that present sources for motivation provides the leader with tools to design work that not only fits with the objectives of the organization, but can also work towards meeting the needs of the employee, thereby increasing the probability of retaining that employee. Within the context of the current and predicted future nursing shortage, this awareness presents a golden opportunity for nurse leaders to create an environment that nurtures nursing professionals and leads to improved retention. As noted Podsakoff, MacKenzie, Paine, and Bachrach (2000) characteristics of OCB such as helping behaviors, organizational commitment, and
sportsmanship work towards improving interpersonal relationships, enhancing the work environment, and creating a symbiotic progression towards achievement of individual and organizational goals.

Leadership Effectiveness and Conflict Management

Bass (1973) asserted that effective leadership is reflected in desired changes of behavior in organizational members (followers), who accept direction from the leader. According to Bass two key determinants of behavioral changes include an alteration in motivation of the follower or an alteration of habit through structural initiatives generated by the leader. Leadership encompasses an intricate web of interaction and relationships between the individual and various elements within the society and time in which they existed. Bass observed that there are numerous demands and limitations placed upon leaders that are situational-dependent. When the needs and demands of the situation correlate well with the abilities, motivation, and opportunities for action by the leader, then the probability for successful, effective leadership is increased (Bass, 1973).

Leaders and followers represent a myriad of personality traits, intellectual and emotional abilities, as well as physical characteristics. This creates potential for conflict of needs and interests of organizational members. Persistent conflict may lead to increased levels of job stress. One source of conflict-generated stress that has come to the forefront in the nursing profession is that associated with intergenerational differences (Clausing et al., 2003; Dunn-Cane, et al., 1999; Hu et al., 2004; Santos et al., 2003; Santos & Cox, 2000; Stuenkel, Cohen, de la Cuesta, 2005). According to Cox (2001) the degree to which conflict is dysfunctional or functional is correlated with the effectiveness
of communication, willingness to resolve conflict issues, and intra-group relationships between organizational members.

The presence of conflict requires effective conflict management techniques by leadership that can address and resolve issues in a manner that is equitable and fair to each participant in the process (Hendel, Fish, & Galon, 2005; Vivar, 2006). According to Hendel, Fish, and Galon the approach needed by nursing leadership towards conflict management is that of collaborative problem solving. Collaborative problem solving is an integrative approach that encompasses participant input, active engagement in identification of alternative solutions, and acceptance of responsibility for consequences of a selected course of action. Contributing factors to successful collaboration include highly developed communication skills; a willingness to view nurses as individuals, separate from their generational cohort; provision of challenging career paths reflective of the needs of each generation (Hendel, Fish, & Galon, 2005).

Sperry (2003) asserted that careful observation and recognition of individual differences encompasses more than just skill level, education, and job position. Each generation represents a different era and prioritization of value subsets associated with that timeframe. Effective leaders take into consideration the values and passions of organizational members to ensure that rewards and feedback correlate appropriately to performance and involvement of the participant. This approach is supported by the research of Hackman and Oldham (1980) that emphasized the importance of feedback, task significance and identity, autonomy, and variety within the job position. Respect for the ability of nurses to contribute to decision-making processes (empowerment and
participation), demonstrate practice autonomy, and work as a member of a team were identified as key characteristics of effective leader-follower relationships (Anthony et al., 2005; Bratt, et al., 2000; Swearingen, 2004; Wieck, 2004).

A recurring theme in a review of historical and current literature is that of leadership (supervisory) influence in the level of OCB of organizational members. Early research by Katz and Kahn (1978) clearly identified a positive correlation between job satisfaction, displays of extra-role behavior, and positive perceptions of supervisory relationships with employees. Organizational leadership is positioned to influence through modeled behaviors actions that are desirable in employees (Katz & Kahn, 1978). As noted by Katz and Kahn, although leaders occupy formally designated and legitimate positions of power and authority, considerable influence can be exerted that represents extra-role behaviors, such as those associated with OCB. Compliance with directives given by leaders is influenced by employee perceptions of factors other than the formal authority that is presented within the hierarchy of the organization. Such factors include the manner in which directives are given, leader expertise in technical matters, demonstrated appreciation and recognition of the abilities and needs of employees (psychological supportiveness), and willingness to work with employees in effecting change (Katz & Kahn, 1978).

Moorman, Blakely, and Niehoff (1998) asserted that the development of trust between organizational members and managers influences job satisfaction, perceptions of fairness, and extension of organization support through supervisory actions. Research by Moorman et al. (1998) examined the relationships between exhibitions of OCB and
employee perceptions of organizational support and procedure justice through utilization of a group value model of analysis. Findings by Moorman et al. were consistent with earlier research (Kovovsky & Pugh, 1994; Van Dyne, Graham, & Dienesch, 1994), which indicated a positive correlation between organizational support and OCB and perceptions of procedure fairness and OCB.

As posited by Bateman and Organ (1983) the most direct influence on job satisfaction is that of leader influence by the most immediate supervisor. From data obtained in two separate studies involving both supervisors and employee responses to questionnaires on job satisfaction and OCB, findings by Bateman and Organ demonstrated a significant correlation between all patterns of relationships of job satisfaction and exhibitions of OCB in both studies. Internal reliability of the first study was $\alpha=.92$, the second study was $\alpha=.94$, with a test-retest reliability of .80 (p. 589). Of particular note in the research by Bateman and Organ was reference to the reciprocal relationship between leader and employee, wherein a positive correlation exists between satisfaction with leader interaction and relationships and exhibited OCB. Employees who perceive that actions representative of OCB (compliance, altruism, loyalty, etc.) will be appreciated or supported by supervisors are more willing to engage in such actions than if lack of reciprocity by leader is anticipated. These findings are supportive of social exchange theory espoused by Blau (1964).

**Generational Cohort Differences**

Differences that exist between organizational members have been recognized for decades as contributing factors to the effectiveness of organizations in meeting
established goals. March and Simon (1958) emphasized that participants at all levels within the organization bring specific attitudes, interests, goals, and values that affect not only individual job performance, but the interactions and relationships that subsequently develop within the work environment. Parsons (1960) emphasized that participants represent unique sets of values, interests, and levels of commitment that not only affect the internal system of organizational relationships, but also extend to those environments within which the organization interacts and operates to achieve desired goals. There are value system differences between generations that affect the relationships and interactions between organizational members.

According to Dunn-Cane, Gonzalez, and Stewart (1999) value system differences are explicitly demonstrated in work value variances between generational cohorts. Each cohort exhibits or expresses a distinct set of beliefs, values, and behavioral characteristics that govern the actions and perceptions of individuals contained within that set (Dunn-Cane, Gonzalez, & Stewart, 1999, p. 930). A review of recent literature attributed generational divergence in work values to three separate, but interrelated areas: attitude, orientation towards the nature of work-life balance; commitment to length of work in one institution and loyalty to the organization, self, or career; and acceptable workplace behavior as a nursing professional (Clausing et al., 2003; Dunn-Cane, et al., 1999; Hu, Herrick, & Hodgin, 2004; Santos et al., 2003; Santos & Cox, 2000; Stuenkel, Cohen, & de la Cuesta, 2005). Pfeffer (1978) asserted that if new roles and patterns of interactions cannot be easily assimilated by participants or are in conflict with existing interests or value systems, organizational effectiveness and performance might decline. The
willingness of organizational leaders and members to acknowledge generational differences, acquire information to understand those differences, and then work towards maximizing the abilities represented by each generational cohort are critical steps to resolving conflict, which acts as a stressor and job dissatisfier (Herzberg, 1968; Kupperschmidt, 2006; Stuenkel, Cohen, & de la Cuesta, 2005).

Purpose of the Study

This quantitative research study was designed to explore relationships between perceptions of effective leadership strategies in the management of IWVC, job satisfaction, and the expressed or exhibited OCB of perioperative registered nurse members of the Association of periOperative Registered Nurses (AORN) in the United States. Expressions of OCB represent verbalized intent by nurses to exert effort beyond the parameters of the job role, such as indicating a willingness to another nurse to serve as an education resource. Exhibited OCB reflects actions that can be observed by others, such as volunteering to serve as a mentor or working late to help finish out the schedule for the day. The exploratory nature of this study is an extension of existing theory on variable relationships between perceptions of leadership effectiveness, job satisfaction, and demonstrations of OCB. As noted previously, these relationships are well established in the literature on OCB, as well as in emerging literature within the nursing profession. Nursing research to date has sought to apply the research from other disciplines, such as management and organizational behavior, to the community of nursing professionals. However, this has primarily been implemented within the existing theory.
Utilizing previous OCB theory as a framework, this study seeks to deepen existing research by exploring the relationship between leadership support of intergenerational differences and management of IWVC to job satisfaction and subsequent actions that represent OCB. This research study examined how variations in the extent of OCB within the organization potentially influence the social capital available to the community at large. In an environment that is increasingly beset with complexity of processes and technology, competition, and limited resources, it is essential to be cognizant of the dynamic and diverse nature of factors that may influence the balance of social capital within a community.

Nature of the Study

Methodology

Quantitative research measurements were obtained from a self-report questionnaire (Appendix A). The survey instrument included questions that examined OCB characteristics, generational work values, leadership characteristics, and demographics. The survey instrument was constructed primarily from existing standardized survey instruments that had demonstrated indices of validity and reliability. The OCB component was adapted from the survey instrument published by Podsakoff, MacKenzie, and Fetter (1993) and addressed key components of altruism, compliance, courtesy, sportsmanship, and civic virtue. Perceptions of the work environment, leadership effectiveness, and generational characteristics were targeted using the Work Environment Scale (WES) developed by Moos (1994).
The generational work values questions examined characteristics such as attitudes toward power and authority, prioritization of career, technology, relationships, and organizational structure within the context of the WES survey questions. Job satisfaction assessment was obtained from a subscale comprised of selected questions within the survey that represented commonly held indicators of job satisfaction noted in the literature review.

Data analysis included descriptive statistics, correlation matrices, and exploratory effects as identified through multiple regressions. Key considerations included appropriate identification of questions, coding of responses within each separate survey instrument to reflect the research questions, and hypotheses. Cronbach’s alpha was used to determine reliability with a targeted base index of 0.70 or higher.

Descriptive statistics for this study examined age (as defined by generational cohort decade), years of experience in perioperative nursing, identification of type of facility (e.g. inpatient hospital, ambulatory surgery center, etc.), level of education, tenure, and certification as an operating room nurse. Categorization of data for measurement and analysis were primarily measured on an ordinal scale, such as those factors associated with attitudes towards and perception of the work environment. A more limited use of data based upon a ratio or interval scale was incorporated into the analyses, such as that associated with age of generational cohort members and years of education and tenure. A determination of frequency distribution and measures of central tendency were examined for each question to arrive at a number representative of the sample.
A quantitative standard regression analysis using a one-tailed test was used to identify relationships between variables and to determine the strength of those relationships. The dependent variable was that of OCB of perioperative nurses. This variable was influenced by the independent variable identified as job satisfaction. Intervening variables included IWVC, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC, leader understanding, and support), and perceived stress.

A pretest was used to identify problems in questionnaire construction (technical or interpretative) and logistics of mailing processes. It was distributed to a random sampling of members from AORN, who represented a small sample of the AORN target population. The purpose of this step was to ascertain whether any difficulties present in understanding the questions or in the logistics of administering the survey. Evaluation of pretest survey findings were discussed with a research expert, as well as provided to the dissertation committee for comment. Results from the pretest, as well as participants, were excluded from the final study.

Research Questions and Hypotheses

The hypothesis tested through this research study was that divergence of intergenerational work values creates a potential for conflict and stress, which influence expressed or exhibited OCB of perioperative registered nurses. Associated with this conflict are nurses’ perceptions of leadership recognition and support of generational cohort differences, as well as perceptions of how effective leadership strategies are in the management of associated work values conflict. Actions that reflect involvement of
leaders with followers associated with intergenerational work-values conflict (IWVC) are noted as leadership behaviors. Each of these factors may affect job satisfaction, which is related to expressed or exhibited OCB by perioperative nurses. The dependent variable was that of OCB of perioperative nurses. This variable was influenced by the independent variable identified as JS. Intervening variables included intergenerational work-values conflict, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC, leader understanding, and support), and perceived stress.

Research questions and hypotheses that reflected the relationship between variables were:

1. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the expressed or exhibited OCB of perioperative registered nurses?

   \[ H_o : \] Perceptions of effective leadership behaviors associated with IWVC have no correlation with expressed and/or exhibited OCB of perioperative registered nurses.

   \[ H_A : \] Perceptions of effective leadership behaviors associated with IWVC are positively correlated with demonstrations of OCB of perioperative registered nurses.

2. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by perioperative registered nurses?

   \[ H_o : \] There is no correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS of perioperative registered nurses.

   \[ H_A : \] Perceptions of effective leadership behaviors in the management of IWVC are positively correlated with the level of reported JS of perioperative registered nurses.
3. Is there a correlation between IWVC and levels of perceived stress by perioperative registered nurses?

\[ H_o : \text{ IWVC has no correlation with levels of perceived stress reported by perioperative registered nurses.} \]

\[ H_A : \text{ IWVC is positively correlated with levels of perceived stress reported by perioperative registered nurses.} \]

4. Is there a correlation between perceptions of effective leadership behaviors associated with IWVC and the level of perceived stress by perioperative registered nurses?

\[ H_o : \text{ Perceptions of effective leadership behaviors associated with IWVC have no correlation with levels of perceived stress by nurses working in the perioperative environment.} \]

\[ H_A : \text{ Perceptions of effective leadership behaviors associated with IWVC are negatively correlated with levels of perceived stress by perioperative registered nurses.} \]

5. Is there a correlation between levels of perceived stress associated with IWVC and the level of reported JS by perioperative registered nurses?

\[ H_o : \text{ Levels of perceived stress associated with IWVC have no correlation with the level of reported JS by perioperative registered nurses.} \]

\[ H_A : \text{ Levels of perceived stress associated with IWVC are negatively correlated with the level of reported JS by perioperative registered nurses.} \]

6. Is there a correlation between JS and expressed or exhibited OCB by perioperative registered nurses?

\[ H_o : \text{ There is no correlation between JS and expressed or exhibited OCB by perioperative registered nurses.} \]
There is a positive correlation with JS and levels of expressed or exhibited OCB by perioperative registered nurses.

The diagram on the following page illustrates the hypothesized relationship between variables (Figure 1):
Organizational Citizenship Behaviors (OCB) expressed and/or exhibited

Perceptions of leader recognition, support, and understanding of IWVC

Leadership behaviors - as perceived by perioperative nurses

Job Stress

Perceptions of leadership effectiveness in management of IWVC

Intergenerational Work Values Conflict (IWVC)

Figure 1. Relationship among study variables.
Operational Definition of Terms

*Conflict:* A process that begins when one party perceives that another party has negatively affected, or is about to negatively affect, something that the first party cares about (Thomas, 1992, p. 653). This process is centered on internal discord that results from differences in ideas, goals, values, or differences between two or more people. (Marquis, 2003; Fisher, 2000).

*Conflict management:* The use of conflict resolution techniques or modes of conduct to facilitate constructive social change towards an acceptable level of conflict (Hendel, Fish, and Galon, 2005; Robbins, 2005).

*Health care delivery system:* A mosaic structure, which exists within a dynamic, technologically driven environment, and is composed of diverse participants who interact, relate, and act to promote the health, welfare, and safety of the end-user of healthcare, the patient. (Wright, 2005).

*Intergenerational work values:* Beliefs, feelings, or attitudes of each generational cohort that demonstrate specific values and expectations from work-associated behaviors and performance.

*Job satisfaction:* An aggregate of attitudes and associated behaviors of an individual towards his/her job.

*Organizational citizenship behavior (OCB):* Discretionary actions taken by employees that are considered “extra-role” or outside of the requirements of the job description and specifications that promotes effective functioning of the organization (Organ & Bateman, 1983)
**Perioperative registered nurse:** The registered nurse who, using the nursing process, designs, coordinates, and delivers care to meet the identified needs of patients whose protective reflexes or self-care abilities are potentially compromised because they are having operative or other invasive procedures. (AORN, 2005, p. 17)

**Stress:** Refers to a dynamic state in which the individual is confronted with a situation that presents an opportunity, constraint, or demand relative to what he/she desires and for which the outcome is perceived as uncertain, but important (Robbins, 2005, p. 569).

**Depth of the Investigation**

**Assumptions**

Several assumptions were made with respect to this study. Of primary concern was that contact information for the nurse members of AORN was readily available, accessible, and representative of the population of perioperative registered nurses. In addition, there was the assumption that the study population represented a normal distribution. A third assumption was that the respondents answered truthfully and within the timeframe allotted for the study. Another assumption was that the purpose of the study was clear and will contribute significantly to leader understanding of perioperative nurses in a way that assists in nurse retention.

**Delimitations**

The study population was perioperative registered nurses, who are members of the national professional organization, the Association of periOperative Registered Nurses.
Geographic location was restricted to the United States, so international implications are limited.

Limitations

Limitations of this study related to sampling of perioperative nurses, which was constrained to those members of the Association of periOperative Registered Nurses (AORN). Although representative of the specialty of perioperative nursing, nurses who choose to become members of AORN are more aware of the standards and practices that govern perioperative nursing practice. This knowledge may present an avenue for historical selection bias through the broader scope of practice and knowledge that exposes those nurses to issues that other nurses might not be aware.

Another limitation may exist in the construction of the questionnaire, which presents the potential for internal construct validity due to the tripartite construction of the survey instrument. Although standardized questionnaire instruments were utilized as the primary framework from which to construct the survey instrument, potential for error is introduced through selection of questions and by use of a nonrandomized sample, which may skew the results.

An additional limitation of this exploratory study exists in the potential for intervening variables that may confound correlation outcomes identified in each research question. These interconnections may threaten the internal validity of this study, as simple regression did not control for confounding effects. Intervening variables to consider might include gender, pay, professional development, specialization of work environment, tenure, or management experience. A multiple regression estimation model
could be used in future research to uncover the true explanatory power of each
independent variable under consideration.

Significance of the Study

Current perioperative research in OCB is limited, which presents an opportunity
for a unique contribution to the profession. As explored in more detail in chapter 2, a
review of the literature, more specifically perioperative dissertations accessed through the
professional association (AORN), indicated that several relate to job satisfaction, stress,
and leadership, but few directly address the field of OCB. Several mention the nursing
shortage and factors that influence the shortage, and one is directed towards OCB and
generational differences with Baby Boomers. While the elements are there, the research
specificity examining the relationship of IWVC and leadership behaviors to OCB is not.
This the identified gap in the literature.

With the extent of the current and predicted nursing shortage, expanding the
knowledge of antecedent factors that contribute to a nurse’s decision to leave the
profession or change careers may assist nursing leaders in implementing effective
interventions to prevent the exodus from exacerbating any further. The perioperative
environment is permeated by volatile actions related to the dynamics of caring for
patients within carefully prescribed parameters of health, disease, or injury. The role of
the perioperative registered nurse is a crucial one, but that demanding role takes a toll on
the health and welfare of those individuals. Behaviors that are considered “extra-role,”
such as taking call for another nurse, working over-time to alleviate stress on peers, or
just offering a shoulder or a listening ear, can make all the difference at the end of a long
day. When conflict in the form of generational differences presents obstacles to extending
time, energy, and commitment beyond what is required by the job, the caring and
supportive actions that comprise OCB take a backseat to survival tactics. Perioperative
nurses may become an endangered species.

Social Change

In addition to contributions to perioperative nursing, this study will benefit the
public by extending the knowledge of generational differences and their impact on
interpersonal relationships, job satisfaction, and career decisions in health care. The
nursing profession represents a community of interest, which exists as a subsystem within
the health care delivery system. Over time, cohesive relationships are established that
develop a sense of community with this profession. As noted by Putnam (2000) these
relationships serve as a locus of social solidarity, wherein organizational members find
mutual assistance, share knowledge and expertise, and develop a sense of belongingness.
Improving recognition and understanding of intergenerational cohort differences can
serve to strengthen relationships between nursing professionals, creating an environment
in which nurses want to remain with the organization and the profession.

Patients are the focus of the health care delivery system. Proactive steps to
improve the health care within that system will promote positive social change by
improving intergenerational relationships, nurse retention, and positive patient care
outcomes.
Summary

The research study examined the influence of generational work value differences and conflict on interpersonal relationships as expressed or exhibited in the dependent variable of OCB within the perioperative work environment. Job satisfaction functioned as an independent variable, through which intervening variables act to influence the level of OCB that is expressed or exhibited by organizational members. This examination also incorporated intervening variables such as perceptions of leader effectiveness in conflict management, leadership behavior that demonstrates actions that support the growth and development of nurses as professionals and as individuals, and job stress associated with intergenerational differences.

Although this study had as its primary focus the profession of nursing, perioperative nursing in particular, implications extend into the realm of public administration through the application of understanding the effect that intergenerational work values conflict has in the workplace. The presence of multiple generations working side-by-side in the workplace is not restricted to the nursing profession. In addition, when highly skilled, educated, and experienced individuals choose to leave a selected field of work, there is a void left that is difficult to fill. The field of public administration has taken recent notice of the current and impending challenges that emerge as workers retire faster than replacements can be educated and trained to fill vacant positions (Jurkiewicz, 2000; Southard & Lewis, 2004). Of particular note is the void left in senior management positions, which are more difficult to fill due to lack of experience. Although a growing
number of public employees are well educated, including those in the nursing profession, there is a distinct imbalance between years of education and years of experience.

This study contributes to the existing body of literature in two specific areas. First, although there is a demonstrated growth in research on generational differences and conflict in both nursing and public administration, a gap exists in research that examines the correlation between those issues and demonstrations of OCB. This is most evident in the nursing field, although that profession represents the largest component of the healthcare delivery system. A second contribution of this study to the existing body of literature and knowledge is to direct attention to the relationship between intergenerational diversity, OCB, and the availability of social capital from the subset community of an organization into the broader community within which that organization functions.

The following two chapters provide detailed information on the state of existing literature on OCB within the discipline of organizational behavior and nursing (chapter 2), and on the research methodology (chapter 3), that explicated the research process utilized to explore the research problem. Each chapter explored in depth the multidimensional nature of OCB within the context of nursing and its relevance to the public domain.
CHAPTER 2:  
LITERATURE REVIEW

This literature review presents theory on the relationship between OCB, job satisfaction, stress, and perceptions of leadership effectiveness in the management of IWVC by perioperative registered nurses. Research questions identified as pertinent to these relationships were examined. Empirical evidence for the theoretical bases of these relationships is presented by investigating underlying theoretical constructs of organizational behavior. Each research variable was examined with respect to human behavior in an organizational context. Organizational behavior as exhibited through OCB was also examined in relationship to social capital and a sense of community. In addition, a review of associated factors that influence OCB, such as the interaction between leaders and followers, different generational cohorts, and mitigating factors that lead to conflict, was conducted.

Research Questions

The hypothesis explored through this research study is that divergence of intergenerational work values creates a potential for conflict and stress, which influence expressed or exhibited OCB of perioperative registered nurses. Factors that are associated with IWVC include nurses' perceptions of leadership recognition and support of generational cohort differences, as well as perceptions of how effective leadership strategies are in the management of associated work values conflict. Leadership actions or strategies that reflect interactions with followers within the context of IWVC are noted
as leadership behaviors. Leadership behaviors may affect job satisfaction, which is related to expressed or exhibited OCB by perioperative nurses. If the perception of organizational members is one of effective leadership management of conflict in the work environment, specifically conflict associated with intergenerational work-value differences, then satisfaction with the job and OCB should be enhanced. Job satisfaction is a predictor of job retention (Chu et al., 2005; Strachota et al., 2003; Todd & Kent, 2006).

The dependent variable in this research study was OCB of perioperative nurses. This variable was influenced by the independent variable identified as job satisfaction. Intervening variables include IWVC, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC, leader understanding, and support), and perceived stress. Research questions that reflect the relationship between variables included:

1. Is there a correlation between IWVC and the expressed or exhibited OCB of perioperative registered nurses?

2. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by perioperative registered nurses?

3. Is there a correlation between IWVC and levels of perceived stress by perioperative registered nurses?

4. Is there a correlation between perceptions of effective leadership behaviors associated with IWVC and the level of perceived stress by perioperative registered nurses?
5. Is there a correlation between levels of perceived stress associated with IWVC and the level of reported JS by perioperative registered nurses?

6. Is there a correlation between the level of reported JS and expressed and/or exhibited OCB by perioperative registered nurses?

Search Strategy

The initial search strategy involved identification of key terms to provide a framework from which to develop an in-depth literature search of journal material relevant to the research problem, purpose, and associated questions/hypotheses. Key terms for this research include organizational behavior (OB), organizational citizenship behavior (OCB), social capital and sense of community, job satisfaction, job stress, nursing, nursing leadership, and generational differences. A cursory sequential search through EBSCO Host of the Academic Search Premier, Business Source Premier, CINAHL Plus with Full Text, Health Source: Nursing/Academic Edition, MEDLINE, and PsycARTICLES databases using the most general term of organizational behavior (OB) brought up 21,555 references. In the next step, the terms OB and OCB were entered, resulting in a significant reduction in volume to 91 references. A third step involved using the terms OCB and nursing, which identified only nine articles (including two dissertations). A fourth search increased the number of terms to job satisfaction, OCB, and nursing, which identified five articles, all of which were included in the first search. In searching for material that addressed social capital and sense of community, approximately 30 articles emerged. When narrowing that search into nursing, only one article surfaced. Similar searches were conducted for each of the key terms in
combination with the others, wherein perioperative nursing-related articles were the most difficult to find. The search for perioperative nursing, generational conflict, and management located only one reference.

In a review of the perioperative dissertations, particularly those provided through the professional association (AORN), several relate to job satisfaction, stress, and leadership, but only a couple directly to the field of OB. Several mention the nursing shortage and factors that influence the shortage, and one is directed towards OB and generational differences with Baby Boomers. While the elements are there, the specificity with relation to OCB is not. There is an identified gap in the literature!

Review of Related Literature

The health care environment is complex, dynamic, and presents significant challenges not only to health care providers, who must keep abreast of immense changes in technology and legislation, but also for the patients who enter health care delivery systems, often at risk to their health (Kohn, Corrigan, & Donaldson, 1999).

Compounding existing factors within this environment, such as increasing patient acuity, decreased third party reimbursement, and legislative modifications, is the very real presence of an acute nursing shortage (Kohn, et al., 1999; Murray, 2002; Stanton, 2004.) The deficiency in the availability of nurses to care for an increasing number of patients, who are sicker and require more time-intensive treatment, creates a tangible need to identify factors that cause nurses to leave the profession (Hart, 2006; Stanton, 2004). By recognizing variables in the health care environment that influence a nurse’s decision to leave or to remain in the nursing profession, nursing leaders may be able to
stem the flow that threatens to drain the industry of vital resources to the point that patient safety becomes an even more critical issue than it is at the present time (Kohn, Corrigan, & Donaldson, 1999; Needleman, Buerhaus, Stewart, Zelevinsky, & Mattke, 2006). In addition to reducing the number of available nurses that are involved in patient care activities, decreased levels of OCB may also be associated with a decrease in the desire and energy reserves needed for those nurses to engage in extra-organizational activities within the community. This represents a loss of social capital as identified in the research by Putnam (2002), Sarason (1974), and Schorr (1997).

As noted in the introductory statements, the underlying theoretical framework of organizational behavior was examined at the outset to set the stage for a literature review of areas that affect expressed or exhibited OCB. For the purposes of this study variables in the health care work environment that influence the behavior of nurses included four key areas: a) group level behaviors within and external to the organization, b) work-related attitudes (job satisfaction), motivation and job content; c) generational cohort characteristics, and d) level of perceived conflict, stress, and leadership effectiveness that impact the work environment.

Each of these areas presents potential for discord that can lead to job dissatisfaction and the decision to leave the nursing profession. The nursing profession represents a distinct community within each health care delivery system and offers a rich resource of social capital upon which the broader community can draw. Threats to the nursing community pose concordant threats not only to the health of the public, but also to the social capital available to the community at large.
Robbins (2005b) defined organizational behavior (OB) as an area of study that “investigates the impact that individuals, groups, and structure have on behavior within organizations” (p. 12). According to Robbins, OB is an applied science that is constructed from contributions from other behavioral disciplines. Disciplines recognized as key contributors to OB include psychology, sociology, social psychology, anthropology, and political science (Robbins, 2005b). Wilson (2001) asserted that OB has its roots in the interrelationships and interactions of organizational members, or what Luthans (1998) referred to as the “human side of management and organization” (p. 3). According to Luthans, OB is concerned specifically with the behavioral context of organizational management and does not portend to reflect management in its entirety. Organizational behavior is a multifaceted discipline with numerous components that reflect the diversity of the human element that exists within each organization. For the purpose of this research study, OCB will be the major component of OB that is investigated.

*Organizational Citizenship Behavior*

Research by Bateman and Organ (1983) examined behaviors of organizational members that present outside of the realm of action prescribed by a job description or organizational policy. These behaviors were termed citizenship behaviors and described as “extra-role,” to indicate the discretionary or voluntary nature of those actions (Bateman and Organ, 1983, p. 588). This designation had roots in the research of Barnard (1968) on the relationship between net satisfaction, incentives, and contributions by
organizational members. Barnard noted that contributions by members are not restricted to those specifically identified and are distinctly related to the willingness (cooperativeness) of members to engage in actions that either work to the advantage or disadvantage of the organization. In addition to the work of Barnard, Bateman and Organ (1983) relied on the research of Katz and Kahn (1978) that provided in-depth analysis of the social underpinnings of citizenship behaviors that hold organizations together beyond the formal construct of the organization. Examples of these behaviors include extending courtesy to coworkers, assisting new hires in adjusting to the work environment, working within the policies and regulations of the organization without undue complaint, and becoming involved in organizational political actions to improve the quality of services provided by the organization.

Reflecting the consensus of other researchers such as von Bertalanffy (1972) and Scott (1998), Katz and Kahn (1978) asserted organizations are open systems in which components are interrelated and interactive with multiple environments, both internal to and external to the organization. In addition, Katz and Kahn emphasized that social systems represent the complex network of human behavioral patterns and relationships that are an integral part of every organization. Within a social system context, displays of OCB represent behavior that is not formally mandated, but is recognized as an essential component of organizational effectiveness. The existence of OCB is a vital undercurrent that keeps the complex social mechanisms of the organization running (Katz & Kahn, 1978). Katz and Kahn posited that the formal structure of an organization provides the basic framework for functional processes, but the social system represented by the
behavioral patterns that develop between organizational members represents the “psychological bonds” that hold the organization together (p. 68).

OCB was also described in the literature as contextual in nature, or associated with performance that is situational-dependent (functioning as a dependent variable), that contributes significantly to the social structure of the organization, and is often ambiguous in nature (Katz & Kahn, 1978; Organ & Ryan, 1995; Van Dyne, Graham, & Dienesch, 1994). Van Dyne, Graham, and Dienesch (1994) noted that perceived situational factors such as workplace values, job characteristics, and hierarchical position also affect the level of OCB demonstrated by organizational members. In addition, Podsakoff, MacKenzie, Paine, and Bachrach (2000) indicated that OCB is multidimensional in construct. This assertion is supported in the recent research of Vigoda-Gadot, Beeri, Birman-Shemesh, and Somech (2007) that explored the development of OCB theory from an individual level to a more complex group and organizational level.

Key themes of OCB identified by Podsakoff et al. include helping behavior (altruism), sportsmanship (organizational compliance), organizational loyalty (commitment), individual initiative, and civic virtue (p. 516). These themes reflect the complex nature of interactions and interrelationships within the organization that may contribute to job satisfaction and involvement in the organization as a community of individuals working together towards identified goals.
Helping Behavior (altruism)

Helping behavior (altruism) is described as voluntary actions of organizational members that directly or indirectly intend to assist another individual in attaining identified objectives (Podsakoff et al., 2000; Smith, Organ, & Near, 1983). As noted by Podsakoff et al. (2000) helping behavior encompasses actions such as courtesy, peacemaking (prevention or resolution of conflict), and cheerleading (acts of encouragement and support) that voluntarily assist others in ways not prescribed by a job description (p. 518).

Sportsmanship (organizational compliance)

Sportsmanship (organizational compliance) is defined as behavior that demonstrates tolerance for inconveniences and impositions related to the work environment without whining or undue complaints (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Podsakoff et al. (2000) noted that this characteristic of OCB is one that extends organizational courtesy into the domain of following rules and regulations without undue criticism and acknowledged the need for rational structure for organizational effectiveness. Brief and Motowidlo (1986) indicated actions illustrative of sportsmanship reflect pro-social behavior that internalizes the core values of the organization and demonstrates a “willingness to subordinate personal idiosyncrasies and preferences” towards achievement of organizational goals (p. 715).

Organizational Loyalty (commitment)

Organizational loyalty (commitment) encompasses actions by individuals that indicate positive involvement with the organization, congruence with established
organizational goals, and “a willingness to exert considerable effort on behalf of the organization and a strong desire to maintain membership of the organization” (Loke, 2001, p. 194). As noted by Podsakoff et al. organizational commitment demonstrates an allegiance or loyalty to the organization that transcends self-interest, support, and defends organizational goals and objectives. Behaviors that exemplify strong organizational commitment include personal contributions in an effort towards positive change, a sense of spirit or *esprit de corps* as described by Fayol (1967). This behavior also entails commitment to remaining with the organization in difficult times and representing the organization to others in a favorable manner (Podsakoff et al., 2000).

*Individual Initiative*

Individual initiative is characterized by actions that illustrate conscientiousness, personal industry, persistence, and constructive suggestions for organizational improvement (Podsakoff et al., 2000). According to Chen, Hui, and Sego (1998) these characteristics, particularly conscientiousness, demonstrate willingness by organizational members to take action beyond the minimum parameters of the job description in such areas as taking breaks, volunteering for overtime, or tardiness (p. 923). Brief and Motowidlo (1986) asserted that initiative also takes the form of organizational member resistance to directives that are considered improper, unethical, or not in alignment with organizational policies or procedures (p. 715). Podsakoff et al. (2000) indicated that individual initiative encompasses behavior that reflects enthusiasm, creativity in problem solving, and responsibility for personal growth and development.
Civic Virtue

Civic virtue involves actions that reflect responsible, constructive involvement in the political arena internal and external to the organization (LePine, Erez, & Johnson, 2002; Podsakoff et al., 2000). As noted by Podsakoff et al. (2000) civic virtue is demonstrated in behavior such as staying informed by keeping abreast of organizational information, attending meetings, maintaining the work environment, accepting responsibility and accountability for involvement in organizational governance. The assertion by LePine, Erez, and Johnson (2002) indicated that willingness of organizational members to become actively involved in the political processes might also represent a key factor in organizational competitiveness. Bolino, Turnley, and Bloodgood (2002) offered support of this approach through the application of a resource-based perspective, which emphasizes that certain organizations possess specific capabilities and strong personal interrelationships that offer a competitive advantage. Other researchers indicate that this advantage is created through the utilization of exchange networks are established through interaction and relationships between individuals within and external to the organization (Blau, 1964; Bolino et al., 2002; Nahapiet & Ghoshal, 1998; Putnam, 2000). The assertion by Nahapiet and Ghoshal (1998) is that the social capital construct is a multidimensional resource base composed of intellectual, structural, and relational capital that is actually and potentially available for use by the organization and community.
Organizational Citizenship Behavior in Nursing Literature

As noted by Jasovsky (2001) a review of nursing literature specific to organizational citizenship behavior reveals a dearth of material. In addition, none of the literature reviewed specifically examined the correlation between generational cohort differences and presence of organizational citizenship behavior. The literature review revealed that interest in examining organizational behavior in the nursing profession has grown over the past decade. However, the focus on organizational citizenship behavior (OCB) demonstrates growth only within the last five years or so (Ackfelt & Coote, 2005; Chu, Lee, Hsu, & Chen, 2005; Jasovsky, 2001). Findings from this literature review process indicate a demonstrated need for the proposed study, which may serve as a framework for understanding antecedent factors in the work environment [health care community] that may lead nursing professionals to exit the field.

Social Capital and a Sense of Community

An underlying aspect of organizational citizenship behavior is the development of a sense of community and connectedness between members of an organization. The health care organization represents a workplace community in which nursing professionals practice. This community reflects a certain geographic location comprised of formal and informal relationships, structures, and networks within the health care delivery system for individuals who share a common association and disposition towards the organization for which he or she works (Burroughs & Eby, 1998; Etzioni, 1975; Sarason, 1974). Sarason (1974) noted, however, that a community is not restricted to the immediacy of its geographic location, but extends into broader dimensions of society.
through a mosaic of interconnecting individuals, groups, and other organizations (p. 131).

A prescient observation by Etzioni (1975) revealed that the formal and informal structures and relationships that comprise an organization (community) form a complex network of processes through which both organizational and individual needs and expectations are achieved. This network extends from the organization into the community in which the organization exists and operates to fulfill identified goals.

According to Sarason (1974) organizational members [nurses] establish a sense of community through interactions, relationships, shared meaning, and efforts to achieve identified goals. It is this sense of community that generates a source of social capital for the broader community within which the organization exists (Bolino, Turnley, & Bloodgood, 2002; Nahapiet & Ghoshal, 1998; Sarason, 1974; Putnam, 2000). Putnam (2000) asserted that the core of community lies in the establishment of a sense of belonging associated with multiple and often overlapping social networks to which an individual belongs. This view is supported in research by Rawls (2003) that revealed a community membership is comprised of individuals with shared values and interests, who come together for a common purpose in support of the organization, but are not necessarily bound by economic or political reasons. From a community perspective, individuals become aware of the interdependency that is created by shared goals and needs, especially within the context of available and accessible resources (Putnam, 2000; Schorr, 1997).

Several studies show that factors in the environment that lead to stress, fear, frustration, and conflict can generate feelings that lead to dissatisfaction and/or
dissociation with the respective community in which an individual lives and works (Cropanzo, Rupp, & Byrne, 2003; Demerouti, Bakker, Nacheriener, & Schaufeli, 2001; Katz & Kahn, 1978; Putnam, 2000; Sarason, 1974; Schorr, 1997). These situational variables can create a cascade effect, which alienates the individual to the point that active participation in his or her chosen profession is at risk, as well as activities within the external community (Kalliath & Morris, 2002; Murray, 2002; Sarason, 1974; Swearingen, 2004).

Within the context of OCB that is expressed or exhibited within the organization, exploration of the existing literature revealed three dominant bodies of research. The work of Bateman and Organ (1983) set the stage for research in to OCB and the influence not only on relationships within the organization, but also on overall effectiveness of the organization. Although derived from earlier research on human behavior specific to the organizational context (Katz & Kahn, 1978; Scott, 1998; von Bertalanffy, 1972), the research on OCB shifted the focus to those behaviors not formally mandated, often intangible, yet vital to the life of the organization. In addition, the correlation between OCB, job satisfaction, stress, relationships between organizational members and leadership also revealed the dependent nature of OCB, as a variable affected by changes in multiple factors in the work environment.

Strengths of the research on OCB during this time period include recognition that behaviors and relationships between the individual and the organization are multidimensional in nature and driven by factors in the work environment heavily influenced by leadership. Existing research supports the hypothesis of this dissertation
research study that perceptions by organizational members (nurses) of effective leadership and support can reduce stress, enhance job satisfaction, and create an environment conducive to the creation and proliferation of OCB. Two spheres of behavioral expectations exist within the organization: those associated with formally designated role responsibilities and those informally prescribed and created from relationships between individuals at and between various levels of the organizational hierarchy. Those informal or “extra-role” behaviors provide the nutrients from which an organization can grow, develop, and function more effectively to meet designated goals. Weaknesses of current literature, as noted previously, include a gap in application into specific communities of interest, such as the nursing profession. In addition, the focus has been on OCB confined to the organization, and not on how those behaviors ultimately affect the broader community at large in the form of social capital. The research on social capital and sense of community (Bolino, Turnley, & Bloodgood, 2002; Etzioni, 1975; Nahapiet & Ghoshal, 1998; Putnam, 2000; Sarason, 1974), however, supports the hypotheses of the proposed research study that expressed and/or exhibited OCB by the individual specific to a professional community [nursing profession] also provides potential for a rich resource for social capital to the broader community within which the organization exists.

The theoretical frameworks of OCB, sense of community, and social capital examine human behavior, interactions, and relationships form a broad perspective. However, as noted in a review of the literature, each of these factors is influenced by factors that emanate from a narrower focus – that of the individual. The following
sections explore attitudes towards work in the form of job satisfaction, work motivational factors, perceptions of leader effectiveness, and finally, generational cohort differences that may potentiate and/or influence work-related behaviors.

**Job Satisfaction**

The concept of job satisfaction (JS) refers to an aggregate of attitudes and associated behaviors of an individual towards his or her job; or as Katz and Kahn (1978) stated, “the overall liking for the job situation” as well as for the “content of work processes” (p. 365, 366). Bateman and Organ (1983) asserted that a positive correlation exists between the level of JS and displayed OCB by organizational members. This relationship was found to be significantly stronger than the relationship between job satisfaction and job performance (p. 592).

In application to the nursing community, Murray (2002) observed that there are underlying factors in the health care work environment, which contribute to the existing and predicted nursing shortage. These factors include an aging nursing workforce, gender/income issues, high patient acuity levels with fewer nurses providing care, long work hours (including excessive over-time), and stress-induced burnout (Murray, 2002; Stordeur, D’Hoore, & Vandenberghe, 2001). Of particular interest is the research on job burnout in the nursing profession, which contributes to increased levels of job dissatisfaction (Kalliath & Morris, 2002; Swearingen, 2004). Kalliath and Morris (2002) indicated that a negative relationship exists between higher levels of job satisfaction and low levels of job burnout. Demerouti, Bakker, Nacheriener, and Schaufeli (2001) noted that working conditions in which resources are insufficient, such as those associated with
inadequate nurse staffing to patient acuity ratios, increased job stress, expressions of burnout, and job dissatisfaction. The following diagram illustrates factors identified in the literature that negatively influence job satisfaction in the perioperative arena.
Figure 2. Factors that negatively influence perioperative nurse job satisfaction. (Demerouti et al., 2001; Kalliath & Morris, 2002; Murray, 2002; Stordeur, et al., 2001; Swearingen, 2004)
In research by Shader, Broome, West, and Nash (2001) generational attitudes towards work preferences make a difference in the willingness of nurses to remain with an organization. According to Shader et al. nurses belonging to older generations (Veterans or Boomers) are less likely to change jobs than nurses coming into the workforce from younger generations (GenXers or Nexters). In addition, as older nurses retire or opt out of the profession, the new generation of nurses (particularly GenXers) demonstrates greater affinity for leaving jobs and careers if job preferences are not met within the current working environment (Clausing, Kurtz, Prendeville, & Walt, 2003; Sherman, 2006; Shader et al., 2001). This attitude presents a challenge for leadership to openly address issues, identify areas of conflict, and subsequently work with nurses to resolve those conflicts.

According to Bateman and Organ (1983) job satisfaction is a determinant of OCB. Similar to OCB, job satisfaction is multidimensional in nature. Of particular note are the elements of job task characteristics and autonomy, which exhibit a positive correlation with OCB (Bratt et al., 2000; Chu et al., 2005; Todd & Kent, 2006). These factors are also considered key components of work motivation theory by Herzberg (1968) and job content (characteristics) theory by Hackman and Oldham (1980).

**Herzberg’s Two-Factor Theory of Motivation**

Recent research on OCB in nursing by Chu et al. (2005) indicated factors in the work environment that enhance employee motivation contribute to job satisfaction, which is considered an antecedent of OCB. Job satisfaction is also considered a predictor of job retention (Chu et al., 2005; Strachota et al., 2003; Todd & Kent, 2006). One of the key
researchers in the area of work motivational theory is Frederick Herzberg. Herzberg developed the Two-Factor Theory of Motivation, which was based upon extensive interviews with employees on perceptions of positive and negative attributes of the work environment (Syptak, Marsland, & Ulmer, 1999). The two dimensions were described as maintenance (hygiene) or motivating factors in the development of job satisfaction (Herzberg, 1968). According to Herzberg (1968) these dimensions were a reflection of separate needs of individuals within the work setting and contribute to job satisfaction or dissatisfaction. The maintenance (hygiene) dimension represented the physiological or “animal” needs of the individual that encompassed an innate drive for pain avoidance associated with environmental stimuli, as well as learned or conditional drives to fulfill basic biological needs (Herzberg, 1968, p. 30). Herzberg described the second dimension as one that is only associated with human behavior – that which represents an inner desire or drive to succeed. This dimension reflects the psycho-emotional aspect of an individual.

In reference to the work environment, the first set of motivators, hygiene factors, were those considered to be essential only to the extent that their presence precluded dissatisfaction, but did not create satisfaction (Herzberg, 1968). Hygiene factors include such job elements as such as job security, working conditions, salary, status, and relationships with peers, subordinates, and personal contacts (Herzberg, 1968, p. 30). Within the second dimension of motivating or growth-inducing factors, Herzberg identified key elements as recognition, growth, advancement, job content, and achievement (p. 31).
Through segregation of motivators into two dimensions, Herzberg provided leaders with a better approach to understanding what factors could lead to either dissatisfaction or satisfaction, and to subsequently take steps to create a work environment provided maintenance or hygiene factors as a standard, but focused on motivating factors to recruit and retain employees. An important contribution of Herzberg’s theory was that it shed new light on the importance of job enrichment and development, which addresses the needs of organizational members for professional growth, increased skill and education levels, and autonomy. Each of these factors has been identified in the literature review as key elements in improving job satisfaction of nurses (Bratt, Broome, Kelber, & Lostocco, 2000; Chu, Lee, Hsu, & Chen, 2005; Diefendorff et al., 2002; Todd & Kent, 2006).

Within the context of application of Herzberg’s theory on work motivation, research by Bratt, Broome, Kelber, and Lostocco (2000) indicated that elements such as group cohesion, level of job stress, collaborative decision-making between peers and physicians, nursing leadership effectiveness, and professional development had direct influence upon the level of job satisfaction. Of particular interest is that Bratt et al. (2000) identified factors noted by Herzberg as motivators, are also key indicators to the development of job satisfaction. In addition, Bratt et al. noted that group relationships and cohesiveness have a negative correlation to attrition.

**Job Characteristics Model**

The basic premise of the work redesign model proposed by Hackman and Oldham (1980) is that work can be effectively structured to meet the needs of the organization and
the needs of members of that organization (p. 71). Hackman and Oldham posited that if employees are well suited to the job, like the job, and achieve satisfaction through that job, there is very little need for directive leadership on the job. As a result of extensive research, Hackman and Oldham constructed what was termed a work redesign model: the Job Characteristic Model (JCM). This model asserted that work should be comprised of five key elements that served as internal motivators: skill variety, task identity, task significance, autonomy, and feedback (Hackman & Oldham, 1980, p. 83).

Skill variety as described by Hackman and Oldham (1980) addresses the degree to which a position requires the utilization of different skill sets, knowledge, and level of expertise. According to Hackman and Oldham, when an individual is challenged to use different, more demanding skills to accomplish a task, there is an associated elevation in meaningfulness attached to that job. Within the context of nursing, Wieck (2004) emphasized that each generation represents a different set of skills, knowledge, education, and experience. Wieck asserted that a key factor in effective leadership is recognizing this diversity in the development of positions that take into account the individual nurse’s ability-job fit, as well as career aspirations.

Task identity and significance share similar foci, in that Hackman and Oldham (1980) posited that an individual gains satisfaction through identification with work and realization of the impact that work has within a broader context. This, in turn, creates an additive effect to the meaning associated with work. According to Hackman and Oldham, individuals need to identify a beginning and end to specific tasks, but also need to know where in the broader scheme of things their work makes a valid contribution. Santos,
Carroll, Cox, and Teasley (2003) asserted that challenges present to nursing leadership with respect to creating job positions that meet the needs of older, more experienced nurses, such as those in the Veteran or Baby Boomer generations. To these individuals, many of the nursing duties and responsibilities may be considered “old hat.” How to create meaning from a task that may seem mundane to a nurse who has been at the bedside for 30 years may seem to present obstacles difficult to overcome, yet Santos et al. asserted that inviting input from nurses in those generations is a critical first step. Incorporating coaching, teaching, and mentoring roles into job positions may present challenging activities that add meaning and purpose for all nurses, not just those from older generations (Santos et al., 2003; Sherman, 2006; Wieck, 2004).

A fourth characteristic of the JCM by Hackman and Oldham (1980) is that of job autonomy. This refers to the extent that a job allows the organizational member freedom to make decisions, to take responsibility, and to be held accountable for the consequences of such decisions (Hackman & Oldham, 1980, p. 79). In addition, autonomy incorporates the element of discretion, wherein the individual is provided with opportunities to create initiatives, to determine scheduling and performance measures, and to take on leadership roles previously withheld to those positions (Hackman & Oldham, 1980). Individual initiative is a key characteristic of organizational citizenship behavior, which supports the theory of autonomy addressed in the JCM by Hackman and Oldham (Chu, Lee, Hsu, & Chen, 2005; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Todd & Kent, 2006). Within the context of nursing practice, autonomy is an integral component of self-governance and ethical decision-making (Aveyard, 2000; Chu et al., 2005; Dalanis,
Chu et al. (2005) identified a positive correlation between increased levels of job autonomy in nursing practice and job satisfaction and organizational commitment, each of which was considered an antecedent factor in exhibited organizational citizenship behavior of nurses.

As the fifth component of the JCM proposed by Hackman and Oldham (1980), a vital element in job performance is that of providing the employee with direct and clear information on how effectiveness that performance is relative to job expectations by the leader. According to Hackman and Oldham feedback communicates knowledge of work activities that can provide motivation and reinforcement for behavior, or serves as a deterrent to future behavior. Communication on performance expectations is dual-channel, in that employees also have expectations that are derived from perceptions generated from leaders and coworkers, as well as official job descriptions (Hackman & Oldham, 1980; Sherman, 2006). Within the context of nursing, communication forms the basis of practice, whether it is between nurse and patient, nurse and physician, or between nursing peers (Clausing, Kurtz, & Prendeville, 2003; Lancaster, 1999; Sherman, 2006).

Communication is one of the most critical factors of leadership, and there is a demonstrated need for leaders to understand the work values and beliefs of each specific generation in order to communicate and provide feedback in an effective manner that promotes job performance and satisfaction (Clausing et al., 2003; Sherman, 2006). Through increased understanding of factors that influence or motivate generational cohort members (e.g. value placed upon monetary rewards or relationships), leaders can
anticipate, plan, and communicate expectations using an approach conducive to the receiver.

Huber (2000) asserted that these actions involve knowing the audience and how to transfer information and provide meaning to work. This supports the contention of the JCM theory by Hackman and Oldham (1980) that each of the five characteristics can add meaning to each job position within the capabilities of the individual. According to Kupperschmidt (2006) awareness by leaders and followers of intergenerational differences, interests, and abilities creates an environment conducive to establishing positive intra-and inter-group relationships and reducing conflict. Podsakoff, MacKenzie, Paine, and Bachrach (2000) emphasized that characteristics of OCB such as helping behaviors, organizational commitment, and sportsmanship improve interpersonal relationships, enhance the work environment, and create a symbiotic progression towards achievement of individual and organizational goals.

A review of the literature supports the contention that a positive relationship exists between JS and OCB (Bateman & Organ, 1983; Chu, Lee, Hsu, & Chen, 2005; Katz & Kahn, 1978), and that many variables associated with work design directly influence that relationship (Bratt et al., 2000; Chu et al., 2005; Herzberg 1968; Hackman & Oldham, 1980; Todd & Kent, 2006). Of particular note in this review is the growing application to the nursing community over the past five years. Most of the nursing literature draws heavily on the work of Bateman and Organ (1983), Podsakoff, MacKenzie, Paine, and Bachrach (2000), and Smith, Organ, and Near (1983) as pioneers in the field of OCB. Strengths of this association lie in nursing research that explores
OCB from a theoretically solid framework that is well established and accepted by the research community. Weaknesses reside in the dearth of material on OCB that is generated from a nursing community perspective, which is even more evident within the perioperative field. This validates the purpose of this study to begin to fill that gap.

Generational Cohort Differences

Value system differences between generations affect the relationships and interactions between organizational members. Each generational cohort reflects a distinct set of beliefs, values, and behavioral characteristics that govern the actions and perceptions of individuals contained within that set (Dunn-Cane, Gonzalez, & Stewart, 1999, p. 930). A review of recent literature attributed generational divergence in work values to several distinct, yet interrelated areas: attitude or orientation towards the nature of work-life balance; commitment to length of work in one institution and loyalty to the organization, self, or career; and acceptable workplace behavior as a nursing professional (Clausing, Kurtz, Prendeville, & Walt, 2003; Dunn, et al., 1999; Hu et al., 2004; Santos, Carroll, Cox, & Teasley, 2003; Santos & Cox, 2000; Smola & Sutton, 2002).

Generational studies investigated revealed four distinct cohorts and the value systems predominant in each cohort (Clausing, et al., 2003; Dunn-Cane, et al., 1999; Hu, et al., 2004; Santos & Cox, 2000; Weston, 2001; and Wieck, 2004). There was consistency of identification of generational cohorts across nursing studies, although terminology for the oldest generation varied somewhat. The four primary categories of generations identified in the literature, and the period in which they were born included: the Silent or Veterans Generation (1925 to 1945); the Baby Boomers (1946 to 1964); the
Generation Xers or GenXers (1965 to 1975); and the Nexters (1976 to 2000). Nursing literature identification of generational cohorts is congruent with literature reviewed from other disciplines such as management and organizational behavior (Robbins, 2005c; Nelson & Quick, 2006). The following table illustrates cohort values and differences.

Table 1
*Intergenerational work value differences and characteristics.*

<table>
<thead>
<tr>
<th>Generational Cohort</th>
<th>Approximate age at the present time</th>
<th>Timeframe entered the workforce</th>
<th>Predominant work value characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans</td>
<td>Over 65</td>
<td>1950s to early 1960s</td>
<td>Loyal to the organization; conservative; conforms to organizational; works well under directive management</td>
</tr>
<tr>
<td>Boomers</td>
<td>Early 40s to mid-60s</td>
<td>1965 to 1985</td>
<td>Goal oriented; focuses on success, achievement, and self; loyalty to own career; resents authority</td>
</tr>
<tr>
<td>Generation Xers</td>
<td>Late 20s to early 40s</td>
<td>1985 - 2000</td>
<td>Priority on work-life balance; focuses on relationships; team oriented; dislike for rules and authority</td>
</tr>
<tr>
<td>Nexters</td>
<td>Under 30</td>
<td>2000 to now</td>
<td>Self confident; independent, yet likes to work in teams; technologically savvy; loyalty to self; values relationships</td>
</tr>
</tbody>
</table>

Research on generational differences is generated from various perspectives. One dominant perspective is that of relationships between occupational stress, coping mechanisms, and intergenerational conflict between nurses of generational cohort groups (Clausing, Kurtz, & Prendeville, 2003; Hu, Herrick, & Hodkin, 2004; Kupperschmidt, 2006; Santos & Cox, 2000). Another perspective presented in the literature was that of leadership. A key factor in establishing positive intergenerational relationships is self-understanding and reflection by the manager of their own values and beliefs, as well as those of other generations (Cordeniz, 2002; Hu et al., 2004; Kupperschmidt, 2006; Weston, 2001; Wieck, 2004).

Weston (2001) examined challenges that present to managers in coaching and mentoring several generations of nurses, as well as the increased focus on intergenerational teamwork in nursing practice. The importance of teamwork as a successful approach to job design was reflective of the movement in management towards a team-based work environment (Katzenbach & Smith, 2005). A third area of focus in intergenerational differences is that of interpersonal relationships (Clausing et al., 2003; Wieck, 2004). The changing tolerance of younger nurses (Generation Xers and Nexters) for surgeon harassment and the impact on nurse leader-follower relationships and nurse-surgeon interactions and relationships is identified as an area of significant conflict (Wieck, 2004). The majority of nurses are women (Hu, Herrick, & Hodgin, 2004), and this intolerance is reflective of research in other disciplines on sexual harassment and workplace violence (Wilson, 2001).
The extensive effect of aging in the oldest cohorts (Veterans or Silent Generation and the Baby Boomers) garnered attention in the majority of literature reviewed (Clausing, Kurtz, & Prendeville, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Erwin, 1999; Hu, Herrick, & Hodgin, 2004; Kupperschmidt, 2006; Lynn & Redman, 2005; Santos, Carroll, Cox, & Teasley, 2003; Santos & Cox, 2000; Wieck, 2004). Erwin (1999) identified the aging process by geographical location with the highest percentage of aging nurses occurring in the West-South-Central area of the U.S. (p. 1). These are areas are supported by recent data from HRSA (2005) as locations where proportions of the aging population choose to reside and are associated with increased levels of demands for health care services. Associated with aging is the impact related to loss of experience and knowledgebase with the out-migration of nursing personnel.

*Job Stress, Conflict, and Leadership Effectiveness*

Stress within the work environment is related “both to an individuals’ perception of the demands being placed upon them and to their perception of their capability to meet those demands” (McVicar, 2003). According to McVicar (2003) a key factor associated with the level of stress experienced by an individual relates to how wide the discrepancy presents between perceptions of demand and capacity to meet demand (p. 633). Conflict is defined as a process that begins when one party perceives that another party has negatively affected, or is about to negatively effect, something that the first party cares about (Thomas, 1992, p. 653). This process is centered on internal discord that results from differences in ideas, goals, values, or differences between two or more people. (Fisher, 2000; Marquis, 2003).
A review of the literature on characteristics of generational cohorts revealed work value differences between generations that affect relationships and interactions between organizational members (Apostolidis & Polifroni, 2006; Clausing, Kurtz, & Prendeville, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Hu, Herrick, & Hodgin, 2004; Kupperschmidt, 2006; Lynn & Redman, 2005; Santos & Cox, 2000; Smola & Sutton, 2002). Generational cohorts represent intra-group structure (nursing peers) as well as inter-group structure (nurses and physicians or nurses and nursing leaders), so there is a dual source for stress generated from group-associated conflict in the work environment (Apostolidis & Polifroni, 2006; Clausing et al., 2003; Cordeniz, 2002; Wieck, 2004; Wilson, 2001). The presence of intra-group and inter-group conflict increases job stress and can lead to decreased levels of job satisfaction and effectiveness of team and individual performance, increasing the rate of turnover of nursing staff (Cox, 2001; Hendel, Fish, & Galon, 2005; McVicar, 2003). For the purposes of this study, the examination of job stress will be focused on two specific areas: 1) stress directly perceived to be related with intergenerational work value conflict (IWVC); and 2) stress associated with perceptions of effective leadership behaviors in conflict management of IWVC.

*Job Stress and IWVC*

According to Santos and Cox (2000) stress in the workplace is prevalent, inherent, yet complex and not easily quantified. There are many sources of stress, and one source that has come to the forefront in the nursing profession is that of intergenerational work value differences. Changes in workforce demographics have resulted in an aging
population with four generations of nurses working side-by-side in the health care environment (Clausing, Kurtz, & Prendeville, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Santos, Carroll, Cox, & Teasley, 2003; Santos & Cox, 2000; Sherman, 2006). Some of the conflict arises over differences in attitudes towards work demands and responsibilities, work-life balance, and personal-professional relationships (Apostolidis & Polifroni, 2006; Clausing et al., 2003; Cordeniz, 2002; Strachota et al., 2003; Wieck, 2004). Extended work hours; weekday, weekend, and holiday call; commitment and loyalty to the organization; and willingness to sacrifice personal/family time for work obligations were identified as sources of IWVC between older generations (Veterans and Baby Boomers) and younger generations (GenerationXers and Nexters), where older generations voiced disapproval of what they consider a lack of commitment and dedication to the organization and profession by younger nurses (Santos & Cox, 2000; Sherman, 2006; Stuenkel, Cohen, & de la Cuesta, 2005; Wieck, 2004).

An underlying factor in organizational loyalty and commitment is variation in the perceptions of the individual-organization relationship. Historically, older generations of nurses sacrificed time with family or dedicated to self for the needs of the organization. Self-worth and self-fulfillment were often equated to that of the organization (Cordeniz, 2002; Weston, 2006). The younger generations view the organization as a conduit to career progression, but not at the expense of personal or professional relationships (Clausing et al., 2003; Dunn-Cane, Gonzalez, & Stewart, 1999; Santos, Carroll, Cox, & Teasley, 2003; Santos & Cox, 2000; Sherman, 2006; Weston, 2001). This dichotomy presents an area of conflict between generations that increases job stress, when
organizational demands meet with greater acceptance by some generational cohorts than others.

Within the perioperative nursing environment, nurses are assigned to teams. When members of those teams are from different generational cohorts and demonstrate conflicting attitudes towards work demands, the level of job stress escalates (Clausing, Kurtz, & Prendeville, 2003; Dunn-Cane, Gonzalez, & Stewart, 1999). Examples of sources of conflict include variations in caseload schedules that increase the demand for nurses to work outside of normal work hours, thus infringing upon time that could spent with family or friends. As noted in a review of relevant literature, members of the older generations demonstrate more affinity to extend efforts for “the good the organization” versus member of younger generations, who voice greater priority on work balance (Clausing et al., 2003; Sherman, 2006; Stuenkel, Cohen, & de la Cuesta, 2005; Wieck, 2004). Questions arise as to who stays to finish cases and who goes home. These findings support the hypothesis of a positive correlation between increased levels of IWVC and job stress. In addition, a review of the literature also supports the hypothesis of a negative correlation between perceptions of increased job stress and reported job satisfaction (Apostolidis & Polifroni, 2006; Avallone, Gibbon, & Avallone, 1998; Clausing et al., 2003; Cordeniz, 2002; Sherman, 2006; Strachota et al., 2003; Staten et al., 2005; Stuenkel et al., 2005; Wieck, 2004).

Job stress, IWVC, and Perceptions of Leadership Effectiveness

A review of nursing literature over the past six years that examined stress in the nursing profession identified leadership behaviors as one of the key contributors. Specific
leadership behaviors that influenced stress included approach to management, locus of control, group cohesion, autonomy, and supervisory support for individual goals and performance (Bratt, et al., 2000; Demerouti et al., 2000; McNeese-Smith, 2000; McVicar, 2003; Shader et al., 2001; Stourdeur, 2001). Murray (2002) asserted that solutions to addressing the current and predicted nursing shortage include improvements in leadership behaviors associated with communication, participation of nurses in decision-making processes, and support for clinical integration of licensed and unlicensed personnel to address the increasing acuity and patient load that professional nurses are required to handle (p. 83). The following table depicts the relationship between conflict issues, leader behavior, and perceptions of effectiveness in managing IWVC.
<table>
<thead>
<tr>
<th>Source of IWVC in the work environment</th>
<th>Leadership behavior in response to source of conflict</th>
<th>Effect on Perceptions of Leader Support, Awareness, and Understanding IWVC</th>
<th>Effect on Perceptions of Leadership Effectiveness in IWVC</th>
<th>Correlation with Level of Job Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in decision-making processes and practice issues, differences exist in cohorts.</td>
<td>Demonstrates respect for nurses’ ability to participate in decision-making processes through empowerment and support for autonomy in practice.</td>
<td>Promotes relationships between leaders and nurses that recognizes individual needs to have a voice in decisions that affect practice and the work environment.</td>
<td>Fosters confidence - leaders understand and value nurses’ perspectives; recognizes variations in desire by different cohorts to actively engage in decisions.</td>
<td>Research shows that active participation by organizational members in decisions that affect their work decreases job stress and promotes job satisfaction.</td>
</tr>
<tr>
<td>Commitment to the organization overrides personal life.</td>
<td>Actively promotes work-life balance through work and call schedule assignments</td>
<td>Positive – indicates leader actions actively support value placed on work-life balance.</td>
<td>Positive – shows leaders recognize and respect cohort differences.</td>
<td>Decreases job stress; work-life balance promotes concept of nurse as whole being.</td>
</tr>
<tr>
<td>Lack of voiced understanding of generational characteristics unique to each cohort.</td>
<td>Communicates awareness of each nurse’s generational characteristics, experience, skills, knowledge (actual and potential).</td>
<td>Serves as a positive reinforcer - lays a groundwork for current and future open discussions; indicates leader values nurses unique perspectives.</td>
<td>Positive correlation to effective conflict management; decisions generated from understanding of issues and how each nurse may react.</td>
<td>Research indicates increasing the knowledgebase of how generations each contribute to the workplace improves relationships, decreases stress.</td>
</tr>
<tr>
<td>Surgical case assignments do not accurately reflect team needs/clinical abilities.</td>
<td>Involves team in work assignment decisions; discusses aptitudes (i.e. affinity for technology) and learning needs.</td>
<td>Creates a platform of trust in the ability of team members to offer valued input; opens the doors to collaborative decision-making.</td>
<td>Opens channels of communication with respect to differences in attitudes/abilities of team members; proactive step.</td>
<td>Research supports the theory that members involved in decisions accept results better, even if not in full agreement.</td>
</tr>
<tr>
<td>Efforts to address current/future needs of the different generational cohorts are not evident on a regular basis.</td>
<td>Offers opportunities for continuous practice improvement, education, and discussions about generational differences and abilities.</td>
<td>Bringing issues into open discussion helps to identify problems, develop effective strategies to proactively solve problems, and allows nurses to learn new skills.</td>
<td>Demonstrates that management of generational differences is not just a management issue; willingness of leaders to openly discuss IWVC fosters open communication.</td>
<td>Communication between leaders and nurses about present and future challenges creates a working environment supportive of diversity, decreasing job stress.</td>
</tr>
</tbody>
</table>
A recurring theme in a review of historical and current literature is that of leadership (supervisory) influence in the level of OCB of organizational members. Early research by Katz and Kahn (1978) clearly identified a positive correlation between job satisfaction, displays of extra-role behavior, and positive perceptions of supervisory relationships with employees. As noted by Moorman, Blakely, and Niehoff (1998) the development of trust between organizational members and managers influences job satisfaction, perceptions of fairness, and extension of organization support through supervisory actions. Bateman and Organ (1983) posit that the most direct influence on job satisfaction is leader influence by the most immediate supervisor. For the purposes of this study, the investigation will focus on the relationship between perceptions of leadership behaviors that are associated with IWCV. These behaviors represent actions that demonstrate understanding, recognition, and support of generational cohort differences, particularly those related to work values.

Leadership behaviors that demonstrate support, understanding, and recognition of the organizational member as an individual, separate from an organizational context and job role, were noted to be important factors in job satisfaction (Ackfeldt & Coote, 2003; Chu, Lee, Hsu, & Chen, 2005; Moorman, Blakely, & Niehoff, 1998). These behaviors include respect for the ability of nurses to contribute to decision-making processes (empowerment and participation), demonstrate practice autonomy, and work as a member of a team were identified as key characteristics of effective leader-follower relationships (Ackfeldt & Coote, 2003; Anthony et al., 2005; Bratt, et al., 2000; Chu et al., 2005; Swearingen, 2004; Wieck, 2004). Within the context of generational cohort expectations,
there is consensus across generations that nurses value leaders who communicate knowledge of individual abilities (educational and experiential) and aspirations, take into consideration work level expertise when making assignments, and involve nurses in the decision-making processes, and visibility in the workplace (Clausing et al., 2003; Santos, Carroll, Cox, & Teasley, 2003; Santos & Cox, 2000; Sherman, 2006; Stuenkel, Cohen, & de la Cuesta, 2005; Weston, 2001; Wieck, 2004). This review supports the hypothesis of a positive correlation between perceptions of leader understanding through demonstrated behavior (e.g. verbalization, work assignments, empowerment) of generational differences and job satisfaction.

Common Research Methods

This section identifies the most commonly used research methods identified in the review of current and historical literature. As noted previously, most of the research on OCB is not in the nursing field; therefore, the analysis takes into account research from other disciplines, predominantly the social and behavioral sciences. A cursory review indicated that the dominant research design is quantitative in nature up to the late 1990s. From that point to the present, there appears to be a move towards inclusion of qualitative and mixed method design content. This may, in fact, represent a general movement towards acceptance of qualitative or mixed methodology as an accepted research design to study human behavior and relationships.

An examination of target populations of literature reviewed on OCB revealed that the majority of early research used both supervisor and employee responses with respect to OCB, but primarily employee response for generational diversity studies. Utilization of
both supervisory and staff responses in OCB research relates to accuracy of perceptions
by employees of OCB behavioral conditions versus how supervisors perceived those
same behaviors (Bateman & Organ, 1983; Chen, Hui, & Sego, 1998; Erhart & Naumann,
2004; LePine, Erez, & Johnson, 2002; Williams, Pitre, & Zainuba, 2002; Todd & Kent,
2006). More recent studies revealed a trend towards a non-mixed population, citing
perception as an influential variable in either case. A synopsis of reviewed literature is
presented in aggregate in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher(s)</th>
<th>Research design/methodology</th>
<th>Employee (E), Supervisor (S), and/or Peer (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Todd &amp; Kent</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2005</td>
<td>Chiu &amp; Chen</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>2005</td>
<td>Van Emmerik, Jawahr, &amp; Stone</td>
<td>Quantitative; correlational survey</td>
<td>E</td>
</tr>
<tr>
<td>2004</td>
<td>Chien</td>
<td>Quantitative; correlational study</td>
<td>S</td>
</tr>
<tr>
<td>2004</td>
<td>Ehrhart &amp; Naumann</td>
<td>Meta-analysis; explanatory model framework</td>
<td>n/a</td>
</tr>
<tr>
<td>2003</td>
<td>Cropanzano, Rupp, &amp; Byrne</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>2003</td>
<td>Tepper and Taylor</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>2002</td>
<td>LePine, Erez, &amp; Johnson</td>
<td>Meta-analysis; explanatory model framework</td>
<td>n/a</td>
</tr>
<tr>
<td>2002</td>
<td>Williams, Pitre, &amp; Zanuba</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2001</td>
<td>Diefendorff, Brown, Kamin, &amp; Lord</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>2000</td>
<td>Podsakoff, MacKenzie, Paine, &amp; Bachrach</td>
<td>Meta-analysis; exploratory model</td>
<td>n/a</td>
</tr>
<tr>
<td>1998</td>
<td>Chen, Hui, &amp; Sego</td>
<td>Quantitative; correlational</td>
<td>E and S</td>
</tr>
</tbody>
</table>
### Nursing research on OCB:

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher(s)</th>
<th>Research design/methodology</th>
<th>Employee (E), Supervisor (S), and/or Peer (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>Moorman, Blakely, &amp; Niehoff</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>1996</td>
<td>Brief and Motowidlo</td>
<td>Meta-analysis; explanatory</td>
<td>n/a</td>
</tr>
<tr>
<td>1995</td>
<td>Organ and Ryan</td>
<td>Quantitative meta-analysis</td>
<td>n/a</td>
</tr>
<tr>
<td>1994</td>
<td>Konovsky and Pugh</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>1994</td>
<td>Van Dyne, Graham, &amp; Diensch</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
<tr>
<td>1993</td>
<td>MacKenzie, Podsakoff, &amp; Fetter</td>
<td>Quantitative; correlational study</td>
<td>S</td>
</tr>
<tr>
<td>1990</td>
<td>Farh, Podsakoff, &amp; Organ</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>1993</td>
<td>Bateman and Organ</td>
<td>Quantitative; correlational study; longitudinal</td>
<td>E and S</td>
</tr>
<tr>
<td>1983</td>
<td>Smith, Organ, &amp; Near</td>
<td>Quantitative; correlational study</td>
<td>E and S</td>
</tr>
</tbody>
</table>

**Generational Diversity**

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher(s)</th>
<th>Research design/methodology</th>
<th>Employee (E), Supervisor (S), and/or Peer (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Apostolidis and Polifroni</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2005</td>
<td>Chu et al.</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2005</td>
<td>Lynn and Redman</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2005</td>
<td>Stuenkel et al.</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
<tr>
<td>2004</td>
<td>Hu et al.</td>
<td>Quantitative; correlational study</td>
<td>E</td>
</tr>
</tbody>
</table>
Summary

Findings from an extensive literature review on OCB and associated antecedents, such as job stress, work design, leadership effectiveness, and generational diversity, illustrated the multifaceted, dynamic nature of the concept under examination. Representing behavioral actions that are considered “extra-role,” or outside of formally designated activities prescribed by a job description, OCB serves as an integral component contributing to the effectiveness of an organization. Organizational groups, such as perioperative registered nurses, function as intra-organizational communities of interest that serve as a framework for interaction and interrelationships within and between that community, the organization, and the broader community within which an organization exists. Demonstrations of OCB promote a sense of belonging, commitment to the organization, engagement in political actions internal and external to the organization, and concern for the welfare of others that supercede that of the individual.

There are numerous factors that contribute the decision by an organizational member (nurse) to remain with an organization and/or a specific profession. Within the

<table>
<thead>
<tr>
<th>Year</th>
<th>Author(s) and Title</th>
<th>Methodology</th>
<th>Classification</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Swearingen</td>
<td>Quantitative; correlational study</td>
<td>E</td>
<td>2003</td>
</tr>
<tr>
<td>2003</td>
<td>Ackfeldt and Coote</td>
<td>Quantitative; correlational study</td>
<td>E</td>
<td>2003</td>
</tr>
<tr>
<td>2003</td>
<td>Santos et al.</td>
<td>Quantitative; correlational study</td>
<td>E</td>
<td>2002</td>
</tr>
<tr>
<td>2002</td>
<td>Cordeniz</td>
<td>Meta-analysis; exploratory</td>
<td>n/a</td>
<td>2000</td>
</tr>
<tr>
<td>2000</td>
<td>Demerouti et al.</td>
<td>Quantitative; correlational study</td>
<td>E</td>
<td>2000</td>
</tr>
<tr>
<td>1999</td>
<td>Dunn-Cane, et al.</td>
<td>Qualitative; case study; interviews</td>
<td>E</td>
<td>1999</td>
</tr>
</tbody>
</table>
context of the nursing profession, job stress is a leading indicator and an identified antecedent in job satisfaction and development of OCB. Variables that influence job stress within the work community include perceptions of leader support and effectiveness in conflict management.

Of particular interest in this research study is conflict generated by differences in work values exhibited by various generational cohorts. A review of associated literature revealed that the presence of IWVC is not a new concept. However, the presence of four generations working side-by-side in the health care arena, specifically nursing, poses increased potential for dysfunctional conflict that leads to increased job stress and job dissatisfaction. Research on the correlation between OCB, job satisfaction, job stress, and IWVC is limited in all disciplines; and in the nursing profession, it is almost negligible. However, as noted in the literature review, there is a positive correlation between job satisfaction and exhibited OCB. In addition, supportive leadership behaviors and effective conflict management are positively associated with increased job satisfaction. Studies on the establishment of a sense of community within an organization indicate that job satisfaction, feelings of belongingness, and value as an individual contribute to overall job satisfaction. Literature reviewed for this study demonstrated that actions reflective of OCB are also identified as key elements in the development of a sense of community and source of social capital.

The hypotheses examined in this exploratory research study propose that there is a positive correlation between perceptions of effective leadership behavior (support and conflict management) associated with IWVC and job stress. In addition, dysfunctional
job stress and job satisfaction have been shown to have a negative correlation. Research reviewed also shows that job satisfaction and expressed and/or exhibited OCB have a positive relationship. This study explored in more depth the interactions of the identified variables and how those relations may affect a nurse’s decision to remain in the nursing community and stay committed to the profession, thus serving as a vital and available resource of organizational and social capital.

The following chapter explicates the research methodology that was used in this study to investigate the proposed relationship between OCB as the dependent variable, JS as the independent variable, and perceptions of leadership behavior and IWVC as intervening variables which influence job stress and JS. Using an exploratory online survey questionnaire, questions examined the relationships between perceptions of leadership effectiveness in managing stress and IWVC, job satisfaction, and expressions or exhibitions of OCB. OCB is not limited to intra-organizational activities, but extends into the external environment in which an organization exists, contributes, and provides a rich resource for social capital within the community itself.
A current national nursing shortage of over 126,000 vacant registered nursing positions threatens the quality of patient care in the United States (Murray, 2002, p. 81.). If predictions materialize, over half of the current nursing workforce of 2.6 million will retire by 2016 (Hart, 2006). Answers to why dedicated nurses would choose to either leave the nursing profession or to choose an alternate career may be found by examining underlying factors that may contribute to that decision. Contributing factors to the existing and predicted nursing shortage include an aging nursing workforce, decreased enrollment in nursing schools with an associated aging of nursing educators, working conditions, gender/income issues, increased patient acuity levels with fewer nurses providing care, decreased job satisfaction, other career options, and stress-induced burnout (Kalliath & Morris, 2002; Lynn & Redman, 2005; Murray, 2002).

For the purposes of this study, an examination of factors contributing to the nursing shortage included those associated with an aging multigenerational workforce, job stress (sources and leadership behaviors), and behaviors that reflect job satisfaction. These areas create the potential for conflict and stress, which in turn influence job satisfaction, and subsequently, expressed or exhibited OCB of nurses. Associated with the presence of intergenerational conflict are nurses' perceptions of leadership recognition, support of generational cohort differences, and perceptions of how effective leadership strategies are in the management of associated work-values conflict. These actions are described in this study as leadership behaviors.
This study examined the relationship between OCB, leader behaviors, and IWVC. The dependent variable was OCB of perioperative nurses. It was influenced by the independent variable, job satisfaction (JS). Three intervening variables were intergenerational work values conflict, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC and leader understanding and support), and perceived stress.

Research Design

A self-report survey questionnaire was administered to a sample of registered nurses to assess the relationship between generational cohort work value differences, leader effectiveness in conflict management, and OCB. The cursory review presented in chapter 2 indicated that the dominant research design is quantitative in nature up to the late 1990s. From that point to the present, a move towards inclusion of qualitative and mixed method design content is apparent. This trend represents a general movement towards acceptance of qualitative or mixed methodology as an accepted research design to study human behavior and relationships (Creswell & Clark, 2007). Selection of a qualitative or mixed method design was considered inappropriate for this study for three reasons: a) local population of perioperative nurses would have presented potential sampling bias due to political environment of the community at the present time; b) costs associated with travel to outlying areas to access nurses from other locales would have been prohibitive; and c) time constraints.

For the purpose of this research, a quantitative exploratory study derived from a self-report survey questionnaire was selected. The use of surveys is an accepted and
frequently used method of research in social sciences, with a history that dates back to ancient Egypt (Babbie, 2007). According to McNabb (2002) selection of an exploratory study is appropriate for small sample design that is used for “gaining insight and ideas about research problems and variables and issues associated with those problems” (p. 85). The exploratory nature of this study provides an extension of existing theory on variable relationships between perceptions of leadership effectiveness, job satisfaction, and demonstration of OCB. In addition, a review of emerging research on OCB in nursing reveals a predominance of survey-based quantitative correlational methods.

Based upon survey data, correlational and standard regression analysis were used to examine relationships among these variables. The dependent variable in this study was OCB of perioperative nurses. This variable is influenced by the independent variable identified as job satisfaction (JS). Intervening (controlling) variables included IWVC, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC, leader understanding, and support), and perceived job stress.

Research Questions and Hypotheses

The concept explored through this research study is that divergence of intergenerational work values creates a potential for conflict and stress, which influences job satisfaction (JS). As noted in the literature review, research indicates that JS has been identified as a precursor to expressed or exhibited OCB in various work settings, including the health care environment (Bateman & Organ, 1983; Bratt et al., 2000; Chu et al., 2005; Todd & Kent, 2006). Associated with conflict in the work environment are nurses' perceptions of leadership recognition and support of generational cohort
differences, as well as perceptions of how effective leadership strategies are in the management of associated work values conflict. Actions that reflect involvement of leaders with followers with respect to IWVC are noted as leadership behavior. Research questions and hypotheses that reflect the relationship between variables include:

1. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the expressed or exhibited OCB of perioperative registered nurses?

   \[ H_0 : \] Perceptions of effective leadership behaviors associated with IWVC have no correlation with expressed and/or exhibited OCB of perioperative registered nurses.

   \[ H_A : \] Perceptions of effective leadership behaviors associated with IWVC are positively correlated with demonstrations of OCB of perioperative registered nurses.

The hypothesized relationship is that if nurses perceive leaders effectively addressing and resolving intergenerational issues of conflict, expressions or demonstrations of OCB will be implemented in the perioperative environment. Behaviors representative of effective leadership include communication between leaders and nurses regarding awareness and recognition of cohort differences; open discussions to identify areas in which nurses feel their interests or needs are not being met; and collaborative problem-solving that incorporates participant input, active engagement in identification of alternative solutions, and acceptance of responsibility for consequences of a selected course of action (Hendel, Fish, & Galon, 2005). Other studies report that nurses express a distinct preference to be recognized and supported by leaders for their individuality (separate from a referenced work group or generational cohort) and for active participation in
collaborative problem solving and decision-making processes (Chu, et al., 2005; Cordeniz, 2002; Hendel et al., 2005; Wieck, 2004).

A $t$-test was used to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient ($R^2$) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of the magnitude and meaningfulness of relationships between variables (Field, 2005). A standard regression analysis using a one-tailed test was used as an appropriate measure to identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

2. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by perioperative registered nurses?

$H_o$: There is no correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS of perioperative registered nurses.

$H_A$: Perceptions of effective leadership behaviors in the management of IWVC are positively correlated with the level of reported JS of perioperative registered nurses.

The hypothesized relationship is a positive correlation between nurses’ perceptions of effective leadership management of IWVC and level of reported JS. Research supports this contention. Solutions to the current and predicted nursing shortage rests with nursing leaders, who must actively involve nurses in problem solving and decision-making.
processes to promote conflict resolution that is acceptable to parties involved in the conflict and to promote job satisfaction (Hendel, Fish, & Galon, 2005; Murray, 2002; Wieck, 2004). Moorman, Blakely, and Niehoff (1998) emphasized that the development of trust between organizational members and managers influences job satisfaction, perceptions of fairness, and extension of organization support through supervisory actions. Job satisfaction is considered an antecedent of OCB and a reflection of effective leadership (Bateman and Organ, 1983; Moorman, Blakely, & Niehoff, 1998; Podsakoff, MacKenzie, Paine, & Bachrach 2000).

A $t$-test was used to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient ($R^2$) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of the magnitude and meaningfulness of relationships between variables (Field, 2005). A standard regression analysis using a one-tailed test was used as an appropriate measure to identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

3. Is there a correlation between IWVC and levels of perceived stress by perioperative registered nurses?

$H_o$: IWVC has no correlation with levels of perceived stress reported by perioperative registered nurses.

$H_A$: IWVC is positively correlated with levels of perceived stress reported by perioperative registered nurses.
The hypothesized relationship is a positive correlation between IWVC and levels of stress reported by nurses. A review of the literature on IWVC, which represents conflict within group relationships, supports it as a stressor in the workplace (Cox, 2001; Hendel, Fish, & Galon, 2005; McVicar, 2003). Generational cohorts represent intra-group structure (nursing peers) as well as inter-group structure (nurses and physicians or nurses and nursing leaders), so there is a dual source for stress generated from group-associated conflict in the work environment (Apostolidis & Polifroni, 2006; Clausing et al., 2003; Cordeniz, 2002; Wieck, 2004; Wilson, 2001).

A $t$-test was used to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient ($R^2$) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of the magnitude and meaningfulness of relationships between variables (Field, 2005). A standard regression analysis using a one-tailed test was used as an appropriate measure to identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

4. Is there a correlation between perceptions of effective leadership behaviors associated with IWVC and the level of perceived stress by perioperative registered nurses?


\( H_o \): Perceptions of effective leadership behaviors associated with IWVC have no correlation with levels of perceived stress by nurses working in the perioperative environment.

\( H_A \): Perceptions of effective leadership behaviors associated with IWVC are negatively correlated with levels of perceived stress by perioperative registered nurses.

The hypothesized relationship is that a negative correlation exists between effective management of IWVC by leaders and the level of perceived stress by nurses. As noted in a review of nursing literature over the past six years that examined stress in the nursing profession, effective leadership is one of the key contributors to reducing stress in the workplace. Specific leadership behaviors that reduced stress included participative and/or collaborative approach to management, sharing locus of control, promoting group cohesion, encouraging autonomy in practice, and providing supervisory recognition and support for individual goals and performance (Bratt, et al., 2000; Demerouti et al., 2000; McNeese-Smith, 2000; McVicar, 2003; Shader et al., 2001; Stourdeur, 2001; Wieck, 2005).

A \( t \)-test was employed to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient (\( R^2 \)) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of the magnitude and meaningfulness of relationships between variables (Field, 2005). A standard regression analysis using a one-tailed test was used as an appropriate measure to
identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

5. Is there a correlation between levels of perceived stress associated with IWVC and the level of reported JS by perioperative registered nurses?

- $H_o$: Levels of perceived stress associated with IWVC have no correlation with the level of reported JS by perioperative registered nurses.

- $H_A$: Levels of perceived stress associated with IWVC are negatively correlated with the level of reported JS by perioperative registered nurses.

The hypothesized relationship is that a negative correlation exists between perceptions of IWVC-generated stress and job satisfaction reported by nurses in the perioperative environment. There is intergenerational conflict associated with differences in attitudes towards work demands and responsibilities, work-life balance, and personal-professional relationships (Apostolidis & Polifroni, 2006; Clausing et al., 2003; Cordeniz, 2002; McVicar, 2003; Strachota et al., 2003; Wieck, 2004). This conflict presents just one more variable that escalates the level of dysfunctional job stress, which does not promote job satisfaction in the work environment (Clausing et al., 2003; Dunn, et al., 1999; Kalliath & Morris, 2002; Swaringen, 2004).

A $t$-test was used to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient ($R^2$) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of the magnitude and meaningfulness of relationships between variables (Field, 2005). A
standard regression analysis using a one-tailed test was used as an appropriate measure to identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

6. Is there a correlation between JS and expressed or exhibited OCB by perioperative registered nurses?

\[ H_o : \] There is no correlation between JS and expressed or exhibited OCB by perioperative registered nurses.

\[ H_A : \] There is a positive correlation with JS and levels of expressed and/or exhibited OCB by perioperative registered nurses.

The hypothesized relationship is that a positive correlation exists between reported levels of job satisfaction and expressed or displayed OCB by perioperative registered nurses.

Early research by Bateman and Organ (1983) noted that job satisfaction is a determinant of OCB. Dimensions of work design that have been found to promote job satisfaction include job task characteristics and autonomy, which also exhibit a positive correlation with OCB (Bratt et al., 2000; Chu et al., 2005; Todd & Kent, 2006). These factors are also considered key components of work motivation theory by Herzberg (1968) and job content (characteristics) theory by Hackman and Oldham (1980) and are considered key elements that can promote job satisfaction.

A \( t \)-test was used to determine the existence of sample variance(s), as the standard deviation of the population was unknown (Knoke, Bohrnstedt, & Mee, 2002). Pearson product-moment correlation coefficient (\( R^2 \)) was used as an appropriate measure to evaluate the strength and relationship between variables examined with this question (McNabb, 2002). Eta squared was used to examine size effect, which is an indication of
the magnitude and meaningfulness of relationships between variables (Field, 2005). A standard regression analysis using a one-tailed test was used as an appropriate measure to identify relationships between variables addressed within this question and to determine the level of significance in those relationships (Knoke et al., 2002; McNabb, 2002).

Population and Sample

The population under consideration was comprised of perioperative registered nurses, who are members of the professional association, the Association of periOperative Registered Nurses (AORN). Currently, there are over 41,000 perioperative registered nurse members of the AORN professional organization belonging to 350 chapters (AORN, 2008). The association operates under the practice standards of the American Nurses Association (ANA) and provides additional interpretative statements for members that are applicable to the perioperative surgical setting (AORN, 2005). Members of the AORN represent multiple surgical health care delivery sites such as ambulatory surgery centers, outpatient and inpatient hospitals, and surgeon’s offices.

The sample consisted of selected chapter officers, who are elected by members of each chapter as representatives to the national chapter. Much like the House of Representatives in the United States Congress, through a formal election process under policy guidelines of AORN, these members are voted upon by perioperative registered nurse peers to represent their interests at local, state, and national levels. In addition, chapter officers were invited to share access to the survey link with other interested AORN members, many of whom had served or were in the process of being elected to serve in the officer capacity. At the time of the survey administration, many chapters
were undergoing a change of officers. Therefore, additional members were provided access to the survey by chapter presidents during this time of transition. This was the method suggested by AORN to reach an identified sample population representative of the population of perioperative registered nurses. Contact was made through AORN research channels due to confidentiality requirements as set forth under policies by that professional organization.

Due to restrictions placed by AORN on accessibility to chapter contacts, consideration was made to insure an adequate sample size for the study. Using the formula proposed by Dillman (2007) to approximate an adequate size for a sample population, the following calculations were made:

\[
N_s = \frac{(N_p)(p)(1-p)}{(N_p-1)(B/C)^2 + (p)(1-p)}
\]

Where:

- \( N_s \) = completed sample size needed for desired level of precision
- \( N_p \) = size of the population
- \( P \) = proportion of population expected to choose one of two response categories
- \( B \) = acceptable amount of sampling error, where .05 = ± 5% of the true population value
- \( C \) = \( Z \) statistic associated with the confidence level; 1.96 corresponds to 95% confidence level

Applying the above formula to the proposed sample population:

\[
N_s = \frac{(350)(.5)(.5)}{(350-1)(.05/1.96)^2 + (.5)(1-.5)}
\]

\[
N_s = 183
\]

The total number of chapters identified in the allowed geographical region was 109. Taking this into consideration, to yield the above estimate, at least two officers
members) per chapter needed to be included. Access to all officers of each chapter in the designated states was permissible under AORN guidelines and was attempted, including the invitation to any other interested AORN member. This approach provided a sample population of approximately 695. As noted by Knoke, Bohrnstedt, and Mee (2002) by using a sample population that is 30 or larger, the sampling distribution of means more closely approximates a normally distribution population. The estimated sample population for the proposed study met both the criteria set forth by Dillman (2007) and Knoke et al. (2002).

A key assumption in this study was that data from chapter officers and/or members, accessed through AORN channels was readily available, accessible, and representative of the population of perioperative registered nurses.

Instrumentation and Materials

Data for research measurements was obtained from an online self-report survey questionnaire (Appendix A). This instrument included questions that examined OCB characteristics, generational work values, autonomy, stress in the work environment, and leadership characteristics that demonstrate understanding and support. The OCB questions addressed key components of OCB such as helping behavior (altruism), organizational loyalty (commitment), sportsmanship (organizational compliance), individual initiative (self-development), and civic virtue (LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Questions contained in the OCB section were derived from the instrument initially developed by MacKenzie, Podsakoff, and Fetter (1993), which was based on the early work by Dennis...
Organ. A review of the literature on OCB revealed that the model as presented by
MacKenzie et al. (1993) is widely accepted and utilized, as it is derived from the seminal
work of Organ. As noted by MacKenzie et al. reliability in each of the studies conducted
for the research model produced a reliability factor for Cronbach’s alpha greater than .70
(p. 74). In addition, utilizing various confirmatory analyses, results from the model
reported the following: Bentler (1990) comparative fit index (CFI) of .92; goodness-of-fit
(GFI) by Tucker and Lewis (1973) of .90; the Jöreskog and Sörbom (1989) GFI of .90;
and, a chi square statistic of 234.9 with 93 degrees of freedom (MacKenzie et al., 1993, p.
73). Findings for the model also demonstrated an acceptable level of discriminant validity
with intercorrelations for OCB (p < .05) significantly less than 1.00 (MacKenzie et al.,
1993, p. 73). The model also produced an R² that ranged from .44 to 65% (MacKenzie et
al., 1993, p. 75).

The section on OCB was comprised of 21 questions that measured OCB activities
considered extra-role, or outside of the parameters of the nurse’s job description. Scaling
was based upon a 5-point Likert scale with a range of 1 (no opinion) to 5 (strongly agree).
High scores reflect higher levels of expressed and/or exhibited OCB within each category
and as an overall measurement of OCB. Utilization of Likert scales in assessment of
OCB is well accepted and documented in research on OCB (Ackfeldt & Coote, 2005;
Bateman & Organ, 1983; Chu, Hsu, & Chen, 2005; Cropanzo, Rupp, & Byrne, 2003;
Farh, Podsakoff, & Organ, 1990; Organ & Ryan, 1995; Moorman, Blakely, & Niehoff,
1998).
The leadership, autonomy, and work environment components using subscales from the WES survey tool were comprised of pertinent questions selected within the context of employee perceptions of autonomy, innovation and change, stress factors in the work environment, and leadership behaviors that involve supportive interventions and approach to conflict management (Avallone, Gibbon, & Avallone, 1998; Staten, Mangalindan, Saylor, & Stuenkel, 2003; Stordeur, D’Hoore, & Vandenberghe, 2001; Stuenkel, Cohen, & de la Cuesta, 2005). Moos (1994) indicated that each of the 10 subscales contained in the WES survey instrument reflects components of the work environment that are distinct, yet interrelated to other aspects of work, and add meaning to work. However, Moos also indicated that each of the subscales contributes to understanding of employee perceptions of the work environment separately and in aggregate (p. 26).

Utilization of the WES survey instrument in health care settings is well documented with accepted standards of validity and reliability (Avallone, Gibbon, & Avallone, 1998; Hayhurst, Saylor, & Stuenkel, 2005; Moos, 1990; Staten, Mangalindan, Saylor, & Steunkel, 2003; Stordeur, D’Hoore, & Vandenberghe, 2001; Stuenkel, Cohen, & de la Cuesta, 2005). The survey instrument and evaluation methods handbook was obtained from the publisher with proper citation referenced within the survey instrument. Contact was made with the publisher regarding the use of a multichotomous (5-point) scale versus the dichotomous scale format presented in the handbook, as no scoring key was available. The researcher was informed that only a dichotomous scale was available and that the researcher could develop scores based upon the researcher’s construct.
Therefore, using information from multiple statistical references (Dillman, 2007; Knoke, Bohrnstedt, & Mee, 2002; McNabb, 2002; Pallant, 2007) and research expert input, analyses were conducted on each subscale to determine reliability under a multichotomous construct. Use of Likert scales versus dichotomous with the WES instrument has been noted with indication that analyses for reliability need to be implemented (Moos, 1994).

Other survey instruments considered included the Multi-Factor Leadership Questionnaire and the Revised Nursing Work Index (NWI-R). The MLQ has an established history of reliability and validity (Bass, 1999; Bass et al., 2003; Judge & Piccolo, 2004), but presented a singular focus, greater complexity, and length for this study. The NWI-R has been used in several nurse practice settings, but has demonstrated lack of generalizability (Li, et al. 2007).

The generational work values were reflected by responses to questions contained in a designated generational diversity awareness category, as well as through identification of generational characteristics from the demographic sections. Characteristics exhibited by different generational cohorts were addressed in questions contained in the WES components concerning attitudes toward power and authority, prioritization of career, innovation [technology], relationships, and organizational structure (Apostolidis & Polifroni, 2006; Clausing, Kurtz, Prendeville, & Walt, 2003; Kupperschmidt, 2006).

Key considerations in preparation of the aggregated survey instrument included appropriate identification of questions and coding of responses within each separate
survey instrument that reflected the research problem and purpose for this study.

Cronbach’s alpha was used as a measure of internal reliability for this aggregated survey with a base index of 0.70 or higher as the targeted measurement (Knoke, Bohrnstedt, & Mee, 2002). This statistic also served as a measurement of internal reliability in the original model by MacKenzie et al. (1993).

Variables

The dependent variable was that of organizational citizenship behavior (OCB) of perioperative nurses. It was hypothesized that this variable is influenced by the independent variable identified as job satisfaction (JS). Evidence in supporting literature showed that job satisfaction is considered an antecedent to the level of OCB demonstrated by organizational members (Ackfeldt & Coote, 2005; Bateman & Organ, 1983; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Three intervening (controlling) variables included in the study were intergenerational work values conflict, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC and leader understanding/support), and perceived stress. As demonstrated by the literature review, these variables have been shown to influence job satisfaction (Chu, Hsu, & Chen, 2005; Clausing, Kurtz, Prendeville, & Walt, 2003; Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Ehrhart, M. G., & Naumann, 2004).

Methodology Appropriateness

Data Collection

The survey instrument was an online self-report questionnaire comprised of questions tailored to address various components of the research questions. This was
administered to a sample population comprised of selected AORN chapters from states located in the west, southwest, and southern regions of the United States. Access to AORN chapters was determined by AORN policy and nonnegotiable.

A pretest was used to identify problems in questionnaire construction (technical or interpretative) and logistics of accessing the Internet survey tool and associated processes. Although standardized survey questions were aggregated to construct the survey instrument, the researcher recognizes potential for effects on reliability and validity associated with ambiguity, placement of questions, and instruction clarity (Babbie, 2007; Fowler, 2002).

The pretest was distributed to a random selection of chapter members, who were representative of the sample population. A total of 24 contacts were made utilizing the AORN research access coordinator. There were 12 responses, of which 3 were invalid, yielding a response rate of 37.5%. Results from the pretest were not included in the final study results, and the pretest respondent pool was excluded in the final survey population. The pretest was administered six weeks before the target date for the final survey, which allowed time to make corrections deemed necessary from the findings. After consultation with research resources and experts, changes were made in the question coding process to address negative wording. This step was taken to insure that question content reflected the intent of the research question (Pallant, 2007). Participants’ identity in both the pretest and final survey were held confidential through the mechanisms provided through the Internet survey protocol.
Data collection involved a process comprised of a pretest, revision of survey instrument, as needed, administration of the survey via the Internet tool, processing and analysis. Initial contact was made through the use of Internet to chapter officers of AORN with a 14-day window allowed for completion of each survey. Follow-up notices were not approved by AORN, although this was a change from the initial information provided. An analysis of nonresponse bias was included to address potential error in results related to this factor (Dillman, 2007; Fowler, 2002).

Age was an influential indicator in this study in the identification of generational cohort differences. For identification of age, birth decade was used as a category reflective of a generational cohort. This characteristic was included in the demographic section to improve responsiveness to the question (McNabb, 2002).

Data analysis

Data analysis using SPSS 13.0 software included descriptive statistics, correlation matrices, effect size, and exploratory effects as identified through standard or simple multiple regression analysis. Use of standard regression analysis to identify the existence, value, and strength of relationships (correlation) is an accepted method for quantitative research in social sciences and public administration (Babbie, 2007; Knoke, Bohrnstedt, & Mee, 2002; McNabb, 2002). McNabb noted that regression analysis makes a determination of whether a relationship is present between variables and how the movement of one variable (dependent variable) is associated with another variable (independent or intervening variable). Once a relationship is identified, the strength of that association can be assessed through correlation analysis, as well as the direction of
that relationship (positive or negative). Statisticians emphasize that correlation does not imply causation (Babbie, 2007; Knoke, Bohrnstedt, & Mee, 2002; McNabb, 2002).

Descriptive statistics for this study examined age (as defined by birth decade), years of experience in perioperative nursing, identification of type of facility (e.g. inpatient hospital, ambulatory surgery center, etc.), level of education, tenure, and certification as an operating room nurse. A determination of frequency distribution and measures of central tendency was applied to each research question to arrive at a number representative of the sample. Use of a $t$-test was employed to determine the existence of sample variance(s), as the standard deviation of the population is unknown (Knoke, Bohrnstedt, & Mee, 2002). Assumption was that the sample of chapter officers and/or members is drawn from a population (perioperative registered nurses) that represents a normal distribution, which also supports the use of a $t$-test (Knoke, Bohrnstedt, & Mee, 2002).

Pearson product-moment correlation coefficient ($R^2$) was used to evaluate the strength and relationship between hypothesized variable relationships identified within each research question using SPSS 13.0 for statistical measurements of this value. As noted by Knoke, Bohrnstedt, and Mee (2002) an important factor in the examination of variable relationships in linear regression is strength of the relationship and the direction (directly or inversely) in which the covariance exists. Eta squared was used to examine size effect, which is an indication of the magnitude of relationship between variables addressed by each research question. Field (2005) indicated that tests of significance do
not clearly establish the importance or meaningfulness of variable relationships, which is provided through use of eta squared testing.

A standard regression analysis using a one-tailed test was used to identify relationships between variables within each research question and to determine the significance of the hypothesized relationships. Selection of a one-tailed versus a two-tailed test was derived from information obtained from the literature review, which indicated that historical and current knowledge supports a directional hypothesis (Ackfeldt & Coote, 2005; Bateman & Organ, 1983; Knoke, Bohrnstedt, & Mee, 2002; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

A system was established for data collection and analysis procedures using the Internet-based survey tool accessed through Surveymonkey.com. Approximate time for survey collection was one month. Once data was entered, SPSS 13.0 data software was used for statistical analysis.

Threats to Validity

To insure validity of data measurement, the utilization of standardized survey instruments with proven records for both validity and reliability for measuring the phenomena under consideration were used (Trochim, 2001). As noted previously, survey questions contained in the OCB section were derived from the instrument initially developed by MacKenzie, Podsakoff, and Fetter (1993). These questions have an accepted standard of reliability and validity in research on OCB and in application within the health care arena (Bateman & Organ, 1983; Bratt et al., 2000; Chu et al., 2005; Todd & Kent, 2006). The WES survey instrument has been used in health care settings and is
well documented with accepted standards of validity and reliability (Avallone, Gibbon, & Avallone, 1998; Hayhurst, Saylor, & Stuenkel, 2005; Moos, 1990; Staten, Mangalindan, Saylor, & Stuenkel, 2003; Stordeur, D’Hoore, & Vandenberghhe, 2001; Stuenkel, Cohen, & de la Cuesta, 2005). However, due to the aggregate composition of this instrument, previous reliability measures may not be as fully applicable. Inferences made on generational cohort differences as derived from demographic data and specific generational diversity awareness questions may not accurately reflect the intensity of personal perspectives that may be drawn through more qualitative research methods.

A threat does present that due to the quantitative design, perceptual inferences that could be gained from a qualitative design would not be identified. Previous research has used components of the MLQ, NWI-R, WES, and OCB survey tools, but none were identified that included incorporation of the third component about generational differences.

Feasibility

Resource allocation for this study represented considerable amounts of time to acquire the questionnaire frameworks, determination of questions for inclusion in the questionnaire, and then construction of the survey tool. In addition, costs were incurred in at each step of the data identification and collection processes, so a budget was be set up to address this issue. A major concern throughout this research process was efficient yet effective allocation of time to conduct the pre-test, final survey, and then preparation of the research findings, summary, and conclusion.
Informed Consent and Ethical Considerations

The first step of ethical consideration for this study involved identification of the sample population. Of prime concern with respect to the target population was obtaining permission from the professional organization to access that population for sampling. As a member of the organization, the researcher had free access to each chapter. Contact with the research department at AORN revealed that instructions and specifications on research access included restricted access only through the research department of AORN. Due to confidentiality parameters, initial contact with chapter officers and access to their addresses was channeled through AORN.

Once permission was obtained to access the sample population, part of the online survey included an introductory letter informing the respondents of the purpose of the research, the status as a student and professional perioperative registered nurse of the researcher, as well as AORN membership by the researcher were sent out (Appendix B). The informed consent form addressed not only the willingness of the participant to engage in the survey, but also the capacity and understanding by each individual of any risks involved, ability to withdraw from the study at any time, availability of findings, and confidentiality of the process as well as individual participation in the study.

Research processes were conducted according to the guidelines set forth under the Ethical Standards of Research of Walden University. In addition, research requirements set forth by the AORN were followed. Each step of the research process was referenced to specify the ethical considerations taken by the researcher to insure integrity of this
project. Samples of the informed consent and introductory letter, and IRB materials are included in the appendices.

Summary

This chapter outlined the research methodology used to obtain and process data from which answers to the identified research questions and associated hypotheses were derived. Identification of the sample population and the association with the population from which the sample was drawn were examined. The survey instrument, as well as the channel through which it was delivered to the identified sample population, were described. Data collection and analyses were discussed to explicate the manner in which statistical methods were used to accurately evaluate findings from the self-report questionnaire. Consideration of factors that effect reliability, validity, and ethical practice were also examined. This chapter provided the framework from which implementation of the research project was based to answer research questions outlined by the researcher that were pertinent to the research problem under consideration. The following chapter will explore in-depth research findings related to each of the research questions and/or hypotheses, which in aggregate serve to address the problem under investigation for this study.
CHAPTER 4:

RESULTS

Introduction

A current national nursing shortage, represented by over 126,000 vacant registered nursing positions, poses a serious threat to the quality of health care (Murray, 2002, p. 81). If predictions materialize, over half of the current nursing workforce of 2.6 million will retire by 2016 (Hart, 2006). To protect the health of the public, researchers are working to identify reasons dedicated nurses either leave the nursing profession or choose an alternate career. The answers may be found by examining underlying factors that contribute to that decision. Studies have identified contributing factors to the existing and predicted nursing shortage that include an aging nursing workforce, decreased enrollment in nursing schools with an associated aging of nursing educators, working conditions, gender or income issues, increased patient acuity levels with fewer nurses providing care, decreased job satisfaction, other career options, and stress-induced burnout (Kalliath & Morris, 2002; Lynn & Redman, 2005; Murray, 2002; Swearingen, 2004).

To meet the objectives of this study, examination of contributing factors to the nursing shortage included those associated with an aging multigenerational workforce, job stress (sources and leadership behaviors), and behaviors reflective of job satisfaction. These areas generate a potential for conflict and stress, which influence job satisfaction, and subsequently, expressed or exhibited OCB of nurses (Kalliath & Morris, 2002; Swearingen, 2004). Intergenerational conflict is associated with nurses' perceptions of
leadership recognition and support of generational cohort differences, as well as perceptions of how effective leadership strategies are in the management of associated work values conflict. These actions are described in this study as leadership behaviors.

Purpose of the Study

The purpose of this quantitative research study was to explore relationships among perceptions of effective leadership strategies in the management of IWVC, JS, and AORN in the United States. The exploratory nature of the study relates to the proposed extension of existing theoretical constructs on variable relationships between perceptions of leadership effectiveness, job satisfaction as expressed by positive perceptions of the work environment, and overt or expressed demonstrations of OCB. As noted in the examination of existing research studies, these relationships are well established in the literature on OCB, as well as in emerging literature within the nursing profession. It should be noted, however, that this has primarily been implemented within the existing constructs. There is a definable gap in application of OCB into specific communities of interest, such as the nursing profession. In addition, the existing focus has been on OCB confined to the organization, and not on how those behaviors may ultimately affect the broader community in the form of social capital.

Sample Population

A self-report electronic survey questionnaire (Appendix A) was administered to a sample of perioperative registered nurses to assess the relationship between generational cohort work value differences, leader effectiveness in conflict management, perceptions of the work environment (potential stress variables), and OCB. The sample population
was identified using a modified convenience sampling approach (purposive or judgmental), in which the researcher utilized her expertise in the perioperative nursing field to select a population that correlated with the purpose of the study (Babbie, 2007). The survey instrument was made accessible through a hyperlink to Survey Monkey, which is an online secured and protected survey software mechanism for designing, implementing, and analyzing survey data. The hyperlink was imbedded in an email from the researcher through the research coordinator at AORN (per AORN research protocol) to the selected population. Contained within the e-mail notification was information addressing confidentiality, informed consent parameters, and timeline for the survey. Each of these elements met IRB criteria as established by Walden University and was approved prior to administration of the survey. Participants were asked to reply within two weeks after receipt of the survey invitation. Follow-up notification was not allowed under a policy change by AORN after initial permission was granted to conduct the survey. A total of 695 participants were contacted in the aforementioned manner. There were 98 surveys returned, of which approximately 89 surveys were valid, for a 12.8% response rate. This rate is within range of the 14% response rate achieved by AORN for the 2007 salary survey (Bacon, 2007). Factors influencing the lower-than-expected response rate include timing of survey during the summer, when some chapters are inactive; an ongoing election process that extends for three months and involves a transition period for officers; inaccurate or missing member addresses made available to AORN; and inability to use a follow up notification.
Survey construct

The survey was divided into several categories, of which five were assigned a cumulative score: OCB, Perceptions of Leader Support, Autonomy, Work Environment Factors (representing stress factors in the work environment), and Job Satisfaction. The use of cumulative scoring has a substantial history in OCB research and in studies on employee relationships and perceptions of the work environment (Chu, Hsu, & Chen, 2005; Farh, Podsakoff, & Organ, 1990; Moos, 1994; Organ & Ryan, 1995).

A 5-point Likert scale was used to assess the degree of participant response, with 5 = Strongly Agree, 4 = Agree, 3 = Strongly disagree, 2 = Disagree, and 1 = No opinion. Use of Likert scaling is reflective of accepted practice, most particularly for the OCB component (Ackfeldt & Coote, 2005; Bateman & Organ, 1983; Chu, Hsu, & Chen, 2005; Cropanzo, Rupp, & Byrne, 2003; Dillman, 2002; Farh, Podsakoff, & Organ, 1990; Moorman, Blakely, & Niehoff, 1998; Organ & Ryan, 1995). For the WES subscales, dichotomous is the most often used scale, but the author (Moos, 1994) noted that previous researchers had also utilized a multichotomous scale (Abraham & Foley, 1984; Fisher & Fraser, 1983). More recent work by Rossberg and Friis (2004) further validates the use of a modified WES in social science research. For consistency and ease of readability, the researcher selected a multichotomous scale and conducted analyses to ascertain reliability of scoring determinations.

A subscale for job satisfaction was developed by for the purposes of this study (see Appendix C). Questions included in the scale were those from survey questions reflective of factors noted in the literature review that influence JS and subsequently,
OCB (Chu, Lee, Hsu, & Chen, 2005; Swearingen, 2004). The scale included questions that directly addressed leadership and IWVC (three), perceptions of overall leader support (four items), autonomy (five items) and work environment (three items). Although not derived from a particular job satisfaction index, components reflect questions historically identified as factors that contribute to JS such as autonomy, leadership, individual recognition, and decreased stress in the work environment (Hackman & Oldham, 1980; Swearingen, 2005; Van Dyne, Graham, & Dienesch, 1994).

Cronbach’s alpha coefficient (\( \alpha \)) was employed to assess reliability of the scales used in the study, with a target indicator of internal consistency above .70 on a scale of 0 to 1 (Knoke, Bohrnstedt, & Mee, 2002; McNabb, 2002; Pallant, 2007). Results are shown in Table 4. Findings from this study for the OCB component, inclusive of reverse coding of pertinent questions, achieved a reliability of \( \alpha = .88 \), which is comparable with earlier research by MackKenzie, Podsakoff, and Fetter (1993) demonstrating reliabilities of \( \alpha = .82, .89, \) and \( .91 \) in three separate studies. The result is also consistent with research by Konosvky and Pugh (1994) with a reliability of \( \alpha = .83 \).

Findings for this study for WES subscales of autonomy, leadership, and work environment (stress factors) after reverse coding of pertinent questions demonstrated reliabilities of \( \alpha = .76, .59, \) and \( .73 \) respectively. After evaluation of internal consistencies for each subscale, four questions were removed from the leadership content. Deletion of questions within a particular subscale to improve internal consistency and reliability, while retaining the purpose of the scale, is acceptable in social research (Babbie, 2007; McNabb, 2002), as well as with modifications of WES scales (Dolbier, Smith,
Steinhardt, 2007). The reliability for the leadership scale after this process was $\alpha = .78$. Results are comparable with those of Moos (1994) of $\alpha = .72$, .77, and .78 respectively, using a dichotomous scale. A comparison of the leadership value to other studies utilizing modified WES with Likert scaling, demonstrated comparable results (Dolbier, Smith, & Steinhardt, 2007; Fraser & Fisher, 1983).

Reliability for the JS scale was $\alpha = .71$, which is consistent with targeted parameters of $\alpha = .70$. This result is within range of JS findings in other research studies that have utilized well established JS indices with $\alpha = .77$ (Ackfeldt & Coote, 2005), $\alpha = .84$ (Smith, Organ, and Near, 1983) and $\alpha = .88$ (Van Dyne, Graham, & Dienesch, 1994).

Data analysis

Based upon integrated survey data, descriptive statistics, test for significance ($t$ test), correlation (Pearson’s $R$), and regression analyses using the Statistical Package for Social Sciences (SPSS) version 13 were used to examine variable relationships.

Descriptive statistics

Descriptive statistics were used to identify and describe characteristics of the sample such as the number of participants, mean, standard deviation, and range of scores. Frequency of scores within each generational cohort was used to identify any differences or similarities among generations. Survey participants were asked to reply to several demographic questions that addressed education, tenure, years in the operating room, certification status, primary work location, and the generational cohort decade in which they were born.
A review of educational level reveals that the majority of the nurse participants had a bachelor’s degree or higher (51.2%), which is higher than the 42% reported by perioperative nurses (AORN members and nonmembers) in a recent national survey (Bacon, 2007).

Table 4

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>8</td>
<td>9.4</td>
<td>9.4</td>
</tr>
<tr>
<td>AND</td>
<td>22</td>
<td>25.9</td>
<td>35.3</td>
</tr>
<tr>
<td>BSN</td>
<td>27</td>
<td>31.8</td>
<td>67.1</td>
</tr>
<tr>
<td>Nonnursing BA/BS</td>
<td>8</td>
<td>9.4</td>
<td>76.5</td>
</tr>
<tr>
<td>MSN</td>
<td>17</td>
<td>20</td>
<td>96.5</td>
</tr>
<tr>
<td>Nonnursing MA/MS</td>
<td>3</td>
<td>3.5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Participants reported significantly high rates of multiple certifications in specialty nursing (84.1%), of which 82.9% represented certification in the operating room.

Table 5

<table>
<thead>
<tr>
<th>Certification</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>CNOR</td>
<td>66</td>
<td>80.5</td>
<td>82.9</td>
</tr>
<tr>
<td>CRNFA</td>
<td>1</td>
<td>1.2</td>
<td>84.1</td>
</tr>
<tr>
<td>None</td>
<td>13</td>
<td>15.9</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Years in nursing and in the operating room reflect a positive correlation, with the majority of participants, 67.1% and 55.3% respectively, considered experts in the field of perioperative nursing. This coincides with results from the AORN survey (Bacon, 2007).

Table 6

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>3-5</td>
<td>4</td>
<td>4.7</td>
<td>7.1</td>
</tr>
<tr>
<td>6-10</td>
<td>4</td>
<td>4.7</td>
<td>11.8</td>
</tr>
<tr>
<td>11-19</td>
<td>18</td>
<td>21.2</td>
<td>32.9</td>
</tr>
<tr>
<td>&gt;20</td>
<td>57</td>
<td>67.1</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7

*Years in the operating room for perioperative registered nurses*

<table>
<thead>
<tr>
<th>Tenure</th>
<th>Frequency</th>
<th>Valid</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>2</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>3-5</td>
<td>5</td>
<td>5.9</td>
<td>8.2</td>
</tr>
<tr>
<td>6-10</td>
<td>8</td>
<td>9.4</td>
<td>17.6</td>
</tr>
<tr>
<td>11-19</td>
<td>23</td>
<td>27.1</td>
<td>44.7</td>
</tr>
<tr>
<td>&gt;20</td>
<td>47</td>
<td>55.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Primary work location at 87.5% was identified as hospital, which was no surprise due to the long history of perioperative nurses in a hospital-based environment.

Table 8

*Primary work location for perioperative registered nurses*

<table>
<thead>
<tr>
<th>Work Location</th>
<th>Frequency</th>
<th>Valid</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory care ctr.</td>
<td>9</td>
<td>11.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Physician clinic</td>
<td>1</td>
<td>1.2</td>
<td>12.3</td>
</tr>
<tr>
<td>Hospital</td>
<td>71</td>
<td>87.7</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A review of survey participants by generational cohort reveals the Boomer generation had the highest response rate with over 74.3%; the Veterans generation came in second with 15.4%; and the GenXers (1970s) came in a close third at 10.3%. Of note was the total absence of any representatives of the late GenXer or Nexter Generation from the 1980s. However, this is in keeping with the assertion by Putnam (2002) that younger generations demonstrate significant differences in their willingness to participate in traditional channels of information gathering (survey administration) and communication within the time constraints of modern day living. It is interesting that members of the older generations in this study, as represented by Veterans and Boomers, were willing to take the time to answer a survey through a communications medium (internet) that has presented steep learning curves over the past two decades.

<table>
<thead>
<tr>
<th>Cohort Decade</th>
<th>Frequency</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940s</td>
<td>12</td>
<td>15.4</td>
<td>15.4</td>
</tr>
<tr>
<td>1950s</td>
<td>43</td>
<td>55.1</td>
<td>70.5</td>
</tr>
<tr>
<td>1960s</td>
<td>15</td>
<td>19.2</td>
<td>89.7</td>
</tr>
<tr>
<td>1970s</td>
<td>8</td>
<td>10.3</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Recognition of generational diversity and differences in work values reflected an acute awareness that did not differentiate between generational cohorts. Over 90% of the survey participants indicated awareness not only of generational diversity, but also recognition that generational cohort work value differences were readily apparent in the work environment. These results are shown in the following tables.
Table 10
*There is generational diversity in my organization*

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>3</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
<td>1.1</td>
<td>4.5</td>
</tr>
<tr>
<td>Agree</td>
<td>41</td>
<td>46.1</td>
<td>50.6</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>44</td>
<td>49.4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11
*Each generation represents a different set of work values*

<table>
<thead>
<tr>
<th>Opinion</th>
<th>Valid Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>2</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Agree</td>
<td>45</td>
<td>50.6</td>
<td>52.8</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>42</td>
<td>47.2</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Invalid/missing</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The presence of kurtosis or skewness was also identified. As noted by Pallant (2007) and McNabb (2002), skewness reveals the extent of symmetry in a distribution, whereas kurtosis reflects the height or peakedness of that distribution. Assessment of normality of the population employed the use of histogram to visually evaluate the
distribution of scores (Field, 2005; McNabb, 2002; Pallant, 2007). These statistics are in accordance with widely accepted research practice (Babbie, 2007; McNabb, 2002; Pallant, 2007). As noted in the histogram (Figure 4) constructed on the relationship between leadership and OCB, there is a significant amount of kurtosis within the normally distributed population. Scatter plots (Figure 4) were also utilized to graphically explore any linear variable relationships, such as perceptions of leadership support and assessment of OCB characteristics.
The *t* test statistic was applied to variables pertinent to each question to test hypotheses that the sample of perioperative registered nurses was derived from a normal population. As noted by Norusis (2005) a one-sample *t* test is appropriate when examining a single set of data, such as that obtained on each of the variables in this study. If comparisons were made between groups, such as between the various cohorts, then an independent samples *t* test would be more appropriate (Norusis, 2005). Both approaches are consistent with existing research and follow recommended guidelines for assessment of normality when the standard error of the population is unknown (Norusis, 2005).

According to Knoke et al. (2002) sample sizes in the range of 30 to 100 cases should represent a normalized distribution (p. 85). The sample size used for this study meets the suggested criteria. Test values for the one sample *t* test were set at 1 to reflect an estimated mean of the null hypothesis that no correlation exists between variables. Values of 2 to 5 were assigned in the Likert scale used in the survey to represent directional responses ranged; whereas, a value of 1 reflected a response that no

*Figure 4.* Histogram and scatter plot of relationship between leadership and OCB.
correlation was perceived. Norusis (2005) and Field (2005) support this assertion and indicate test values for a \( t \) test are obtained from a hypothetical mean of the population that represents the null hypothesis (p. 238). Results of application of the \( t \) test to variables pertinent to the research questions are included in the following table.

Table 12

*Application of \( t \) test in the determination of population normality*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>( SD )</th>
<th>( SE )</th>
<th>( t )</th>
<th>( df )</th>
<th>Sig. 2-tailed</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is generational diversity in my organization.</td>
<td>89</td>
<td>4.42</td>
<td>.688</td>
<td>.073</td>
<td>46.858</td>
<td>88</td>
<td>.000</td>
<td>3.416</td>
</tr>
<tr>
<td>Each generation represents a different set of work values.</td>
<td>89</td>
<td>4.43</td>
<td>.620</td>
<td>.066</td>
<td>52.185</td>
<td>88</td>
<td>.000</td>
<td>3.427</td>
</tr>
<tr>
<td>Leadership is supportive of generational work value differences.</td>
<td>89</td>
<td>3.74</td>
<td>1.1</td>
<td>.114</td>
<td>24.135</td>
<td>88</td>
<td>.000</td>
<td>2.742</td>
</tr>
<tr>
<td>I am recognized as a member of a particular generational cohort (group).</td>
<td>89</td>
<td>4.04</td>
<td>1</td>
<td>.109</td>
<td>27.821</td>
<td>88</td>
<td>.000</td>
<td>3.045</td>
</tr>
<tr>
<td>Differences in generational work values represent a source of conflict in work environment.</td>
<td>89</td>
<td>3.82</td>
<td>1.1</td>
<td>.111</td>
<td>25.325</td>
<td>88</td>
<td>.000</td>
<td>2.820</td>
</tr>
<tr>
<td>Leadership effectively manages conflict associated with generational work value differences.</td>
<td>89</td>
<td>3.21</td>
<td>1.1</td>
<td>.112</td>
<td>19.693</td>
<td>88</td>
<td>.000</td>
<td>2.213</td>
</tr>
<tr>
<td>Leadership Score</td>
<td>89</td>
<td>3.32</td>
<td>.804</td>
<td>.085</td>
<td>27.232</td>
<td>88</td>
<td>.000</td>
<td>2.321</td>
</tr>
<tr>
<td>Autonomy Score</td>
<td>86</td>
<td>3.43</td>
<td>.598</td>
<td>.065</td>
<td>37.737</td>
<td>85</td>
<td>.000</td>
<td>2.433</td>
</tr>
<tr>
<td>Work Environment Score</td>
<td>84</td>
<td>3.35</td>
<td>.692</td>
<td>.076</td>
<td>31.106</td>
<td>83</td>
<td>.000</td>
<td>2.350</td>
</tr>
<tr>
<td>OCB Score</td>
<td>87</td>
<td>3.95</td>
<td>.408</td>
<td>.044</td>
<td>67.57</td>
<td>86</td>
<td>.000</td>
<td>2.953</td>
</tr>
<tr>
<td>Job Satisfaction Score</td>
<td>85</td>
<td>3.13</td>
<td>.484</td>
<td>.052</td>
<td>40.628</td>
<td>84</td>
<td>.000</td>
<td>2.134</td>
</tr>
</tbody>
</table>
Measures of correlation or Pearson’s \( R \) were used to examine relationships between variables (Table 13). As noted by McNabb (2002) correlation reveals the strength and presence of relation between two or more variables, the direction of that relationship (positive or negative), but does not indicate the existence of a causal relationship. Correlation values range from -1 to 1, with 0 being neutral (McNabb, 2002, p. 218). The closer a value is to 1 (- or +), the stronger the relationship between variables (McNabb, 2002; Norusis, 2005; Pallant, 2007). As noted previously, the nature of this study is one of exploration of variable relationships, not identification of causality.

### Table 13

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</table>

**Correlation is significant at the 0.01 level (1-tailed).  
*Correlation is significant at the 0.05 level (1-tailed).  
Cronbach’s alpha ( )

1. There is generational diversity in my organization.
2. Each generation represents a different set of work values.
3. Leadership is supportive of generational work value differences.
4. I am recognized as a member of a particular generational cohort (group).
5. Differences in generational work values represent a source of conflict in the work environment.
6. Leadership effectively manages conflict associated with generational work value differences.
7. Total Leadership Score
8. Total Autonomy Score
9. Total Work Environment Score
10. Total Job Satisfaction Score
11. Total Organizational Citizenship Behavior Score
Using regression analysis, variables under consideration specific to the research question under consideration were entered using a standard or simple approach. According to Field (2005) and supported by Norusis (2005), this model allows the researcher to examine the influence of each independent variable upon the dependent variable, separate from all of the other variables included in the model. It is also the most commonly used approach to multiple regression analysis (Pallant, 2007). Norusis (2005) asserted that using a simple regression model that works well is more important than creating a complex model that cannot be understood or does not explain the relationship between variables under examination.

A probability level of \( p \leq .05 \) was used as a basis for rejection of the null hypothesis in each research question that no correlation existed between variables examined within the question. According to social science research guidelines, this is considered to be an acceptable limit (Field, 2005; Knoke, Bohrnstedt, & Mee, 2002; Norusis, 2005).

In addition to significance level, measurement of effect size using eta squared (\( \eta^2 \)) was also identified for indicators within each question. As noted by Field (2005) this measurement provides insight into the importance of an effect between variables beyond what may be considered as a significant finding (p. 32). Results of these measurements are noted in Table 14 on the following page.
Table 14

*Eta Squared ($\eta^2$) Matrix*

<table>
<thead>
<tr>
<th>Variable</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</tr>
</tbody>
</table>

Using guidelines proposed by Cohen (1988, p. 284-287), the following interpretations would apply:

- .01 = small effect
- .06 = moderate effect
- .14 = large effect
The primary dependent variable in the study was identified as OCB. This variable is influenced by the independent variable identified as job satisfaction (JS), which represents aggregated perceptions of the work environment. Intervening (controlling) variables include intergenerational work values conflict, leader behaviors (nurses’ perceptions of leader effectiveness in managing IWVC, leader understanding, and support), and perceived job stress. Analysis of each research question and associated hypotheses with pertinent statistical results is reported in the following discussion.

Research questions and hypotheses

The central hypothesis explored through this research study is that divergence of intergenerational work values creates a potential for conflict and stress in the work environment, which influence expressed and/or exhibited organizational citizenship behavior (OCB) of perioperative registered nurses. Associated with this conflict are nurses' perceptions of leadership recognition and support of generational cohort differences, as well as perceptions of how effective leadership strategies are in the management of associated work values conflict. Actions identified in this study that reflect involvement of leaders with followers with respect to IWVC are noted as leadership behaviors. As noted in the review of existing literature, each of these factors may affect job satisfaction, which is related to expressed or exhibited OCB by perioperative nurses. Research questions and hypotheses that reflect the relationship between variables and tests utilized to examine the correlation and relationships between variables are explored in the following sections.
Research Question 1

Is there a correlation between perceptions of effective leadership behaviors in the management of intergenerational work values conflict (IWVC) and the expressed and/or exhibited organizational citizenship behavior (OCB) of perioperative registered nurses?

\[ H_0: \] Perceptions of effective leadership behaviors associated with IWVC have no correlation with expressed and/or exhibited OCB of perioperative registered nurses.

\[ H_A: \] Perceptions of effective leadership behaviors associated with IWVC are positively correlated with demonstrations of OCB of perioperative registered nurses.

To answer this question, survey questions that addressed leadership recognition and support of generational differences, management of IWVC, and OCB were examined. The subscale score for leadership was also examined in relation to perceived IWVC and OCB scores. Results of multiple analyses are reported in the following discussion. Using significance value of \( p \leq .05 \) as a baseline for normality (Field, 2005; Norusis, 2005), findings for a one-sample \( t \) test as noted in Table 12 support an assumption of normality. Respondents reported expressed and/or exhibited OCB actions (\( M = 3.95, SE = .044 \)) significant at \( t (87) = 67.57, p = .000 \).

Based upon the \( t \) tests and an observed significance level of \( p < .01 \) for the relationship between factors that reflect recognition of generational diversity in an organization, awareness of conflict and stress associated with generational differences, and perceptions of effective leadership behaviors (direct and overall), the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a
normally distributed population and that OCB is not affected by perceptions of leader support and effectiveness in the management of IWVC.

Variable correlations using Pearson’s $R$ were then examined to explore the presence, strength, and direction of those relationships. Results of these analyses are presented in Table 13. The relationship between OCB and leadership behaviors that reflect support and understanding generational work value differences, as well as effective management of conflict associated with IVWC, were investigated using Pearson’s $R$ coefficient. Previous tests for assumptions of normality did not reveal any violations. The relationship between perceptions of overall (generalized) leadership behaviors as represented by the Total Leadership Score and OCB reveals a moderate, positive correlation of $r = .473$, $n = 89$, and $p = .01$. Perceptions of effectiveness of leadership behaviors account for over 47% of the variance in respondents’ OCB scores.

Supportive leadership behaviors perceived as directly associated with IWVC and OCB also reflect a lesser, yet still moderate, positive correlation of $r = .387$, $n = 87$, and $p = .01$. Of interest in this examination is the effect that perceptions of supportive leadership behavior in association with generational work value differences have on overall perceptions of effective leadership (Total Leadership Score) demonstrating a moderate, positive correlation of $r = .467$, $n = 89$, and $p = .01$. These findings indicate leadership behaviors that reflect understanding and support of generational cohort differences account for nearly 47% of the variance in overall perceptions of leadership support and effectiveness in the work environment.
Of particular note is the relationship between perceptions of leadership effectiveness in managing IWVC and overall perceptions of supportive leadership behaviors with a strong, positive correlation of \( r = .614, \ n = 89, \) and \( p = .01 \). Over 61% of the variance in nurses’ perceptions of supportive leadership actions in the work environment is related to how IWVC is managed.

Using regression analysis, each of the variables under consideration in this question that potentially influence OCB was entered using a standard or simple approach. The following table illustrates this examination.

**Table 15**

*Regression Analysis for Research Question 1*

<table>
<thead>
<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>Adj ( R^2 )</th>
<th>Std. Error of the Estimate</th>
<th>( R^2 ) Change</th>
<th>( F ) Change</th>
<th>( df1 )</th>
<th>( df2 )</th>
<th>Sig ( F ), Change</th>
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<td>.266</td>
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<td>84</td>
<td>.000</td>
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</table>

a. Predictors: (Constant), Total Leadership Modified Scaled, Leadership is supportive of work value differences, Leadership effectively manages conflict associated with generational work value differences.
b. Dependent Variable: Total OCB Scaled.

This analysis revealed that variance in OCB explained by the model was approximately 27%, \( F (3, 84) = 10.165, \ p = 000. \) There was a statistically significant difference of \( p < .001 \) at \( p < .05 \) in OCB, when taking into consideration the influence of leadership behaviors (overall and specific to IWVC) on the willingness of nurses to exhibit and/or express actions reflective of OCB. Although this analysis infers a positive relationship between leadership variables and OCB, it is apparent that 73% of the variance in OCB is related to other factors.
To evaluate the significance of the model results, analysis of variance (ANOVA) was also used to test that the null hypothesis that multiple R in the population is zero and that the likelihood of having an $F$-ratio of this value at $p \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at $F(3,84) = 10.165, p = .000$ (Appendix D). In addition to identifying the significance of findings, the effect size was measured using eta squared ($\eta^2$). Measures of effect between OCB and each of the variables noted above were $\eta^2 = .424, .191,$ and $.170,$ respectively. Using guidelines noted previously proposed by Cohen (1988), the perceptions of overall leadership effectiveness as well as those directly associated with IWVC have a large effect on OCB actions of perioperative registered nurses.

**Research Question 2**

Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by perioperative registered nurses?

$H_o$ : There is no correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS of perioperative registered nurses.

$H_A$ : Perceptions of effective leadership behaviors in the management of IWVC are positively correlated with the level of reported JS of perioperative registered nurses.

To answer this question, survey questions that addressed perceptions of overall leader support and effectiveness in managing intergenerational work value differences were examined in relation to the JS subscale score. Using a significance value of $p \leq .05$ as a baseline for normality (Field, 2005; Norusis, 2005), findings noted in Table 12 support an assumption of normality. Based upon the $t$ tests and an observed significance level of $p <$
.01 for the relationship between perceptions of leader effectiveness in managing IWVC and JS, the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a normally distributed population and that JS is not affected by perceptions of leader support and effectiveness in the management of IWVC.

Using Pearson’s $R$ relationships between variables were then examined to identify the presence, strength, and direction of those relationships. As noted previously, the nature of this study is one of exploration of variable relationships, not identification of causality. Results of these analyses are presented in Table 13. The relationship between leadership behaviors that demonstrate effective management of IWVC and JS was investigated using Pearson’s $R$ coefficient. Previous tests for assumptions of normality did not reveal any violations.

As indicated from the extensive literature review, leadership actions that demonstrate support and understanding of nursing staff are considered key determinants in job satisfaction and OCB (Burroughs & Eby, 1998; Loke, 2001; Murray, 2002; Smith, Organ, & Near, 1983). The relationship between perceptions of leadership support of generational leader and leader effectiveness in managing IWVC with JS support reveal a strong, positive correlation of $r = .61$, $n = 85$, $p = .01$ and $r = .58$, $n = 85$, $p = .01$, respectively. Leadership behaviors that support and effectively manage intergenerational work value differences influence approximately 60% of the variance in perceptions of job satisfaction.

Using regression analysis, each of the variables under consideration in this question that potentially influence JS with respect to leadership strategy and behavior in
the management of IWVC was entered using a standard or simple approach. As noted in Table 15 the variance in JS as explained by the model was approximately 46%, \( F(2, 82) = 34.444, p < .001 \). There was a statistically significant difference in JS when taking into consideration the influence of perceptions of effective leadership behaviors in the work environment that support generational work value differences and effectively manage IWVC. As noted in the literature review, leadership actions that reflect individual consideration are considered key factors in promoting job satisfaction (Hackman & Oldham, 1980; Sperry, 2003). Results from this analysis support rejection of the null hypothesis that no correlation exists between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS of perioperative registered nurses.

Table 16

**Regression Analysis for Research Question 2**

<table>
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<tr>
<th>Model</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>Adj. ( R^2 )</th>
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<th>Change Statistics</th>
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a. Predictors: (Constant), Leadership effectively manages conflict associated with generational work value differences, Leadership is supportive of generational work value differences.
b. Dependent Variable: Total Job Satisfaction Scaled.

To evaluate the significance of the model results, analysis of variance (ANOVA) was also used to test that the null hypothesis that multiple R in the population is zero and that the likelihood of having an \( F \)-ratio of this value at \( p \leq .05 \) would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at \( F(2, 82) = 34.444, p = .000 \) (Appendix D). In addition to identifying the significance of findings, the size of effect
was measured using eta squared ($\eta^2$). Measures of effect between JS and each of the variables noted above were $\eta^2 = .402$ and .385 respectively. Using guidelines noted previously proposed by Cohen (1988), the perceptions of leadership effectiveness directly associated with IWVC have a large effect on JS of perioperative registered nurses.

**Research Question 3**

Is there a correlation between IWVC and levels of perceived stress by perioperative registered nurses?

$H_o$: IWVC has no correlation with levels of perceived stress reported by perioperative registered nurses.

$H_A$: IWVC is positively correlated with levels of perceived stress reported by perioperative registered nurses.

To answer this question, survey questions that addressed stress and conflict in the work environment (Work Environment Scale) and factors underlying IWVC were examined. Subscale scores for work environment were examined in relation to perceived IWVC. Using a significance value of $p \leq .05$ as a baseline for normality (Field, 2005; Norusis, 2005), findings noted in Table 12 support an assumption of normality.

Respondents reported perceptions of increased generalized stress in the work environment of ($M = 3.35, SE = .076$) significant at $t (84) = 31.106, p = .000$. Perceptions of stress and conflict associated with intergenerational work value differences yielded a ($M = 3.83, SE = .111$) significant at $t (89) = 25.325, p = .000$. Based upon the $t$ tests and an observed significance level of $p < .01$ for the relationship between factors that reflect recognition of stress and conflict associated with generational diversity in an organization, generational differences (individual and group), perceptions of effective/
leadership behaviors that specifically address IWVC, and stress in the work environment (as represented by the Work Environment Scale), the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a normally distributed population and that stress in the work environment is not influenced by the presence of intergenerational differences as a source of conflict.

Using Pearson’s $R$ relationships between variables were then examined to identify the presence, strength, and direction of those relationships. As noted previously, the nature of this study is one of exploration of variable relationships, not identification of causality. Results of these analyses are presented Table 13. The relationship between stress in the work environment (Total Work Environment Score or TWES) and factors that reflect generational diversity and generational work value differences were investigated using Pearson’s $R$ coefficient. Previous tests for assumptions of normality did not reveal any violations.

The relationship between TWES and acknowledgement of generational diversity and the uniqueness of each generational cohort reveal moderate, positive correlations of $r = .312$, $n = 84$, and $p = .002$ and $r = .304$, $n = 84$, and $p = .002$, respectively. Variance in overall work environment stress is influenced approximately 30% of the time by factors associated with generational differences. In addition, IWVC as a contributor to overall work stress reveals a correlation of $r = .231$, $n = 84$, and $p = .017$. Not only do intergenerational cohort differences create diversity within the organization, but those differences also serve as a source of conflict that increases the overall stress level in the work environment. It can be noted that a weak, negative correlation of $r = -.171$, $n = 84$, ...
and \( p = .060 \) exists between perceptions of overall stress in the work environment and how leaders directly manage that IWVC, although at a lesser significance level with \( p \leq .05 \). Increased levels of stress reported by nurses correlate to decreased levels perceived effectiveness by leaders in managing conflict.

Using regression analysis, each of the variables under consideration in this question that potentially influence OCB was entered using a standard or simple approach.

Table 17

Regression Analysis for Research Question 3

<table>
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<tr>
<th>Model</th>
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<th>Adj ( R^2 )</th>
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<th>Change Statistics</th>
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<td>.208</td>
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</table>

a. Predictors: (Constant), Leadership is supportive of generational work value differences, Differences in generational work values represent a source of conflict in the work environment, There is generational diversity in my organization, Each generation represents a different set of work value, Leadership effectively manages conflict associated with generational work value differences.
b. Dependent Variable: Total Work Environment Scaled.

This analysis revealed that variance in TWES as explained by the model was approximately 21%, \( F (5, 78) = 4.085, p = < .01 \). There was a statistically significant difference in TWES when taking into consideration the influence of factors in the work environment that reflect generational diversity and generational work value differences that represent sources for conflict and stress. As noted in this analysis, a significance level of .002 would indicate that the null hypothesis can be rejected and changes in the \( F \)-ratio are related to influence of generational diversity as a source of conflict and stress in the work environment.
To evaluate the significance of the model results, analysis of variance (ANOVA) was also used to test that the null hypothesis that multiple $R$ in the population is zero and that the likelihood of having an $F$-ratio of this value at $P \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at $F(5,78) = 4.085, P = .002$ (Appendix D). Measures of effect between stress in the work environment (TWES) and indicators that contribute to IWVC were noted at $\eta^2 = .094, .144, .158, .092, \text{ and } .035$, respectively. Using guidelines noted previously proposed by Cohen (1988), factors in the work force that contribute to IWVC have varying degrees of effect on levels of stress. Generational diversity and associated work value differences present a very tangible effect on the level of perceived stress.

**Research Question 4**

Is there a correlation between perceptions of effective leadership behaviors associated with IWVC and the level of perceived stress by perioperative registered nurses?

$H_0$ : Perceptions of effective leadership behaviors associated with IWVC have no correlation with levels of perceived stress by nurses working in the perioperative environment.

$H_A$ : Perceptions of effective leadership behaviors associated with IWVC are negatively correlated with levels of perceived stress by perioperative registered nurses.

To answer this question, survey questions that addressed stress and conflict in the work environment (Total Work Environment Score or TWES), leadership recognition, support, and management of IWVC were examined. Using a significance value of $P \leq .05$ as a
baseline for normality (Field, 2005; Norusis, 2005), findings noted in Table 12 support an assumption of normality.

Respondents reported perceptions of increased generalized stress in the work environment of \( M = 3.35, SE = .076 \) significant at \( t (84) = 31.106, p = .000 \). In contrast, perceptions that leaders effectively manage conflict associated with generational work value differences indicate a \( M = 3.21, SE = .112 \) significant at \( t (89) = 19.693, p = .000 \). Based upon the \( t \) tests and an observed significance level of \( p < .01 \) for the relationship between perceptions of effective leadership behaviors that specifically address IWVC, and generalized stress in the work environment (as represented by the Work Environment Scale), the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a normally distributed population and that stress in the work environment is not influenced by the effectiveness of leadership strategies in managing IWVC.

Using Pearson’s \( R \) relationships between variables were then examined to identify the presence, strength, and direction of those relationships. Results of these analyses are presented in Table 13. The relationship between stress (TWES) and leadership behaviors in the management of IWVC (acknowledgement, support and understanding generational work-value differences) was investigated using Pearson’s \( R \) coefficient. Previous tests for assumptions of normality did not reveal any violations.

The relationship between perceptions of overall conflict and stress in the work environment as represented by the TWES and perceptions of intergenerational differences as a factor that affects relationships in the work environment reveals a
moderate, positive correlation of $r = .304$, $n = 84$, and $p = .002$. Nurse perceptions of intergenerational differences that affect relationships in the work place account for 30% of the variance in respondents’ TWES scores. In addition, perceptions of how effectively leaders manage that conflict demonstrate a weak, negative correlation with TWES of $r = -.171$, $n = 84$, and $p = .06$. Although not considered significant at $p \leq .05$, these results do indicate that higher levels of stress are associated with perceptions of ineffective leader management that are directed towards IWVC.

Of interest is the correlation between overall leader effectiveness and perceptions of effective leader management IWVC with a strong, positive correlation of $r = .614$, $n = 89$, and $p = .01$. Actions that are perceived effective in the management of IWVC account for over 61% of the variance in overall leadership scores. Yet, when examining the relationship between TWES and overall leadership perceptions, a weak, negative correlation exists of $r = -.044$, $n = 84$, and $p = .344$. Again, perceptions of ineffective leadership appear to increase reported levels of stress in the work environment; however, with results of $p = .344$ and $p < .05$, these findings would be not be considered significant (Knoke, Bohrnstedt, & Mee, 2002; Norusis, 2005).

Using standard regression analysis, each of the variables under consideration in this question with respect to leadership interactions with IWVC that potentially influence perceptions of effective leadership behaviors are addressed in the following table.
Table 18

Regression Analysis for Research Question 4

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adj $R^2$</th>
<th>Std. Error the Estimate</th>
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<th>$F$ Change</th>
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<th>df2</th>
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<td>3.096</td>
<td>5</td>
<td>78</td>
<td>.013</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Each generation represents a different set of work values, Leadership is supportive of generational work value differences, Differences in generational work values represent a source of conflict in the work environment, Total Leadership Modified Scaled, Leadership effectively manages conflict associated with work value differences.

b. Dependent Variable: Total Work Environment Scaled.

Analysis revealed that variance in TWES explained by the model was approximately 17%, $F (5, 78) = 3.096$, $p = .05$. There was a statistically significant difference of .013 at $p < .05$ in TWES when taking into consideration the influence of factors in the work environment that reflect leadership acknowledgement, support, and understanding of generational diversity and generational work value differences. As noted in this analysis, the likelihood of having an $F$-ratio of this value at $p \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). The null hypothesis can be rejected and inference can be made that changes in the $F$-ratio of stress are related to influence of leadership in the management of IWVC.

To further evaluate the significance of the model results, analysis of variance (ANOVA) was also used to test that the null hypothesis that multiple R in the population is zero and that the likelihood of having an $F$-ratio of this value at $p \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at $F (5, 78) = 3.096$, $p = .013$ (Appendix D). In addition to identifying the significance of findings, the size of effect was measured using eta squared ($\eta^2$). Measures of effect between indicators...
of stress in the work environment (as designated by TWES) and those associated with leadership behaviors and IWVC as noted above were $\eta^2 = .092$, $.094$, $.144$, $.219$, and $.035$, respectively. The effect of the highest magnitude was that associated with overall perceptions of leadership effectiveness and support in the work environment.

Generational diversity and work value differences do have an effect on levels of stress in the work environment, but how leadership manages stress in its many forms is perceived to have the most effect.

**Research Question 5**

Is there a correlation between levels of perceived stress associated with IWVC and the level of reported JS by perioperative registered nurses?

- $H_0$: Levels of perceived stress associated with IWVC have no correlation with the level of reported JS by perioperative registered nurses.

- $H_A$: Levels of perceived stress associated with IWVC are negatively correlated with the level of reported JS by perioperative registered nurses.

To answer this question, survey questions that addressed stress and conflict in the work environment, recognition of generational diversity, IWVC, perceptions of leadership effectiveness and support examined.

Using significance value of at $p \leq .05$ as a baseline for normality (Field, 2005; Norusis, 2005), findings noted in Table 12 support an assumption of normality. Based upon the $t$ tests and an observed significance level of $p < .01$ for the relationship between perceptions of stress associated with IWVC and JS, the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a normally distributed population and that JS is not affected by perceptions of stress associated with IWVC.
Using Pearson’s $R$ relationships between variables were then examined to identify the presence, strength, and direction of those relationships. Results of these analyses are presented in Table 13. The relationship between stress associated with generational diversity, differences in generational work values, IWVC, leadership management of IWVC, and JS was investigated using Pearson’s $R$ coefficient. Previous tests for assumptions of normality did not reveal any violations.

As indicated from the extensive literature review, leadership actions that demonstrate support and understanding of nursing staff are considered key determinants in job satisfaction and OCB (Burroughs & Eby, 1998; Loke, 2001; Murray, 2002; Smith, Organ, & Near, 1983). The relationship between perceptions of leader effectiveness in managing IWVC and leadership support of generational differences with overall perceptions of leadership support reveal a strong, positive correlations of $r = .614$, $n = 89$, and $p = .01$ and $r = .467$, $n = 70$, and $p = .01$, respectively. Leadership as a factor that contributes to JS accounts for approximately 50% of the variability in nurses’ perceptions of how effectively leaders manage conflict associated with IWVC.

Using regression analysis, each of the variables under consideration in this question that potentially influence the relationship between stresses associated with IWVC and JS was entered using a standard or simple approach. These results are included in the following table.
Table 19

Regression Analysis for Research Question 5

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adj $R^2$</th>
<th>Std. Error of the Estimate</th>
<th>$R^2$ Change</th>
<th>$F$ Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig $F$. Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.697$^a$</td>
<td>.486</td>
<td>.452</td>
<td>.36348</td>
<td>.486</td>
<td>14.208</td>
<td>5</td>
<td>75</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Each generation represents a different set of work values. Leadership is supportive of generational work value differences, Total Work Environment Scaled, Differences in generational work values represent a source of conflict in the work environment, Leadership effectively manages conflict associated with generational work value differences.

b. Dependent Variable: Total Job Satisfaction Scaled

This analysis revealed that variance in JS related to IWVC-induced stress as explained by the model was approximately 49%, $F (5, 80) = 314.208, p < .001$. There was a statistically significant difference at $p < .05$ in JS when taking into consideration the influence of factors that contribute to stress related to generational differences and conflict.

Analysis of variance (ANOVA) was used to test that the null hypothesis that multiple $R$ in the population is zero and that the likelihood of having an $F$-ratio of this value at $p \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at $F (5,75) 14.208, p = .000$ (Appendix D). Stress associated with IWVC is affected by nurses’ perceptions of factors in the work environment that contribute to job satisfaction. In addition to identifying the significance of findings, the size of effect was measured using eta squared ($\eta^2$). Measures of effect between JS and stress associated with IWVC as noted above were $\eta^2 = .174$, .385, .501, .036, and .402, respectively. Using guidelines noted previously proposed by Cohen (1988), the perceptions of stress directly associated with IWVC have a large effect on JS of perioperative registered nurses.
Research Question 6

Is there a correlation between JS and expressed and/or exhibited OCB by perioperative registered nurses?

\[ H_0 : \text{There is no correlation between JS and expressed and/or exhibited OCB by perioperative registered nurses.} \]

\[ H_A : \text{There is a positive correlation with JS and levels of expressed and/or exhibited OCB by perioperative registered nurses.} \]

To answer this question, survey questions that comprised subscales for JS and OCB were examined. Using a significance value of \( p \leq .05 \) as a baseline for normality (Field, 2005; Norusis, 2005), findings noted in Table 12 support an assumption of normality. Based upon the \( t \) tests and an observed significance level of \( p = .01 \) for the relationship between OCB and JS, the null hypothesis can be rejected. It would be highly unlikely that the sample is not representative of a normally distributed population and that OCB is not affected by factors in the work environment that have been identified as contributors to JS.

Using Pearson’s \( R \) relationships between variables were then examined to identify the presence, strength, and direction of those relationships. Results of these analyses are presented in Table 13. There is a strong, positive correlation between JS and OCB of \( r = .586, n = 83, \) and \( p = .01 \). Factors that contribute to JS in the work environment account for approximately 59% of the variability in reported expressions of OCB by perioperative registered nurses. These findings are supported in the extensive literature review on OCB and associated antecedents (Barnard, 1968; Bateman & Organ, 1983; Chu, Lee, Hsu, & Chen, 2005; Jasovsky, 2001; Smith, Organ, & Near, 1983).
Of particular interest in the survey findings is also the correlation between job satisfaction and the components of OCB that represent civic virtue and altruism, which have been identified as behaviors associated with social capital (Burroughs & Eby, 1998; Etzioni, 1975; Sarason, 1974). Findings in this study reveal strong, positive correlations of $r = .488$, $n = 84$, and $p = .01$ and $r = .588$, $n = 84$, and $p = .01$, respectively. Nurses who demonstrate high degrees of job satisfaction, also exhibit associated high levels of behaviors designated as OCB, particularly those identified in the research as representative of social capital interactions and interrelationships. According to Etzioni (1975) relational networks extend from the organization into the community operate to fulfill identified goals for both entities.

Using regression analysis, each of the variables under consideration in this question was entered using a standard or simple approach.

Table 20

<table>
<thead>
<tr>
<th>Regression Analysis for Research Question 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change Statistics</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

* a. Predictors: (Constant), Total Job Satisfaction Scaled
b. Dependent Variable: Total OCB Scaled

This analysis revealed that variance in OCB explained by the model was approximately 34%, $F (1, 82) = 42.003$, $p < .001$. There was a statistically significant difference of $p < .001$ at $p < .05$ in OCB when taking into consideration the influence of factors in the work environment that contribute to JS. Findings indicate that JS does have an influence
on expressed or exhibited OCB in the work environment, thus providing a basis for rejecting the null hypothesis that no correlation exists.

As shown in Appendix D, analysis of variance (ANOVA) was used to test that the null hypothesis that multiple R in the population is zero and that the likelihood of having an $F$-ratio of this value at $p \leq .05$ would not occur by chance (Field, 2005; Pallant, 2007). These results were significant at $F(1,82) = 42.003$, $p = .000$. In addition to identifying the significance of findings, the size of effect was measured using eta squared ($\eta^2$). The measurement of effect between OCB and JS was noted at $\eta^2 = .974$. According to Cohen (1988) factors that contribute to JS have a demonstrable effect on OCB. This is a basic premise presented in the review of literature on OCB and supports the hypothesis of this study that a positive correlation exists between JS and OCB.

Summary

The purpose of this chapter was to assess the findings from a self-report survey questionnaire by perioperative registered nurses, which explored the relationships between perceptions of leadership effectiveness in the management of IWVC with expressed or exhibited OCB. As noted in preceding chapters, OCB is related to job satisfaction, which has been identified as an underlying factor in the decision-making process of individuals to either remain with an organization or to continue in a particular career direction. Six separate, but interrelated, research questions were presented to explore these relationships. The null hypotheses were rejected based on significant findings that correlations exist between IWVC, leadership behaviors associated with
IWVC, stress (generalized and specific to IWVC), job satisfaction, and expressed or exhibited OCB in the work environment.

Nurses expressed an acute awareness of generational diversity and the presence of IWVC in the work environment. In addition, there was a distinct preference for leadership strategies that reflect understanding and support of organizational members, not only as nursing professionals, but also as individuals with different work values, beliefs, and behaviors. The majority of these nursing professionals expressed feelings of commitment to their respective organizations and indicated a willingness to extend themselves beyond the parameters of clearly defined job roles (OCB). However, stress and conflict were clearly identified as dissatisfiers in the work environment, mitigated in a large part by the perceived effectiveness of leaders in managing those variables.

Chapter 5 provides a detailed overview of study findings, summarizes results, identifies implications for future research, and explicates social significance of this study.
CHAPTER 5:
SUMMARY, RECOMMENDATIONS, AND CONCLUSION

Introduction

Diversity in the health care delivery system presents in a myriad of forms. It exists in the diverse patient population (the public); in the form of illness and disease that beset that public; in the access channels through which health care is delivered; and in the health care providers who seek to provide safe, effective, and efficient health care, which meets the needs and expectations of the patient population. It is the diversity of a particular segment of health care provider, perioperative registered nurses, which is the focus of this study. Differences between generations of the workforce have existed for centuries; but today, the presence of four generations working side-by-side presents the potential for discord that may affect not only the decision by a nurse to remain in the profession, but also the quality of health care that is provided to the public that nurses serve. Unrest in the work environment may also influence the desire by those nurses to engage in activities within the organization outside of job role expectations, as well as activities within the community in which they work and live as integral components of the social network system.

The purpose of this chapter was to examine the influence of perceptions of leadership effectiveness in the management of IWVC on expressed or exhibited OCB. A multisection survey instrument composed of questions addressing generational diversity, perceptions of leader support, autonomy, stress in the work environment, and expressions of OCB was administered to perioperative registered nurses to determine what
relationship, if any, existed between nurses' perceptions of leadership behaviors associated with intergenerational differences and conflict and OCB.

Summary

The research problem that served as the basis for this study is the presence of a national nursing shortage of registered nurses, which has created a threat to the health and safety of patients who enter the health care delivery system (Murray, 2002). There are underlying issues to this shortage, which serve as drivers in the decision by a registered nurse to leave the profession or to change career paths. The shortage is one that affects the nursing profession across specialties. The focus of this research was on the specialty of perioperative nursing. Four generations are working together for the first time in the operative arena. Although each of these nurses shares a common goal of providing safe, quality care to surgical patients, each generational cohort represents a different set of work values. As noted by Hu, Herrick, and Hodgin (2004), however, there is an identifiable lack of intergenerational understanding of cohort work values. It is this deficiency that creates the potential for conflict, stress, disengagement, and decreased OCB of perioperative registered nurses. These factors may serve as dissatisfiers in the work environment, which in turn may influence a nurse's decision to engage in activities outside of the job role, to remain in the nursing profession, and potentially to serve as an active resource in community-based activities.

The following research questions were utilized to achieve the goals of this study in reaching a better understanding of factors that may contribute to the nursing shortage.
1. Is there a correlation between perceptions of effective leadership behaviors in the management of intergenerational work values conflict (IWVC) and the expressed and/or exhibited organizational citizenship behavior (OCB) of perioperative registered nurses?

2. Is there a correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by perioperative registered nurses?

3. Is there a correlation between IWVC and levels of perceived stress by perioperative registered nurses?

4. Is there a correlation between perceptions of effective leadership behaviors associated with IWVC and the level of perceived stress by perioperative registered nurses?

5. Is there a correlation between levels of perceived stress associated with IWVC and the level of reported JS by perioperative registered nurses?

6. Is there a correlation between JS and expressed and/or exhibited OCB by perioperative registered nurses?

Answers to the above questions were determined first, by examining the normalcy of the population through the visualization of histograms and scatter plots, and then by application of t test statistics. It was determined from these evaluations that the sample from which the survey was drawn represented a normal distribution. Measures of correlation or Pearson’s R were then utilized to explore the relationships between
variables addressed by each specific research question, using a probability level of $p \leq .05$ as an acceptable basis for rejection of the null hypothesis (Field, 2005; Knoke, Bohrnstedt, & Mee, 2002; Norusis, 2005). Regression analyses were subsequently performed to examine the extent of predictability, if any, that the independent variable(s) had on the dependent variable addressed by the research question. Measurement of effect size was also used to determine the magnitude of effect between variables. The following discussion addresses overall findings from each research question and associated conclusions based upon those findings.

**Research Question 1**

Research question one addressed perceptions by perioperative registered nurses of the effectiveness of leaders in managing IWVC and to what extent those perceptions influenced expressed or exhibited actions representing OCB. The alternate hypothesis stated that perceptions of effective leadership behaviors associated with IWVC are positively correlated with demonstrations of OCB of perioperative registered nurses. Correlation analysis confirmed this hypothesis, demonstrating significant moderate effects between leadership behaviors directed specifically at IWVC and overall perceptions of supportive and effective leadership in the work environment. Both of these variables also exhibited a significant moderate, positive influence on OCB. Regression analysis revealed a significant relationship between leadership variables and OCB.

Conclusions can be drawn from these findings that OCB actions in the nursing environment are significantly influenced by strategies implemented by leadership that reflect acknowledgement, support, and effective management of intergenerational work.
value differences and conflict. The approach that leaders take to recognize differences in work values and attitudes associated with individuals who represent diverse generations makes a difference in how these nurses feel about extending their time and efforts beyond what is prescribed by a job description. The presence of IWVC was fully acknowledged by survey participants. However, as shown by these findings, it is the manner in which leaders address conflict that determines actions that reflect OCB. These results are supported by existing research on OCB theory and the relationship to perceptions of leader interest and support for the employee as a valued individual, separate from the job role assumed within the organization (Chu et al., 2005; Smith, Organ, & Near, 1983).

Questions in the survey specifically addressed nurses’ perceptions of interactions with leaders that were associated with generational diversity, management of IWVC, and acknowledgement of individuals as members of a particular generational cohort. Responses reported in these results indicated a positive correlation between leader strategies that demonstrate individual consideration or support and expressions of job satisfaction and associated OCB attitudes. These findings are supported in nursing literature that has surfaced over the past five years that examined generational differences, work environment, and leadership effectiveness in promoting job satisfaction (Apostolidis & Polifroni, 2006; Cordeniz, 2002; Hendel, Fish, & Galon, 2005; Kupperschmidt, 2006; Sherman, 2006; Wieck, 2004).

Research Question 2

Research question two addressed the correlation between perceptions of effective leadership behaviors in the management of IWVC and the level of reported JS by
perioperative registered nurses. The alternate hypothesis stated that perceptions of effective leadership behaviors in the management of IWVC are positively correlated with the level of reported JS of perioperative registered nurses. Correlation analysis confirmed this hypothesis, demonstrating a significant strong, positive correlation between leadership behaviors directed specifically towards IWVC and factors that contribute to overall JS (such as leader support, management the work environment, and autonomy). Regression analysis also demonstrated significant relationships between leadership behaviors that effectively manage IWVC and perceptions of overall job satisfaction with the working environment.

From findings associated with this question, a conclusion can be drawn that perceptions of job satisfaction are strongly influenced by implementation of leadership strategies that promote autonomy; effectively manage job stress in the work environment, especially those associated with IWVC; and offer support for work value differences represented by each generational cohort. It can be inferred from these results that nurses express feelings of satisfaction with their job as a result of positive interactions with leaders that promote empowerment and autonomy, which is considered a hallmark of professional nursing practice (Aveyard, 2000; Chu et al., 2005; Dalanis, 2005). One of the contributing theories to this study by Hackman and Oldham (1980) supports this conclusion with the affirmation that leader strategies supportive of autonomy in the work environment promote job satisfaction.
In addition to leader strategies that promote autonomy in practice, job satisfaction is also influenced to a large extent by the manner in which leaders acknowledge, discuss, and then resolve IWVC, as well as other generalized stressors in the work environment such as time constraints and workload. When nurses perceive that leaders can openly and effectively manage stress and conflict that is associated with the complex and dynamic perioperative environment, there is a positive correlation with how they feel about their job. Job satisfaction is an antecedent in job retention, which is the underlying problem of this study. These results are supported in the seminal research on OCB theory by Bateman and Organ (1983), as well as more recent studies by Erhart and Naumann (2004), LePine, Erez, and Johnson (2002), and Williams, Pitre, and Zainuba (2002).

Research Question 3

Research question three addressed the correlation between recognition of IWVC in the work place and levels of perceived stress (overall stress in the work environment or TWES) by perioperative registered nurses. The alternate hypothesis stated that IWVC is positively correlated with levels of perceived stress reported by perioperative registered nurses. Correlation analysis confirmed this hypothesis, demonstrating a significant but weak, positive correlation between perceptions that generational cohorts represent different sets of work values and those differences create a source of conflict and stress in the overall work environment. Regression analysis supported this assumption with a statistically significant difference in reported overall work stress when taking into consideration the influence of factors in the work environment that reflect generational diversity and generational work value differences. In addition, effect size was considered
large in varying degrees depending upon the interaction being explored. Although other factors still account for overall 75% of the variance in reported overall stress and conflict in the work environment. These factors might include staffing levels, salary, opportunity for professional development, economic conditions and associated downsizing, or even the pressures of learning new technologies for surgical procedures.

Conclusions drawn from these findings would infer that IWVC is a contributing factor to overall perceptions of stress in the work environment, but not the dominant source. However, within the context as a contributing factor to 25% of the overall stress level, measures of effect size were large. This indicates that the magnitude of IWVC is an important source of stress in the perioperative work environment. As a permanent factor of multiple generations working together, IWVC is not a transient phenomenon. Nurses acknowledged that generational work value differences are an identifiable source of stress in the work setting, which create an additional source of conflict in an environment that is beset with numerous other stressors. These findings are supported in research and theory on generational work value differences and conflict from a historical perspective (March & Simon, 1958; Parsons, 1960), as well as from a nursing perspective (Clausing et al., 2003; Sherman, 2006; Stuenkel, Cohen, & de la Cuesta, 2005). Of serious concern with respect to stress is the relationship to burnout and the decision by nurses to either leave the job or the profession (Cropanzo, Rupp, & Byrne, 2003; Demerouti, Bakker, Nacheriener, & Schaufeli, 2001). At some point, remaining in a work environment that is permeated with stress in its myriad of forms may not be conducive to the health of the
nurse or to the health and safety of patients who are entrusted to the care of that nurse.

*Research Question 4*

Research question four addressed the correlation between perceptions of effective leadership behaviors associated with management of IWVC and the level of perceived stress by perioperative registered nurses. The alternate hypothesis stated that perceptions of effective leadership behaviors associated with IWVC are negatively correlated with levels of perceived stress by perioperative registered nurses. Correlation analysis revealed that management of IWVC has a weak, negative correlation with TWES, but at a level of $p = .063$ would not be considered a significant finding. This exceeds by .013 the significance level of $p < .05$ for this study. However, measures of effect size between indicators of stress in the work environment (as designated by TWES) and those associated with effective leadership behaviors in the management of stress and IWVC demonstrated a large effect in varying degrees, depending upon the relationship explored. The effect of the highest magnitude was that associated with overall perceptions of leadership effectiveness and support in the work environment. Decreased levels of stress are associated with perceptions of effective leadership. Other factors that may contribute to decreased stress could include alteration of work assignments or team members, complexity of surgical cases, management changes, shift of demographics, or processes used within the surgical environment to care for patients.

Conclusions can be drawn from these findings that the approach leadership uses to manage stress in its many forms is perceived to have a positive effect in reducing stress in the work environment. There are changes in reported levels of stress associated with the
manner in which leaders manage IWVC, which supports the alternative hypothesis. Regression analysis revealed that variance in TWES explained by the model was significant when taking into consideration the influence of factors in the work environment that reflect leadership recognition, support, and understanding of generational diversity and generational work value differences. Stress decreases when nurses perceive that leaders are actively engaged in establishing relationships that demonstrate mutual understanding and caring for others. Similar findings are noted in the literature review concerning the influence of supervisory support for individual goals and performance and levels of reported job stress (Bratt, et al., 2000; Demerouti et al., 2000; McNeese-Smith, 2000; McVicar, 2003; Shader et al., 2001; Stourdeur, 2001).

Findings from this question are supported by theories reviewed in chapter 2 on the inverse relationship between perceptions of effective leadership in the management of workplace conflict and the level of stress (McVicar, 2003; Shader et al., 2001; Wieck, 2004). Within the context of management of IWVC and reported levels of stress, a review of the literature finds support not only from a broad perspective, but also from the narrower focus of the nursing profession (Clausing et al., 2003; Santos, Carroll, Cox, & Teasley, 2003; Sherman, 2006; Stuenkel, Cohen, & de la Cuesta, 2005; Weston, 2001). It is not that IWVC as a stressor is eliminated from the work environment, but the tactics leaders employ to address conflict that reduces the level of reported stress.

Research Question 5

Research question five addressed the correlation between levels of perceived stress directly associated with IWVC and the level of overall JS reported by perioperative
registered nurses. The alternate hypothesis stated that levels of perceived stress associated with IWVC are negatively correlated with the level of overall JS reported by perioperative registered nurses. Correlation analysis revealed a weak, negative correlation between levels of IWVC-related stress and overall JS. However, measure of effect size demonstrated a large effect from IWVC-associated stress and perceptions of job satisfaction. Regression analysis revealed a statistically significant difference in JS when taking into account the effects of stress generated by IWVC. In aggregate, these analyses support the alternative hypothesis.

Given the findings in this research question, it can be concluded that nurses who reported higher levels of stress and conflict derived from intergenerational work value differences reported lower levels of JS. Interactions with nursing peers from different generations affect relationships in the work environment. Theory examined in previous chapters on stress and conflict indicated that internal discord arises when differences present in ideas, goals, and values in the relationship and interactions between two or more people (Fisher, 2000; Marquis, 2003). When levels of stress impede those relationships, job satisfaction decreases. Results from variables examined within this question support this assertion. Theories examined on job satisfaction indicated stress that occurs at a dysfunctional level decreases job satisfaction and the willingness of nurses to remain with an organization (Shader, Broome, West, & Nash, 2001). Findings lend insight into antecedent factors that may underlie the decision by a nurse to leave a particular work environment or to change careers.
Research Question 6

Research question six addressed the correlation between JS and expressed or exhibited OCB by perioperative registered nurses. The alternative hypothesis stated that there is a positive correlation with JS and levels of expressed or exhibited OCB by perioperative registered nurses. Correlation analysis revealed a moderate, positive correlation between factors that contribute to JS (as represented by the JS subscale) and perceived actions by perioperative registered nurses that represent OCB in the work environment. Regression analysis revealed a significant difference in the variance in OCB when taking into consideration the influence of JS. However, as in the other regression analyses, other factors must be considered due to the lower percentage of variance accounted for by the independent variable (JS). Factors such as the nature of job stressors in the work environment, organizational structure and culture, leadership, level of organizational commitment, social, or political environment could influence OCB and could be examined in future research using more complex models of regression or path analysis.

Findings from the analyses for this research question support the alternative hypothesis that a positive relationship exists between JS and OCB. Nurses who reported high levels of job satisfaction also reported high levels of OCB. When nurses are happier with their job and work environment, they are more willing to extend time and effort outside of prescribed job parameters to assist peers and the organization. This conclusion is supported in the early research of Organ and Bateman (1983) and Smith, Organ, and Near (1983), as discussed in the literature review of the relationship between job
satisfaction and OCB theory. This relationship has been examined in detail over the past two decades by other researchers and supports the findings of this question (LePine, Erez, & Johnson, 2002; Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Van Dyne, Graham, & Dienesch, 1994; Vigoda-Gadot, Beeri, Birman-Shemesh, & Somech, 2007). Recent studies in nursing research also support these findings (Ackfelt & Coote, 2005; Chu, Lee, Hsu, & Chen, 2005; Jasovsky, 2001).

In addition, a review of the relationship between civic virtue and altruism (as components of OCB) reveals a positive relationship with job satisfaction. These two factors are also noted as behaviors identified in actions that represent social capital as discussed in the review of social capital theory (Putnam, 2000). These actions may serve as the bridge from OCB at the organization to availability of perioperative nurses as social capital resources to the community. Nurses who are satisfied with their jobs, extend efforts as demonstrated by OCB actions, may be more willing to commit to community activities such as involvement with literacy and learning programs, development of fine arts or historical events, or serve in the capacity of public office.

Implications Based on Existing Research

There is a substantial body of research that supports a positive correlation between factors in the work environment that contribute to JS and expressed or exhibited actions reflective of OCB within the organizational community (Bateman & Organ, 1983; Katz & Kahn, 1978; Podsakoff, MacKenzie, Paine, & Bachrach, 2000; Smith, Organ, & Near, 1983). Studies that demonstrate a positive relationship between perceptions of leader support and effectiveness and job satisfaction are also well documented in social

A more recent and rapid expansion in social science research on generational diversity focused on the impact that intergenerational work value differences have on relationships within the work environment (March & Simon, 1958; Parsons, 1960; Pfeffer, 1978; Santos et al., 2003; Santos & Cox, 2000; Stuenkel, & Cohen, 2005). These studies have also addressed the influence that intergenerational diversity and associated IWVC have on the development of leadership strategies and associated job satisfaction (Apostolidis & Polifroni, 2006; Clausing et al., 2003; Cordeniz, 2002; Hendel, Fish, & Galon, 2005; Sherman, 2006; Strachota et al., 2003; Stuenkel et al., 2005; Wieck, 2004).

As outlined in chapter 2, however, there is an identifiable gap in the literature. This gap exists in an in-depth exploration of relationships between the aforementioned variables within a defined community of professionals with a broader horizon in mind, that which represents the potential effect on that community serving as a resource for social capital. Exploratory findings from this study begin to fill that gap and provide supportive information on the positive relationship between perceptions of leader support and effectiveness in the management of IWVC and OCB. In addition, this study advances the research initiated by Putnam (2000) on social capital as an integral component of community development and social interaction. As nurses feel free to extend time, energy, and knowledge beyond the predetermined confines of a job role, those efforts may have a domino effect into the broader community in the form of social capital.
Limitations of this Research

Limitations of this study related to sampling of perioperative nurses, which was confined to those members of the Association of periOperative Registered Nurses (AORN) located in a specific geographic location of the United States. Although representative of the specialty of perioperative nursing, nurses who choose to become members of AORN are more aware of the standards and practices that govern perioperative nursing practice. This knowledge may present an avenue for historical selection bias through the broader scope of practice and knowledge that exposes those nurses to issues that other nurses might not be aware. In addition, geographic location was restricted to the United States, so international implications are limited.

Another limitation may present in the construction of the questionnaire, which presents the potential for internal construct validity due to the multiple scale construction of the survey instrument. Although standardized questionnaire instruments (WES and OCB) were utilized as the framework from which to construct the majority of subscales in the survey instrument, potential for error is introduced through selection of questions and by use of a nonrandomized sample, which may skew the results. Particularly with the WES scales, comparison to the results by Moos (1994) may be inaccurate due to the dichotomous construction of that study. However, as indicated in chapter 4, other researchers have successfully moved into a multichotomous format with positive results (Abraham & Foley, 1984; Fisher & Fraser, 1983; Rossberg & Friis, 2004).

An additional limitation of this exploratory study is the potential for intervening variables that may confound correlation outcomes identified in each research question.
These interconnections may threaten the internal validity of this study, as simple regression did not control for confounding effects. Intervening variables to consider might include gender, pay, professional development, specialization of work environment, tenure, or management experience.

Another limitation of this study is the response rate, which was lower than expected. Although still representative of sample size from which to make preliminary inferences, further research is needed to generalize results.

Implications for Social Change

As a subsystem within the overall health care delivery system, the nursing profession represents a community of interest. According to Burroughs and Eby (1998) the development of a sense of community reflects the development over time of cohesive relationships between community members. These relationships serve as a locus of social solidarity through which organizational members find mutual assistance and share their knowledge and expertise (Putnam, 2000). Improving recognition and understanding of intergenerational cohort differences can serve to strengthen relationships between nursing professionals. Findings from this study indicated that relationships between nurses and leaders are intimately affected by perceptions of caring, understanding, and support between nursing professionals.

Intertwined throughout the fabric of social solidarity within the organization are actions defined as OCB, which represent extra-role, or discretionary behavior that present outside of the parameters set forth by job descriptions or organizational policies (Bateman & Organ, 1983). Within a social system context, displays of OCB represent
action that is considered an essential component of organizational effectiveness. Katz and Kahn (1978) asserted that the presence of OCB serves as a vital undercurrent to keep the complex social mechanisms of the organization running. From a broader perspective, organizations also exist as open systems, in which components are interrelated and interactive with multiple environments, both internal to and external to the organization (Katz & Kahn, 1978; Scott, 1998, von Bertalanffy, 1972). Organizational citizenship behavior is grounded in the positive attitude of organizational members to engage in activities to improve conditions in the work environment. Those same attitudes may well carry over into the broader community within which these individuals live in the form of social capital.

Putnam (2000) posited that social networks, reciprocal interactions, and relationships serve as catalysts in the development of social capital. Adler and Kwon (2002) support this assertion by defining social capital as the “goodwill engendered by the fabric of social relations and that can be mobilized” towards identified goals of the community (p. 17). Social capital as a collective construct represents conscious, reciprocal efforts by community members to improve the community and to improve the general welfare of the public (Adler, & Kwon, 2002; Burroughs & Eby, 1998; Edmondson, 2003; Putnam, 2000; Sarason, 1974).

Bolino, Turnley, and Bloodgood (2002) observed that social networks serve as a basis in the development of shared meaning and understanding between individuals that create a shared language through which organizational members communicate. This same language can then serve as a structural aspect in the development of social capital (Bolino
Subsystems as communities of interest (social networks) and as resources for social capital also represent an important source of influence throughout the policy process (Sabatier, 1991). Professional communities of interest (social and organizational networks) often serve as a significant power base that influences policy agenda, selection of policy alternatives, and ultimately, policy implementation (Anderson, 2003; Kingdon 2003).

The nursing profession represents a professional community of interest. As such, Cohen and Milone-Nuzzo (2001) indicated that integration of health policy in nursing curricula is considered an integral component of nursing education. This facet of the educational process serves as a foundation for the development of active, meaningful roles by nursing professionals to influence the policy process of the health care delivery system. In concert with the policy process, researchers observed that participation at the individual level (such as that associated with nurses or other public employees) functions as a catalyst in the development of social capital through actions that have been described as organizational citizenship behaviors (Brewer, 2005; Skocpol, Ganz, & Munson, 2000). Brewer (2005) emphasized that actions directed towards the public good at the individual level are “crucial in forming and sustaining social capital in society at large (p. 20).

Recommendations for Action

Organizational leadership is a key factor in creating a balance in the workplace between meeting the needs of the organization and meeting the needs of a changing and very diverse workforce (Ackfeldt & Coote, 2005; Helland & Winston, 2005). Moving this concept into the area of intergenerational differences, Clausing, Kurtz, Prenderville,
and Walt (2003) asserted that leader awareness of generational differences in work values and respect for those differences must be actionably visible through continuous effective communication that addresses the needs reflected by each generation. Survey results from this study support this assertion. Nurses want to be recognized as individuals, above and beyond their specified role within the organization.

Early research by Smith, Organ, and Near (1983) noted that leadership behaviors, which demonstrate consideration and respect for organizational members as individuals, create an environment conducive to the development of OCB. Careful assessment and awareness of individual differences entails more than just the skill level, education, and job position of the respective individual (Sperry, 2003). Each generational cohort also reflects a different era, as well as prioritization of value subsets associated with that timeframe. Findings from this study indicated that when the values and interests of organizational members are taken into consideration, these actions reflect supportive and effective leadership behaviors that are positively correlated with rewards and feedback appropriately linked to performance and involvement of the participant. This approach is supported by the research of Hackman and Oldham (1980) that identified the importance of feedback, task significance and identity, autonomy, and variety within the job position.

Loke (2001) further emphasized that nursing leadership plays a vital role in enhancing the strength of organizational commitment and sense of community by followers. Organizational commitment has been identified as a component of OCB and is associated with increased job satisfaction, decreased absenteeism, and lower turnover rates (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Leadership can play a vital role
through development of ongoing educational and career opportunities that enhance awareness and acceptance of generational diversity in the workplace. This can be accomplished through workshops, continuing education programs, or poster sessions at local, state, or national level meetings. AORN has an established program for accrediting proposed offerings.

An important component in the relationship between organizational leadership and OCB is the development of a sense of community between members of an organization. As noted by Burroughs and Eby (1998) an organization represents a workplace community, reflective of a specific geographic location comprised of formal and informal structures and networks for individuals who share a common association. Within this context leadership plays a vital role by providing direction and momentum, which serve as sustaining and balancing forces within an environment that is in a constant state of flux. Within the dynamic, highly volatile health care environment, bombarded by additional challenges presented by an acute nursing shortage, organizational commitment and associated OCB serve as catalysts in the creation of a work environment or community conducive to nurse retention (Burroughs & Eby, 1998; Murray, 2002).

Recommendations for Further Study

This study was designed as an exploratory investigation into the relationship between perceptions of leader effectiveness in the management of intergenerational differences and conflict as an antecedent to expressed or exhibited OCB within the professional community of perioperative nursing. Interactions and relationships between individuals forming a particular subset community exist within the open system of the
organization. Those actions are not mutually exclusive to the confines of the organization. Actions that reflect OCB may well serve as a conduit for social change and act as a reservoir for social capital to the community at large. Future research is needed to extend this study into an exploration of the relationship between IWVC, demonstrations of OCB, and expressions or availability of individuals to the community in the form of social capital.

The use of path analysis could also be utilized to more clearly explicate the influence that variables under investigation within a specific research question have on the dependent variable. There is a historical basis for this technique, but these studies have not addressed the tripartite relationship of IWVC, perceptions of leader effectiveness, and OCB (Ackfeldt & Coote, 2005; Moorman, Blakely, & Niehoff, 1998). This, of course, would extend the analysis into identification of causal relationships between interrelated hypotheses of a model (Babbie, 2007).

In addition, analysis of the relationship between IWVC, leadership, and OCB through the use of qualitative research, such as case or phenomenological studies, could provide more in-depth understanding of these issues. Although findings from this study demonstrated a clear association between perceptions of positive leader behaviors and OCB, the use of qualitative technique could unveil nuances not identified through a strictly quantitative design.

Conclusion

The state of the healthcare environment is one of constant change, sometimes subtle, but more often turbulent, resembling the undulating rapids of a raging river. As
demands from internal and external environments eat away at fragile resources, conflict and stress emerge at every turn. One of the most vital resources within the health care delivery system is the registered nurse, who represents the largest segment of health care provider. These professionals are diminishing in numbers at a more rapid rate than replacements can be educated, trained, and assimilated into the system. Quality, safe, and effective patient care outcomes are threatened by the nursing shortage. This breach in care represents a very real and present danger to the public.

Understanding factors that may contribute to the nursing shortage is imperative. Leadership strategies that serve to support a diverse work force are key elements in nurse retention. One particular area of diversity that presents in the work force is generational work value differences. These differences transcend the boundaries of the health care environment, making the issue one that creates the potential for conflict in every arena in which individuals from multiple generations work side-by-side. However, just the presence of generational diversity and associated IWVC is not fully responsible for decreased satisfaction with the work environment or with a particular job. As shown in this study, the strategies that leadership employs to manage those differences and IWVC are key determinants of the level of stress or conflict associated with IWVC. Perceptions of effective leadership in the management of intergenerational differences and associated conflict have a domino effect, influencing actions outside the parameters carefully prescribed in a job description. These actions are known as OCB, which has been shown to contribute to the overall effectiveness of organizations. It is proposed in this study that actions that constitute OCB may spill over into the external environment, ultimately
affecting the willingness of individuals to become involved in activities within the community. This attitude becomes a vibrant resource to the community in the form of social capital, or those behaviors derived from social interaction and relationships that develop over time and reflect individual beneficence towards community goal attainment.

Diversity in the form of intergenerational work value differences reflects the mosaic pattern of the health care delivery system, where each unique component is a vital element of the overall pattern. This pattern is constantly changing, shifting with the needs and demands of the providers, payers, and patients. Interventions that are implemented within each organization can create a cohesive bond that holds each piece together, or can sever the threads that knit the fabric of relationships together. Leadership serves in the role of a conductor, orchestrating innumerable and diverse elements through coordinated efforts to achieve the goals not only of the organization, but also of the community in which that organization exists. In health care and public administration, those goals are intimately intertwined in the lives of the public that is served.
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Publications.

Wesley.


APPENDIX A: SURVEY INSTRUMENT

1. Informed Consent

As a member of AORN, you represent the interests and voice of perioperative nurses within your designated area. Participation in the survey is strictly voluntary and your identity will be kept confidential. The researcher will not use your information for any purpose other than research. Your name or any other identifying information will not be disclosed. You may withdraw at any time.

No compensation will be provided for survey participation. There are no known risks associated with participating in the study. If you encounter any anxiety or stress while participating in the survey, you may terminate participation at any time.

Your informed consent is implied by completion of the survey. To enter the survey, click on the NEXT button and proceed.

2. Generational Characteristics

<table>
<thead>
<tr>
<th>Generational Work Values</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is generational diversity in my organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Each generation represents a different set of work values and behaviors.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership is supportive of generational work value differences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am recognized as a member of a particular generational cohort (group).</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Differences in generational work values represent a source of conflict in the work environment.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Leadership effectively manages conflict associated with generational work value differences.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Evaluation of the Work Environment
### Leadership (supervisor) support

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors tend to talk down to employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors usually compliment an employee who does something well.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors tend to discourage criticism from employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors usually give full credit to ideas contributed by employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors often criticize employees over minor things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees generally feel free to ask for a raise.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors expect far too much from employees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees discuss personal problems with supervisors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors really stand up for their people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Autonomy

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are assigned important responsibilities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees have a great deal of freedom to do as they like.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are encouraged to make their own decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People use their own initiative to do things.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors encourage employees to rely on themselves when a problem arises.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees generally do not try to be unique and different.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are encouraged to learn things even if they are not directly related to their job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees function fairly independently of supervisors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors meet with employees regularly to discuss future work goals.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work setting</td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>No opinion</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>-------------------</td>
<td>----------</td>
<td>------------</td>
</tr>
<tr>
<td>There is constant pressure to keep working.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There always seems to be an urgency about everything.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>People cannot afford to relax.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Nobody works too hard.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There is no time pressure.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>It is very hard to keep up with your work load.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>You can take it easy and still get your work done.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>There are always deadlines to be met.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>People often have to work overtime to get their work done.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>4. Organizational Citizenship Behavior</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>No opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>I keep up with developments in the organization and attend work-related activities.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I attend functions that are not required, but that help the image of the organization.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am willing to risk disapproval in order to express my beliefs about what is best for the organization.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I make suggestions to improve organizational procedures, policies, and practices.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I share my knowledge and expertise with others in order to help the organization.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I keep up with changes in my organization and attend required meetings.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel a strong sense of commitment to my organization.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel this organization provides a sense of meaning and belonging for me.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am willing to help orient new employees, even if it is not required.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
### 5. Demographic Information

**Educational, professional, and generational cohort information**

<table>
<thead>
<tr>
<th>Demographic categories</th>
<th>Education</th>
<th>Certification</th>
<th>Years in nursing</th>
<th>Years in the operating room</th>
<th>Primary place of employment</th>
<th>Birth Decade</th>
</tr>
</thead>
</table>

### 6. Survey Format

**Survey Format**

- The survey format was simple and visually easy to follow.
- Survey instructions were easy to follow.
- I could understand the survey questions.
- The survey questions addressed issues of importance in perioperative nursing.
Access to survey link

Number of ANA
members given access to
the survey link

Thank you for taking time from your very busy professional and personal schedules to complete this survey. The information gained from your input will contribute to the knowledge base for understanding interactions between nursing colleagues that may be influenced by generational work value characteristics.
Nursing colleagues:

As an officer with AORN, you represent the interests and voice of perioperative nurses within your designated area. You are invited to take part in a nursing research study of factors that may influence a nurse’s decision not only to remain with an organization, but also to remain as a vital part of the perioperative nursing community. The study will look at variations in work values of different generations and how effective leaders are in managing conflict related to those differences. In addition, the study will also explore how these factors play a role in job satisfaction, participation in the organization, and community involvement.

This research study is being conducted by Patricia Wright, RN, MS, CNOR, a doctoral candidate in public policy and administration, specialization in health services, at Walden University. Patricia has been an active member of AORN since 1989, serving in the capacity of Vice President and President of the local AORN chapter. The researcher’s dissertation advisor is Dr. Patricia Ripoll, e-mail patricia.ripoll@waldenu.edu. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott, Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

The survey is in an online format, which can be accessed at

https://www.surveymonkey.com/s.aspx?sm=87dh7W0FSQ8gq7DZRey3Cw_3d_3d

By clicking on this link, you will be immediately directed to the survey. Completion time for the survey is approximately 10 minutes. Please complete the survey within two weeks of receipt.

Thank you for participating in this research. Your participation will help perioperative nurses gain a better understanding of generational work value differences, as well as how each generation contributes to the overall goal of perioperative nursing – caring, competent, and safe patient care!
APPENDIX C: JOB SATISFACTION SCALE

Generational diversity

Each generation represents a different set of work values and behaviors. Leadership is supportive of generational work value differences. I am recognized as a member of a particular generational cohort (group).

Leadership

Supervisors usually compliment an employee who does something well. Supervisors usually give full credit to ideas contributed by employees. Employees generally feel free to ask for a raise. Supervisors really stand up for their people.

Autonomy

Employees are assigned important responsibilities. Employees are encouraged to make their own decisions. People can use their own initiative to do things. Employees are encouraged to learn things even if they are not directly related to their job. Supervisors meet with employees regularly to discuss their future work goals.

Work Environment

Nobody works too hard. There is no time pressure. You can take it easy and still get your work done.
APPENDIX D: ANOVA TABLES

Anova Table for Research Question 1

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>3.848</td>
<td>3</td>
<td>1.283</td>
<td>10.165</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>10.601</td>
<td>84</td>
<td>.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14.449</td>
<td>87</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Total Leadership Modified Scaled, Leadership is supportive of work value differences, Leadership effectively manages conflict associated with generational work value differences.
b. Dependent Variable: Total OCB Scaled.

Anova Table for Research Question 2

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>8.994</td>
<td>2</td>
<td>4.497</td>
<td>34.444</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>10.706</td>
<td>82</td>
<td>.131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.700</td>
<td>84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Leadership effectively manages conflict associated with generational work value differences, Leadership is supportive of generational work value differences.
b. Dependent Variable: Total Job Satisfaction Scaled.

Anova Results for Research Question 3

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>8.258</td>
<td>5</td>
<td>1.652</td>
<td>4.085</td>
<td>.002a</td>
</tr>
<tr>
<td>Residual</td>
<td>31.537</td>
<td>78</td>
<td>.404</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>39.796</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Leadership is supportive of generational work value differences, Differences in generational work values represent a source of conflict in the work environment, There is generational diversity in my organization, Each generation represents a different set of work value, Leadership effectively manages conflict associated with generational work value differences.
b. Dependent Variable: Total Work Environment Scaled.
## Anova Table for Research Question 4

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>6.589</td>
<td>5</td>
<td>1.318</td>
<td>3.096</td>
<td>.013a</td>
</tr>
<tr>
<td>Residual</td>
<td>33.206</td>
<td>78</td>
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<tr>
<td>Total</td>
<td>39.796</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Each generation represents a different set of work values, Leadership is supportive of generational work value differences, Differences in generational work values represent a source of conflict in the work environment, Total Leadership Modified Scaled, Leadership effectively manages conflict associated with work value differences.

b. Dependent Variable: Total Work Environment Scaled.

## Anova Table for Research Question 5

<table>
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<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>1 Regression</td>
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<td>5</td>
<td>1.877</td>
<td>14.208</td>
<td>.000a</td>
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<tr>
<td>Residual</td>
<td>9.909</td>
<td>75</td>
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<td>Total</td>
<td>19.294</td>
<td>80</td>
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a. Predictors: (Constant), Each generation represents a different set of work values, Leadership is supportive of generational work value differences, Total Work Environment Scaled, Differences in generational work values represent a source of conflict in the work environment, Leadership effectively manages conflict associated with generational work value differences.

b. Dependent Variable: Total Job Satisfaction Scaled

## Anova Table for Research Question 6

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<th>Model</th>
<th>Sum of Squares</th>
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<th>Sig.</th>
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<td>4.512</td>
<td>42.003</td>
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<td>Residual</td>
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<td>82</td>
<td>.107</td>
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<tr>
<td>Total</td>
<td>13.321</td>
<td>83</td>
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<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Total Job Satisfaction Scaled

b. Dependent Variable: Total OCB Scaled
CURRICULUM VITAE

Patricia G. Wright
44 Dogwood Lake Drive
Texarkana, Texas  75503
patriciawright@cableone.net
(903) 733-0890

Education:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Program</th>
<th>Degree</th>
<th>Start Date</th>
<th>End Date</th>
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<tbody>
<tr>
<td>Walden University</td>
<td>Public Policy &amp; Administration</td>
<td>Ph D</td>
<td>Dec 2004-</td>
<td>Nov 2008</td>
</tr>
<tr>
<td>Minneapolis, MN</td>
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<tr>
<td>Tulane University</td>
<td>Doctoral Program in Health</td>
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<td>Jan 2002-</td>
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<tr>
<td>New Orleans, LA</td>
<td>Systems Management</td>
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<td>Jan 2003</td>
<td></td>
</tr>
<tr>
<td>Texas A &amp; M University -</td>
<td>Business Administration -</td>
<td>MSBA</td>
<td></td>
<td>Oct 2000</td>
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<tr>
<td>Texarkana, Texas</td>
<td>Management</td>
<td>BAAS</td>
<td></td>
<td>Oct 1998</td>
</tr>
<tr>
<td>Yavapai College, Prescott, AZ</td>
<td>Nursing</td>
<td>ADN</td>
<td></td>
<td>May 1988</td>
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<td>*with honors</td>
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</tr>
</tbody>
</table>

Employment:

OR Inventory Control Manager/Asst to
OR Inventory Control Manager/
Perioperative Registered Nurse
Wadley Regional Medical Center
1000 Pine Street
Texarkana, Texas  75503

July 1991  present

Review and maintain compliance with facility, state, and national policies and regulations governing acquisition of surgical supplies, equipment, and tissue. Identify items under health device alert for removal and/or inspection to prevent harm to surgical patients. Monitor surgical supply inventory/cost control. Insure ordering and procurement of specialty supplies, equipment, and instruments for various surgical cases. Monitor charging and coding procedures for surgical cases. Coordinate procurement of surgical supplies/instrumentation from other facilities. Assist in the development of capital budget.

Perform perioperative assessments, teaching and care of the surgical patient; perform circulating/scrubbing duties in surgical specialties including open heart, cardio/thoracic, orthopedic, neuro, EENT, plastic, and general surgery cases. Assist in intraoperative monitoring of patients and equipment. Coordinate patient care activities within various hospital departments. Analyze perioperative data for determination that patient outcome criteria have been met. Document perioperative nursing care to provide a comprehensive
overview of the health status of the patient throughout the perioperative period. Function as a staff educator for surgery and radiology departments.

**Adjunct Instructor – Business Administration**

Texas A & M University – Texarkana
2600 North Robison Road
Texarkana, Texas  75503

Instructor for undergraduate business management courses.  Responsible for the selection of textbooks, course material, development of outcome criteria, and course format. Format includes classroom lecture, web-enhanced, and web-based classes. Focus on fundamental management and organizational theory/behavioral concepts.

**Perioperative Nurse – Military**

United States Army Reserve
ARPERCENS, St. Louis, MO
Rank: Captain

March 1990 to November 1999

Performed all duties as previously described for perioperative nursing. Assisted in the establishment, organization, and functioning of a 400-bed evacuation hospital in a combat zone in Saudi Arabia during Operation Desert Storm. Set up a six-bed DEPMED operating room facility designed to receive heavy combat/chemical casualties estimated at 100 surgical cases/day. Set up a functional CMS supply unit for a specialized case cart system. Assisted in the transport of wounded from combat zone. Taught perioperative nursing in preparation for war casualties.

**Perioperative Head Nurse**

William Beaumont Army Medical Center
Ft. Bliss, El Paso, Texas

June 1990 to June 1991

Planned, supervised, directed and evaluated all clinic and surgical nursing operations of a plastic surgery clinic. Established a comprehensive patient teaching program. Established, reviewed, and updated clinic nursing policies and regulations for compliance with nationally accepted standards (JCAHO, AORN). Conducted quality assurance and control initiatives for the clinic. Performed risk appraisals; conducted audits and prepared reports of findings; identified trends and reported corrective actions.

**Research/Projects:**

Completed dissertation research study on relationship between leader effectiveness in the management of intergenerational differences and actions that denote organizational citizenship behavior.
Completed a research study (archival) on transformational leadership as a motivational factor within a multigenerational perioperative workforce.

Completed a research study (archival) on specialization of health care professions as the basis for regulatory governance in practice.

Completed a social needs evaluation of the medically underserved patient population in the Texarkana MSA.

Prepared a research proposal which examined patient care outcomes related to the utilization of registered perioperative nurses in the hospital surgical setting.

Developed a strategic plan for the conversion to an all-registered nurse, cross-functional nursing staff in the Surgical Services Department, WRMC, Texarkana, Texas.

Conducted a field study on the efficacy of a perioperative preceptorship program at WRMC, Texarkana, Texas.

Revised the perioperative preceptor training program and manual for the Surgical Services Department at WRMC, Texarkana, Texas.

**Professional Licenses/Certifications:**

- Registered Nurse – State of Texas, MultiState Licensure Compact participant
- CNOR (Certified periOperative Nurse in the Operating Room)
- Certificate in Surgical Services Management
- BCLS

**Organizational Memberships:**

- Association of periOperative Registered Nurses (AORN)
- Alumni Association – Texas A & M University – Texarkana (lifetime member)
- American Society for Public Administration (ASPA)
- CCNE (Commission on Collegiate Nursing Education) – team evaluator
- Disabled American Veterans (lifetime member)
- Race for the Cure (sponsor/participant)
- Texas A & M University – Texarkana Foundation (sustaining member)
- Women for A & M – Texarkana – Charter member